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**THE ANTECEDENTS AND CONSEQUENCES OF
ANTICIPATORY IDENTIFICATION**

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Doctor of Philosophy

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THESIS SUMMARY

The aim of this thesis was to investigate anticipatory identification: newcomers' identification with an organisation prior to entry; in particular by exploring the antecedents and consequences of the construct. Although organisational identification has been frequently investigated over the past 25 years, surprisingly little is known about what causes an individual to identify with a new organisation before entry and whether this has an impact on their relationship with the organisation after formally taking up membership. Drawing on a Social Identity approach to organisational identification, it was hypothesised that newcomers would more closely identify with an organisation prior to entry when the organisation was seen as a source of positive social identity and was situationally relevant and meaningful to the newcomer, i.e. salient, during the pre-entry period. It was also hypothesised that anticipatory identification would have post-entry consequences and would predict newcomers' post-entry identification, turnover intentions and job satisfaction. An indirect relationship between anticipatory identification and post-entry identification through post-entry social identity judgements (termed a "feedback loop" mechanism) was additionally proposed. Finally anticipatory identification was also predicted to moderate the relationship between post-entry social identity judgements and post-entry identification (termed a "buffering" mechanism). Four studies were conducted to test these hypotheses. Study One served as a pilot study, using a retrospective self-report design with a sample of 124 university students to initially test the proposed conceptual model. Studies Two and Three adopted experimental designs. Each used a unique sample of 72 staff and students from Aston University to respectively test the hypothesised positive social identity motive and salience antecedents of anticipatory identification. Study Four explored the relationship between anticipatory identification, its antecedents and consequences longitudinally, using an organisational sample of 45 employees. Overall, these studies found support for a social identity motive antecedent of anticipatory identification, as well as more limited evidence that anticipatory identification was associated with the salience of an organisation prior to entry. Support was inconsistent for a direct relationship between anticipatory identification and post-entry identification and there was no evidence that anticipatory identification was a significant direct predictor of turnover intention and job satisfaction. Anticipatory identification was however found to act as a buffer in the relationship between post-entry social identity judgements and post-entry identification in all but one of the four samples measured. A feedback loop mechanism was observed within the experimental designs of Studies Two and Three, but not within the organisational samples of Studies One and Four. Overall the findings of these four studies highlight key ways through which anticipatory identification can develop prior to entry into an organisation. Moreover, the research observed several important post-entry consequences of anticipatory identification, indicating that an understanding of post-entry identification may be enriched by attending more closely to the extent to which newcomers identify with an organisation prior to entry.

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CHAPTER ONE: INTRODUCTION

1.1. Chapter Summary

This chapter provides the reader with an introduction to anticipatory identification and an overview of the thesis as a whole. The position adopted by this thesis relative to the extant literature on organisational identification is first outlined. This is followed by a discussion of the specific aims of the thesis and the contribution to the literature that can be made by addressing these aims. A synopsis of the studies described within the thesis is subsequently presented and the chapter concludes with an outline of the structure of the remainder of the thesis.

1.2. Introduction

Organisational identification, “a sense of oneness with or belonging to an organisation, where the individual defines him or herself in terms of the organisation” (Mael and Ashforth, 1992; p.104), has been described as a root construct in organisational phenomena (Albert, Ashforth and Dutton, 2000 p.13). Reinforcing this stance, over the past two decades this phenomenon has been linked to a broad range of outcomes for both individuals and organisations. At an individual level, organisational identification is thought to impact upon a person’s self-esteem (e.g. Hogg and Abrams, 2000), their job satisfaction (e.g. van Dick, Christ, Stellmacher, Wagner, Ahlswede, Grubba, Hauptmeier, Hoehfeld, Moltzen, and Tissington, 2004) and to have a positive effect on health and wellbeing (e.g. Haslam, Jetten, Postmes, and Haslam, 2009; van Dick and Wagner, 2002). At an organisational level, identification has been shown to be associated with a range of positive work outcomes including reduced withdrawal cognition (e.g. Randsley de Moura, Abrams, Retter, Gunnarsdottir and Ando, 2009) greater in-role productivity and performance (e.g. Millward and Postmes, 2010; van Dick, Stellmacher, Wagner, Lemmer and Tissington, 2009) and organisational citizenship behaviours (e.g. Olkkonen and Lipponen, 2006).

Yet despite its suggested centrality to much of organisational life, organisational identification is not predicated on formal organisational membership. Anyone can identify with an organisation, regardless of the form or purpose of their relationship (Pratt, 1998; Whetten, 2007), provided that they believe themselves to be psychologically intertwined with that organisation (Ashforth and Mael, 1989). This proposal has already led to interchange between management and marketing literatures (e.g. Brown, Dacin, Pratt and Whetten, 2006; Cornelisson, Haslam and Balmer, 2007), but could also allow notable advances to be made in our understanding of identification in other groups of stakeholders who have so far received more limited research attention. One such group of stakeholders

is future employees of the organisation (Jablin, 2001; Kramer, 2010). Identification amongst future members of a social group has been termed “anticipatory” identification (Ashforth, 2001) and can be advanced as a valuable, but currently underexplored, focus for research into organisational identification. This thesis contends that the extent to which a newcomer identifies with an organisation prior to entry could have important consequences for how they see and relate to their new organisation after formally taking up membership. The aim of the thesis is therefore to extend our understanding of anticipatory identification, through investigation of its pre-entry antecedents and post-entry consequences.

1.2.1 Antecedents of Anticipatory Identification

In recent years increasing attention has been paid to the role that identity-related perceptions can play in attracting future members to an organisation (e.g. Boezeman and Ellemers, 2008; Edwards, 2009; Lievens, 2007; Lievens, van Hove and Anseel, 2007). The view that an organisation will contribute to a positive identity is, for example, thought to impact upon applicants’ job pursuit intentions and initial desire to join that organisation (e.g. Celani and Singh, 2011; Herriot, 2004). Yet whilst researchers have investigated the identity-related antecedents of organisational attractiveness, consideration of the factors that specifically influence anticipatory identification has so far remained primarily conceptual in nature. Accordingly, the first objective of the research presented in this thesis was to explore potential antecedents of anticipatory identification, in particular by drawing on those factors put forward by the most dominant theoretical perspective on organisational identification (Edwards, 2005; He and Brown, 2013): the Social Identity Theory approach (e.g. Ashforth and Mael, 1989). From this perspective it may be argued that identification with an organisation will be strengthened through two main antecedents. These antecedents were both addressed within the current investigation of anticipatory identification and are outlined briefly below.

First, identification has been shown to be strongest when the organisation is seen as a source of positive social identity (e.g. Ashforth and Mael, 1989; Dutton, Dukerich and Harquail, 1994; Tyler and Blader, 2003). Possessing a positive social identity has been found to contribute to an individual’s self-esteem as well as to reduce their sense of uncertainty within the social world (e.g. Abrams and Hogg, 1988; Rubin and Hewstone, 1998; Tajfel and Turner, 1979). As such, there is thought to be a motivational drive to more closely define oneself in terms of an organisation when that organisation is prestigious and of high status (e.g. Smidts, Pruyn and Van Riel, 2001) or makes one feel valued (e.g. Ellemers, Sleebos, Stam and de Gilder, 2013), and thus has the capacity to facilitate a positive social identity. The present research consequently sought to determine

whether the perceived status of the organisation and the experience of being valued by the organisation before joining can similarly impact upon newcomers' anticipatory identification.

Research Question One: Will a newcomer identify more closely with an organisation prior to entry when it is seen as a source of positive social identity during the pre-entry period?

Second, identification is strengthened when the organisation is particularly salient to the individual (e.g. Milward and Haslam, 2013; Rousseau, 1998; van Dick, Wagner, Stellmacher and Christ, 2005). At any one time a multitude of social identities are available to a person, derived from their membership of a wide range of different social groups or categories. However only a social identity that is meaningful and situationally relevant within a particular social context will be activated (e.g. Oakes, 1987; Oakes, Turner and Haslam, 1991). The activation of a particular social identity has been shown to be associated with heightened identification with that group (e.g. van Dick et al., 2005); thus within an organisational setting an individual is more likely to define themselves in terms of an organisation when it is relevant and meaningful to them within the current social context. In looking to transfer this proposition to a study of anticipatory identification, the research presented within this thesis investigated whether newcomers who saw their new organisation as relevant and meaningful prior to entry also experienced heightened anticipatory identification prior to entry.

Research Question Two: Will a newcomer identify more closely with an organisation prior to entry when the organisation is situationally relevant and meaningful to the newcomer, i.e. salient, during the pre-entry period?

1.2.2 Consequences of Anticipatory Identification

A focus on the antecedents of anticipatory identification, rather than the attractiveness of the organisation per se, is especially valuable given that the construct could have potentially important post-entry outcomes. Mael and Ashforth (1995) for example argue that the identification experienced by newcomers at the beginning of their tenure will be influenced, at least in part, by their experience of the organisation prior to entry. Similarly, Stephens and Dailey (2012) have shown positive correlations between new entrants' anticipatory identification and their post-entry identification. Organisational identification has been linked to important newcomer-specific factors such as early turnover (Smith, Amiot, Callan, Terry and Smith, 2010) and adjustment (Carmeli, Gilat and Waldman, 2007), as well as a broader range of positive work outcomes including job satisfaction, extra-role behaviour and a motivation to work for the interests of the organisation (e.g. van

Knippenberg, 2000; van Dick et al., 2004; van Dick, Grojean, Christ and Wieseke, 2006). Together these outcomes may be seen to help newcomers become integrated and accepted members of the organisation, as well as experiencing their work more positively, early on in their tenure.

If anticipatory identification impacts upon newcomers' initial organisational identification, anticipatory identification could make a notable contribution to the successful assimilation of new employees into an organisation. Yet the studies highlighted above that have so far considered the relationship between anticipatory and post-entry identification have either only made the assumption that initial identification must be influenced by pre-entry experiences due to the proximity of the data collection to entry (e.g. Mael and Ashforth, 1995), or have asked participants to retrospectively report on their anticipatory identification after joining (e.g. Stephens and Dailey, 2012). Further research which enables anticipatory identification to be reported prior to entry is therefore needed to more clearly understand the nature of the relationship between anticipatory identification, post-entry identification and positive post-entry work outcomes.

Research Question Three: Will a newcomer's level of anticipatory identification, reported prior to entry, predict post-entry identification?

Research Question Four: Will a newcomer's level of anticipatory identification, reported prior to entry, predict post-entry work outcomes?

However a challenge that arises when looking to understand the post-entry impact of anticipatory identification is the differentiation of a true link between anticipatory identification and post-entry identification and an association that is attributable to constant factors which span the boundary from pre- to post-entry. For example, individual differences in individuals' need for identification (e.g. Glynn, 1998; Kreiner and Ashforth, 2004) and their personality (e.g. Bizumic, Reynolds and Myers, 2012) might lead an individual to identify the same way before and after entry. Similarly a stable impression of the identity of the organisation (e.g. van Knippenberg, van Dick and Tavares, 2007), for instance brought about through consistent employer branding (e.g. Edwards, 2008), could also have an equivalent impact on an individual's anticipatory identification and their post-entry identification. To address this, in addition to investigating the direct relationship between anticipatory identification and post-entry identification, there is considerable value in also looking to determine whether anticipatory identification acts in combination with other post-entry variables to have an indirect or interactive impact upon newcomers' organisational identification after joining.

Research that has explored the relationship between initial and subsequent organisational identification for example suggests a “feedback loop” of organisational identification; whereby initial identification leads to more favourable perceptions of the organisation which in turn strengthens subsequent organisational identification (e.g. Bullis and DiSanza, 1999; Dukerich, Golden and Shortell, 2002). Similarly, there is evidence to suggest that previous identification can moderate the relationship between later perceptions of the organisation and organisational identification (e.g. Lipponen, Wisse and Perälä, 2011), in effect acting as a “buffer” against the impact of subsequent negative impressions of the organisation. If these interaction effects may indeed be extended to anticipatory identification, this suggests notable benefits of anticipatory identification for newcomers’ relationship with their new organisation.

From this perspective, anticipatory identification could provide a foundation for a long-term attachment to the organisation, helping ease newcomers’ entry into the organisation. For example a feedback loop mechanism may contribute to an on-going process of strengthening a deeper and more stable sense of identification over time (see Rousseau, 1998). Moreover, a buffering effect of anticipatory identification could help mitigate the potential shock or surprise that can accompany the process of joining a new organisation (e.g. Louis, 1980) or limit the effect of unmet expectations on post-entry attachment to the organisation (e.g. Wanous, Poland, Premack and Davis, 1992). Yet whilst researchers have studied the temporal dynamics between initial and subsequent post-entry identification, this investigation has not been extended to consider anticipatory identification. A further objective of the thesis is therefore to determine whether the previously observed effects of prior identification on subsequent identification would also be present for anticipatory identification, so that pre-entry identification similarly influences newcomers’ organisational identification after entry.

Research Question Five: Can anticipatory identification act as a buffer in the relationship between a newcomer’s post-entry perceptions of the organisation and their post-entry identification?

Research Question Six: Can an anticipatory identification feedback loop be observed, whereby a newcomer’s anticipatory identification leads to more favourable post-entry perceptions of the organisation, which in turn strengthen post-entry organisational identification?

In summary, this thesis has two main aims. The first aim is to consider the antecedents of anticipatory identification by drawing on a Social Identity approach to organisational identification. In doing so, the thesis will investigate whether the perception that an

organisation is a source of positive social identity prior to entry, as well as the salience of the organisation prior to entry, positively impacts upon anticipatory identification. The second aim is to more clearly understand the relationship between anticipatory identification and post-entry consequences by exploring how anticipatory identification can influence post-entry identification, post-entry social identity judgements and post-entry work outcomes. To address these two aims, a series of four studies are presented. A brief overview of these studies is provided below.

1.3. Overview of Studies

1.3.1 Study One

Study One was a pilot study. Students who had recently started university were asked to retrospectively report their levels of anticipatory identification prior to joining the university. This study explored a positive social identity motive as an antecedent of anticipatory identification, by measuring both the intergroup and intragroup social identity judgements made by participants (e.g. Tyler and Blader, 2003). In the current research context intergroup social identity judgements corresponded to the perceived status of the university, whilst intragroup social identity judgements corresponded to the extent to which students believed that they were valued and respected by the university. Participants were also asked to report the degree to which they currently identified with the university, and their perception of the organisation as a source of positive social identity, to investigate the post-entry impact of anticipatory identification on the relationship between post-entry identification and its post-entry antecedents. Study One showed support for a positive social identity motive as an antecedent of anticipatory identification. It moreover found evidence to suggest anticipatory identification buffered the relationship between post-entry social identity judgements and post-entry identification. However the proposition that anticipatory identification would predict post-entry identification, either directly or indirectly, was not supported in this pilot study.

1.3.2 Study Two

Study Two moved away from a specific organisational focus and made use of an experimental minimal group design. Here the pre-entry salience of the group was introduced as an alternative antecedent of anticipatory identification, thus providing an extension of the analysis conducted in the first study. The salience of a group was manipulated prior to entry. Participants subsequently joined the group to complete an online decision-making task. After completion of the task they received feedback on their group's performance, which indicated that the group had either performed well or poorly in comparison to other groups. At this point participants' perceptions of the group as a

source of positive social identity and their post-entry identification were measured. This analysis again investigated the relationship between anticipatory identification, post-entry social identity judgements and post-entry identification, to test the hypothesised buffering and feedback loop mechanisms. Evidence to support the role of pre-entry salience as an antecedent of anticipatory identification was inconclusive. Support was however obtained for many of the predicted consequences of anticipatory identification: anticipatory identification was shown to predict post-entry identification and again appeared to buffer the relationship between post-entry social identity judgements and post-entry identification.

1.3.3 Study Three

Study Three applied a similar research methodology to that adopted in Study Two. In this instance however the perceived status of a group was manipulated prior to entry to again explore the role of a positive social identity motive as an antecedent of anticipatory identification. Participants next engaged in the same online decision-making task as in Study Two, and again received feedback that their group's performance was above or below average, before reporting on their social identity judgements and post-entry identification. In doing so, the moderating effect of anticipatory identification on post-entry identification was once more analysed. Study Three found support for a positive social identity motive as an antecedent of anticipatory identification. It additionally observed an indirect relationship between anticipatory identification and post-entry identification mediated by post-entry social identity judgments. However although a significant interactive effect was observed for anticipatory identification and post-entry social identity judgements on post-entry identification, this effect did not support the hypothesised buffering mechanism discussed above.

1.3.4 Study Four

Study Four adopted of a two-wave longitudinal survey design, during which students who were about to commence an industrial placement reported their anticipatory identification before starting their placement, and subsequently reported their post-entry identification after joining their new organisation. At the post-entry data collection point, social identity judgements were also measured, as well as several key work outcomes: turnover intention and job satisfaction. This study made it possible to test whether the observations of the preceding studies would also be observed within a "real world" environment. It also allowed the relationship between anticipatory identification and post-entry identification once more to be explored, as well as testing the impact of anticipatory identification on a broader range of work outcomes. A positive social identity motive as an antecedent of

anticipatory identification was once more observed, and there was also evidence of a buffering effect of anticipatory identification on the relationship between post-entry social identity judgements and post-entry identification. Anticipatory identification was found to predict post-entry identification; post-entry identification also acted as an intervening variable between anticipatory identification and job satisfaction and turnover intention. There was however no evidence of an indirect relationship between anticipatory identification and post-entry identification through post-entry social identity judgements; the hypothesised feedback loop was therefore again not supported.

1.4. Thesis Structure

Chapter One provides an introduction to the thesis, including the rationale of the research, its major aims and the studies conducted to address these aims.

Chapter Two presents an overview of organisational identification from a Social Identity Theory perspective; in particular focussing on the antecedents and consequences of organisational identification as well as the temporal dynamics which can impact upon organisational identification over time.

Chapter Three introduces the concept of anticipatory identification. It draws on the antecedents and consequences of organisational identification discussed in Chapter Two to explore what might influence anticipatory identification during the pre-entry period, as well as the potential post-entry consequences of anticipatory identification once an individual joins the organisation. From this review a series of research hypotheses are developed and brought together to present a conceptual model of the antecedents and consequences of anticipatory identification.

Chapter Four provides an overview of the specific aims for each of the four studies. The chapter also outlines the research hypotheses addressed in each study and relates these to the conceptual model presented in Chapter Three.

Chapter Five discusses the philosophical considerations of relevance to the research before a justification for, and description of, the methodological approach adopted within each study is provided. This chapter also outlines the ethical issues which impacted upon the design and conduct of the research.

Chapters Six to Nine describe Studies One to Four respectively. For each study the results of the hypothesis testing and examination of the conceptual model are described. Each chapter concludes with a discussion of how the study contributes to our understanding of the antecedents and consequences of anticipatory identification, along

with recognition of the limitations of the study and consideration of how the next study can build on the extant findings.

Chapter Ten draws together the findings of all four studies to present a concluding discussion of the antecedents and consequences of anticipatory identification. This chapter also considers the implications of these findings for managers and suggests possible avenues for future research.

CHAPTER TWO: ORGANISATIONAL IDENTIFICATION

2.1. Chapter Summary

This chapter provides an overview of organisational identification, with a specific focus on the Social Identity approach to organisational identification (e.g. Ashforth and Mael, 1989; Dutton et al., 1994; Hogg and Terry, 2000). After briefly outlining the history and construct validity of organisational identification, the chapter goes on to describe the two theories which together comprise the Social Identity approach: Social Identity Theory (e.g. Tajfel, 1978; Tajfel and Turner, 1979) and Self-Categorisation Theory (Turner, 1982; Turner, Hogg, Oakes, Reicher and Wetherell, 1987). The discussion then moves to a specific focus on organisational identification, with a review of research which has addressed its antecedents and consequences. The chapter concludes with a reflection on the temporal dynamics of organisational identification, and considers how initial organisational identification may determine the extent to which an individual identifies with an organisation at a later point in time.

2.2. Introduction to Organisational Identification

2.2.1. *Early Conceptualisations of Identification*

Investigation of individuals' identification with social groups has a long history within psychological research. Building on psychodynamic studies that discussed identification with, and attachment to, another person or object as part of the formation of personality (e.g. Freud, 1897, cited in Foote, 1951), a number of early researchers (e.g. Tolman, 1943; Foote, 1951) emphasised the importance of social groups to a person's identity. Linked to this, and sharing some similarity with later definitions, identification was described as "appropriation of and commitment to a particular identity or series of identities" (Foote 1951, p.17). Importantly such early conceptualisations emphasised not only the attitudinal outcomes of identification, but also behavioural consequences, insofar as when an individual identifies with an organisation, they are thought to be increasingly motivated to act on behalf of the group (Foote, 1951).

Moving forward to the 1970s and 1980s, researchers began to consider identification within a formal organisational context, rather than simply with social groups more generally (e.g. Cheney 1983; Hall, Schnieder and Nygren, 1970; O'Reilly and Chatman, 1986). However explicit reference to the relationship between identification and identity was somewhat lost within this early work on organisational identification. Identification was instead viewed as a more general link between individual and organisation, and the assimilation of organisational and individual goals and values (Hall et al., 1970; O'Reilly

and Chatman, 1986). This led some to question the construct validity of organisational identification when compared to constructs such as organisational commitment or internalisation; presenting the view that identification was simply one aspect of an individual's general commitment to an organisation (see Pratt, 1998).

Correlations between organisational identification and affective organisational commitment are typically significant (Bergami and Bagozzi, 2000; Riketta, 2005; van Knippenberg and Sleebos, 2006). Models that talk about an "emotional bond" component of organisational commitment often view a sense of identification with an organisation as an important determinant of this bond. Allen and Meyer (1990, p.2) for example suggest that "a strongly committed individual identifies with...the organisation" whilst Mowday, Steers and Porter (1979, p.226) have defined organisational commitment as "the relative strength of an individual's identification with, and involvement in, a particular organisation". Some researchers have therefore suggested that identification and commitment are best seen as two facets of the same individual-organisation relationship, with identification representing the content of the relationship and commitment the form (Cheney and Tompkins, 1987; Russo, 1998).

However a noteworthy body of work has indicated that, whilst associated, organisational commitment and organisational identification can be viewed as separate constructs. Construct validity has been demonstrated using the two most commonly used measures of organisational identification: Cheney's (1983) Organisational Identification Questionnaire (Guatam, van Dick and Wagner, 2004) and Mael and Ashforth's (1992) scale (van Knippenberg and Sleebos, 2006). Differentiating between the two constructs, van Knippenberg and Sleebos (2006) argue that organisational identification and organisational commitment result from different aspects of an individual's relationship with an organisation. Commitment stems from a social exchange relationship between the organisation and the individual, which facilitates the fulfilment of particular needs of the individual by the organisation such as positive affective ties. Identification in contrast is self-definitional and identity-related, contingent on factors such as perceived similarity and shared fate. Ashforth and Mael (1989) recognised the susceptibility of organisational identification to confusion with other related constructs, asserting that this, more than anything, resulted from a lack of comprehensive operationalisation of the construct. A Social Identity approach to organisational identification was presented as an attempt to minimise this confusion. This approach to organisational identification has continued to inform much of the subsequent work on organisational identification, and forms the theoretical foundations of the present research.

2.3. The Social Identity Approach to Organisational Identification

The Social Identity approach to organisational identification is informed by two inter-related social psychological theories: Social Identity Theory (e.g, Tajfel, 1978; Tajfel and Turner, 1979) which traditionally has focussed on the intergroup aspects of individuals' social identities, and Self-Categorisation Theory (Turner, 1982; Turner et al.,1987), a subsequent, but equally relevant, extension to the theory, which considers the intragroup origins and outcomes of social identity processes. Together these theories have not only provided a framework for the initial reconceptualisation of organisational identification but also later refinements of this original approach. The two theories are therefore discussed in depth below.

2.3.1. Social Identity Theory

Social Identity Theory (SIT) finds its basis in a series of experimental “minimal group” studies. In these studies, Tajfel and colleagues (e.g. Tajfel, Billings, Bundy and Flament, 1971) found that even in groups categorised according to irrelevant criteria and consisting of members with no previous or future interaction, participants favoured members of their in-group over out-group members in the distribution of rewards. When provided with the opportunity to maximise the reward that both groups were allocated, participants continued to prefer a strategy that enabled their group to “win” against an out-group, even if this meant that the reward their group received was lower as a result. Findings from these initial minimal group studies suggested that bias in favour of a group to which one belongs is a “remarkably omnipresent” aspect of intergroup behaviour (Tajfel and Turner, 1979, p.38). This is because an important element of a person’s identity is their social identity (Tajfel, 1978; 1982) or “that part of the individual’s self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 1978; p.63). A person is motivated to establish a positive social identity as part of a more general drive to preserve or enhance a sense of positive self-esteem (Tajfel and Turner, 1979; see also Rubin and Hewstone, 1998). They will therefore identify with particular social groups and define themselves in terms of their membership, tending to assess groups to which they belong positively and maintain “positive distinctiveness” (Hogg and Abrams, 1988, p.23) from other social groups. Through this they are able to achieve a positive social identity.

The classification of oneself and others into social categories additionally enables a person to form schema for given social environments, for example the behavioural norms or expected attitudes of a particular social group. This reduces a person’s subjective uncertainty about the world and their place within it, creating a sense of meaning and

control within their social environment (Hogg and Grieve, 1999; Hogg and Terry, 2000). Hence not only does membership of a social group allow a person to preserve a positive sense of who they are, it also provides them with stability within the social world, helping them to understand both how they should behave in a particular social group and the behaviour they might expect from others. A person's social identity therefore has important intragroup implications in addition to providing an explanation of intergroup competition.

2.3.2. *Self-Categorisation Theory*

A subsequent theoretical offshoot of SIT, Self-Categorisation Theory (SCT), has more closely considered the role that intragroup categorisations and comparisons play in informing a person's social identity. Turner and colleagues (Turner, 1982; Turner et al., 1987) have proposed that, in seeking to establish a positive social identity, a person is motivated both to maximise differences between themselves and out-group members and to minimise the differences that exist between themselves and people that they perceive to be fellow in-group members. It is the meta-contrast between in-group similarities and out-group differences, rather than simply comparing oneself to an out-group, which leads to categorisation. Once categorisation takes place and group membership is ascertained, as well as defining other people according to the perceived characteristics of a particular group, a person will also strive to classify themselves in the same way.

Self-categorisation thus tends to lead to a process of depersonalisation, a "cognitive redefinition of the self - from unique attributes and individual differences to shared social category membership and associated stereotypes" (Turner, 1982, p.528). When this occurs, a group member will see themselves as an exemplar of that group, overriding differences between them and other group members. They look to apply a prototype they have formed of the group (which might include the behaviours, cognitions and emotions they believe are appropriate for members) to themselves and use this to guide their actions within the social environment. This prototype provides the individual with a sense of self-definition and self-regulation in relation to their membership of the group and leads to the perception of a sense of shared fortune with the group as a whole (Turner et al., 1987). It therefore plays a considerable role in enabling a person to define who they are within a social environment.

2.3.3. *Social Category Salience*

At any one time an individual will usually have available to them a number of different social groups which could potentially be called upon to define who they are. An individual will typically also have a range of discrete social groups with which they feel a sense of

belonging, be it a church they attend, a sports team they belong to or the country they live in. Within each of these discrete groups there will also typically be a hierarchy of different social categories; for example a student may see themselves as a member of a certain university, or as belonging to a single school within that university or as enrolled on a specific degree programme within that school. Moreover, Social Identity theorists consider one's social identity to be additional to one's personal identity (e.g. Tajfel, 1978; Tajfel and Turner, 1979); an individual is just as capable of seeing themselves as distinct from other individuals as they are of distinguishing themselves from members of other social groups. Self-Categorisation theorists (e.g. Haslam, Postmes and Ellemers, 2003; Oakes, 1987; Oakes et al., 1991; Turner, Oakes, Haslam and McGarty, 1994) argue that the salience of a particular social identity will determine if and when a person will see themselves in terms of that identity, over all other social or personal identities available to them.

The salience of a social group is determined by two main factors, category fit and relative accessibility. Category fit has two aspects: a comparative aspect and a normative aspect (Oakes et al., 1991; Turner et al., 1994). Comparative fit denotes an individual's belief, in a particular context, that intragroup differences on a given dimension will be smaller than intergroup differences. We can draw again on the example of a student discussed above to illustrate this principle. If a student undertaking a marketing degree were to be surrounded by other marketing students and also by students undertaking a finance degree, it is likely that our student would define him or herself according to their marketing degree discipline and see the finance students as members of an out-group. If, on the other hand, the marketing and finance students were joined by a number of students reading chemistry and biology, we may expect our student to instead categorise him or herself, along with the finance students, as "business students" in contrast to the "natural science students" who now also surround them. Thus ultimately, self-categorisation is not absolute and is strongly influenced by the social context in which one finds oneself.

Normative fit describes the extent to which differences match perceivers' theories about the nature of social reality. Accordingly not only must differences between in-group members on a given dimension be smaller than between in-group and out-group members, these differences must also fit with an individual's expectations about those social categories (Haslam, Oakes, Reynolds and Turner, 1999). The student introduced above is unlikely to categorise his or her fellow students as "business students" and "natural science students" if they do not differ from one another in the expected ways, for instance in terms of their topics of conversation, their interests or their manner of dress. Only when the nature of an in-group matches an individual's existing normative beliefs are they likely to categorise themselves as a member of that group.

Relative accessibility refers to the extent to which that group is seen as subjectively important and relevant by the individual on the basis of their past experiences and current expectations (e.g. Turner et al., 1994; see also Ashforth, 2001). Certain groups will be more meaningful, relevant or useful to an individual than others and will therefore be drawn upon more readily to define themselves within a social environment (Oakes et al. 1991). Relative accessibility may be the result of a particular social group being seen by the individual as a central aspect of their self-concept or because a group is particularly meaningful to the individual within the current social context (Hogg and Terry 2001). However importantly, the notion of accessibility highlights the fact that self-categorisation is not a “cold” cognitive processes, but is also influenced by factors such as one’s social history, goals, values and emotions (Haslam 2004). A person will categorise themselves in terms of a social group which holds meaning and significance for them, rather than simply defining themselves in terms of the group that is the best fit within a particular social context.

The salience of a social group therefore can be seen as an important determinant of when an individual will define themselves as a member of that group. Accordingly, and as will be discussed in detail in Section 2.5.2, the salience of a particular organisation to an individual can have a notable impact upon their sense of oneness with or belonging to that organisation. As a consequence, salience may be thought to play a key role in determining an individual’s organisational identification.

2.4. Organisational Identification

An individual can define themselves in terms of their membership of any number of social groups, including the organisations to which they belong. Within the context of the present discussion, organisations can be viewed as a specific type of social group and organisational identification should be considered a specific, but not fundamentally different, form of social identification (Ashforth and Mael, 1989). We should expect a person to seek to define themselves in terms of an organisation in the same way they might for other forms of social group, for example a school class or a particular political party (e.g. Doosje, Ellemers and Spears, 1995; van Heil and Mervielde, 2002). Using an SIT or SCT approach to supply a theoretical basis for organisational identification can consequently provide a means to understand when, why and to what degree a person will categorise themselves in terms of their membership of an organisation, and as a result identify with that organisation.

Adopting an SIT approach to organisational identification, Ashforth and Mael (1989; Mael and Ashforth, 1992) have described organisational identification as a sense of “oneness

with or belonging to an organisation, where the individual defines him or herself in terms of the organisation(s) in which he or she is a member” (Mael and Ashforth, 1992; p.104). They argue that, in identifying with an organisation, an individual comes to describe and evaluate themselves in relation to the organisation and in contrast to relevant out-group organisations, and in doing so derives a sense of closeness with that organisation. Akin to identification with other social groups, organisational identification serves to maintain or enhance self-esteem by allowing the individual to draw on the successes and status of their organisation, and can reduce uncertainty by providing an individual with information about their place within the social world and prescribing appropriate behaviours and attitudes (Ashforth and Mael, 1989).

2.4.1. Social Identity Theory and Organisational Identification

Since Ashforth and Mael’s (1989) initial conceptualisation of organisational identification, attempts have been made to refine the construct, by exploring the multidimensional nature of identification. Drawing on Tajfel’s (1978, p.63) definition of social identity as “that part of the individual’s self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership”, several researchers (e.g. Ellemers, Kortekaas and Ouwerkerk, 1999; van Dick, 2001; van Dick et al., 2004) suggest a cognitive dimension (relating to the knowledge of group membership), an evaluative dimension (relating to the value attached to group membership) and an affective dimension (relating to the emotional attachment to the group) of organisational identification. Van Dick (2001) furthermore highlights a fourth behavioural or conative dimension of identification not present in Tajfel’s (1978) definition of social identity, but evidenced within the minimal group studies, relating to an individual’s intentions to support the interests of the group. These different dimensions have since been found to be associated with different work-related attitudes and behaviours, for example cognitive and affective organisational identification were associated with job satisfaction whilst affective and evaluative organisational identification were associated with withdrawal intentions (e.g. van Dick et al. 2004). Edwards and Peccei (2007) have taken a slightly different approach by identifying three alternative subcomponents: self-categorization and labelling, value and goal synergy, and belonging and membership. Yet whilst the labelling of these components departs somewhat from the more common delineation of organisational identification, the researchers nonetheless differentiate between cognitive and affective aspects of an individual’s identification with an organisation.

Bergami and Bagozzi (2000) however construe only the first, cognitive dimension as identification itself. From this perspective, affective and evaluative components of social

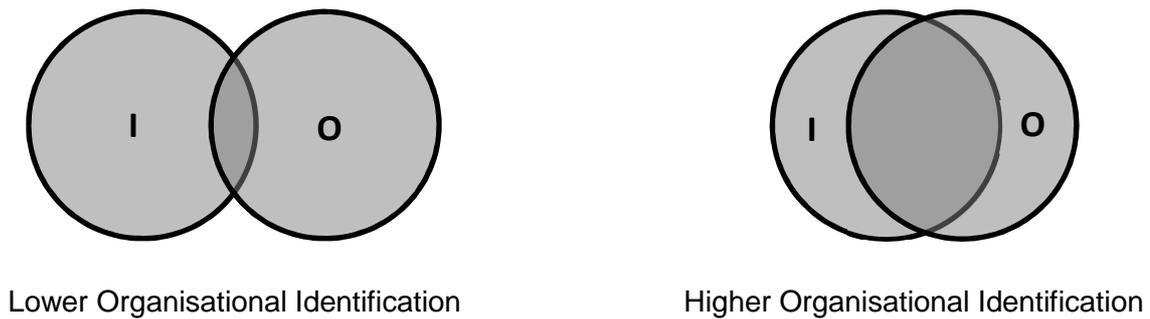
identity are instead viewed as affective commitment and organisation-based self-esteem respectively, rather than identification per se. Moreover, whilst multidimensional models of identification differentiate between cognitive, evaluative and affective aspects of identification, the cognitive, self-categorisation aspect of organisational identification is generally presented as the first step in terms in an individual's identification with an organisation (see van Dick, 2001). Finally, Ashforth, Harrison and Corley (2008) advise caution when considering the role of emotion in organisational identification, because the affect experienced in response to a sense of oneness with a group may be positive, negative or ambivalent depending on the situation and on the nature of the organisation. As a consequence, whilst there may be different aspects to identification, this thesis focuses primarily on a cognitive conceptualisation of organisational identification, given that this is the aspect for which there is the most consistent agreement between theorists and that appears to be the cornerstone of social identity processes within organisations.

2.4.2. Self-Categorisation Theory and Organisational Identification

Turning attention to cognitive conceptualisations of organisational identification, Self-Categorisation Theory (e.g. Turner, 1982; Turner et al., 1987) has explicitly considered what leads an individual to identify with a social group. Turner (1982, p.32) defined social identification as “the process by which one defines oneself as a category member, forms a group stereotype on the basis of other category members’ behaviour and applies the stereotype to oneself¹”. Accordingly, researchers have proposed that the extent to which an individual identifies with an organisation can best be described as the degree of overlap between an individual’s mental representations of their own identity and the perceived identity of the organisation (e.g. Schubert and Otten, 2002; Bergami and Bagozzi, 2000; Foreman and Whetten, 2002; Shamir and Kark, 2004; Whetton, 2007). Using a Venn diagram metaphor (taken from Whetten, 2007; illustrated in Figure 2.1) organisational identification is seen to be greater the more an individual’s mental representations of themselves and the organisation overlap, representing a greater proportion of shared attributes between them and the organisation.

¹ The term “prototype” rather than “stereotype” has since become more commonly used within discussion of social identification, and the former term will therefore be used throughout this thesis.

Figure 2.1: Organisational Identification as Individual-Organisational (I-O) Identity Overlap



A series of response time studies conducted by Smith, Coats and colleagues (e.g. Coats, Smith, Claypool and Banner, 2000; Smith and Henry, 1996; Smith, Coats and Walling, 1999; see also Cadinu and De Amicis, 1999) that have looked to establish a measure of an implicit association between self and in-group lend weight to this conceptualisation of identification. In these studies, participants were required to rate themselves, their in-group and a relevant out-group according to particular attributes. They were then seated in front of a computer screen and asked to indicate whether the attributes subsequently displayed on the screen were, or were not, self-descriptive. The time taken for participants to respond to these stimuli was measured with the premise that faster reaction times would be observed when there was a stronger cognitive association between the self and a particular stimulus. Smith, Coats and colleagues found that participants responded more quickly to items on which the self and the in-group matched, for example where an individual shares similar traits or attitudes, compared to items where there was a mismatch between self and group or when traits are instead shared with the out-group. Sharing attributes with an in-group therefore facilitates quicker response times to these attributes and thus suggests that the self and in-group have overlapping mental representations (Smith and Henry, 1996). Importantly, these reaction time measures of implicit overlap between self and in-group have been shown to correlate with explicit, theoretically derived measures of identification (Coats et al., 2000). This provides support for the argument that organisational identification can be seen in terms of overlapping mental representations of one's self and an organisation; a principle that has considerable value when looking to explore organisational identification amongst a range of organisational stakeholders.

2.5. Antecedents of Organisational Identification

A person can identify with even minimal groups (e.g. Tajfel et al., 1971; see also Cadinu and Rothbart, 1996); accordingly the only necessity for a person to identify with an

organisation is the fact that they perceive themselves to be in some way psychologically linked to that organisation (e.g. Ellemers, van Knippenberg, de Vries, and Wilke, 1988; Jetten, Hogg and Mullin, 2000; van Leeuwen and van Knippenberg, 2003). However researchers pursuing a Social Identity approach to organisational identification have suggested that there are certain conditions under which an individual is more likely to define themselves in terms of their membership of an organisation (e.g. Ashforth and Mael, 1989; Riketta, 2005; Tyler and Blader, 2003; van Dick et al., 2005). An understanding of the antecedents of organisational identification has therefore become an important focus for the study of the construct. Informed by the Social Identity and Self-Categorisation Theories discussed above, two broad categories of antecedents can be noted. First is the capacity of the organisation to provide an individual with a positive social identity. Second is the extent to which the organisation is situationally relevant and meaningful, i.e. salient, within a given social context. These antecedents are discussed below.

2.5.1. Positive Social Identity Motive

Arguably the most commonly cited antecedent of organisational identification is what may be termed a positive social identity motive. Researchers adopting a Social Identity approach to organisational identification have argued that identification is stronger when an individual believes an organisation to be a source of positive social identity (Ashforth and Mael, 1989; Dutton et al., 1994; Hogg and Terry, 2000). Consequently, factors such as the prestige and social standing of the organisation and its distinctiveness from other relevant “out-group” organisations are thought to be closely associated with heightened organisational identification (Ashforth and Mael, 1989). Such proposals have subsequently received support from a range of empirical studies (Mael and Ashforth, 1992; Carmeli et al. 2007; Lipponen, Helkama, Olkkinen and Juslin, 2005; Reade, 2001; Riketta, 2005; Smidts et al. 2001).

The Group Engagement Model (e.g. Blader and Tyler, 2009; Tyler, 1999; Tyler and Blader, 2003) has more recently presented a shift in focus in how we can address the antecedents of organisational identification. Within this model greater attention is paid to an individual’s perceptions of an organisation, rather than to a specific list of organisational characteristics which evoke organisational identification. Two main judgements are set out, through which an individual evaluates the extent to which an organisation is seen as a source of positive social identity, and which therefore impact upon the extent to which they identify with the group. The first of these judgements concern the status of the group, in other words an individual’s *pride* in the group, for example derived from the perceived external prestige or the distinctiveness of the group.

A second judgement relates to the status of the individual as a valid and valued member of the group. This includes the *respect* they receive from the group as a whole and the degree to which they are valued by other group members. Adopting this perspective, both intergroup and intragroup status judgements facilitate the development and maintenance of a positive social identity, and are therefore associated with a heightened sense of identification with that organisation (e.g. Fuller, Hester, Barnett, Frey, Relyea and Beu, 2006).

In its complete form the Group Engagement Model is a model of procedural justice, which argues that members' evaluations of their interpersonal treatment within the group will impact upon their social identity. The element of this model which focusses on the impact of positive social identity judgements on identification, termed the "social identity mediation hypothesis" by Tyler and Blader (2003, p.353), has however been drawn on by a number of researchers to explore the factors that impact upon identification more generally, outside of a specific focus on organisational justice (e.g. Boezeman and Ellemers, 2014; Edwards, 2009; Fuller et al., 2006; Hameed, Roques and Arain, 2013; Haslam, Powell and Turner, 2000). Moreover, a range of studies have also explored the impact of members' pride in the organisation (e.g. Carmeli et al., 2007; Dukerich et al., 2002; Lipponen et al., 2005; Mishra, Bhatnagar, D'Cruz and Noronha, 2012; Smidts et al., 2001; Wan-Huggins, Riordan and Griffeth, 1998) and the perceived respect they receive from the organisation (e.g. Ellemers et al. 2013; Huo, Binning and Molina, 2010; Prestwich and Lalljee, 2009; Simon and Strumer, 2003) on identification, without explicitly calling on the Group Engagement Model. Again such studies consistently demonstrate that perceptions of inter- and intragroup status are associated with increased organisational identification.

In summary, the social identity judgements highlighted by the Group Engagement Model provide a useful way to address the antecedents of organisational identification. This approach is more explicitly grounded in the subjective perceptions of individuals, rather than the characteristics of the organisation themselves, and thus arguably is more attuned to the variability between individuals within the same organisation. Moreover, whilst researchers have most frequently focussed on the prestige of an organisation as key factor in determining organisational identification (see Riketta, 2005 for a meta-analysis), there does appear to be robust evidence to suggest that individuals look both outside and inside the organisation to determine the extent to which an organisation will provide them with a positive social identity. These dual judgements, at both an organisational and an individual level, therefore can provide a useful and consistent framework when looking to predict the strength of an individual's identification with an organisation.

2.5.2. Social Identity Salience

In Section 2.3.3, the concept of social identity salience was introduced. It was recognised that of all the potential social identities available to an individual at any one time, one particular social identity is likely to be subjectively most meaningful within a given social context. It is this social identity that will be brought into active use, or become salient (Hogg and Terry, 2001). Social identity salience will typically lead an individual to define themselves in terms of that social identity (Haslam, 2004). As such, salience is closely interrelated with an individual's social identification, with a salient social identity serving as a foundation for increased identification with that group (Haslam et al., 2003). Empirical findings support the proposal that group salience heightens identification with the group (e.g. van Dick et al. 2005; van Dick et al., 2009). Indeed, even very subtle or unconscious exposure (in the form of subliminal group primes) has been found to be sufficient to activate the salience of the group and through this positively influence an individual's social identification (Randolph-Seng, Reich and DeMarree, 2012).

The salience of an organisation may be activated in a variety of ways, for instance by referring to an individual as an organisational member, as a consequence of person's personal history and prior involvement with the organisation, in the presence of "out-group" members or by placing emphasis on group membership cues such as shared goals or values (e.g. Brewer and Gardner, 1996; Haslam et al., 1999; Reicher, Spears and Haslam, 2010; van Dick et al., 2005). Therefore whilst salience-enhancing factors may also be associated with the preservation of a positive social identity discussed in the previous section, the two may be seen as conceptually distinct. As Hogg and Terry (2001) state: "the cognitive system, governed by uncertainty reduction and self-enhancement motives, matches social categories to properties of the social context and brings into active use (i.e. makes salient) that category which renders the social context and one's place within it subjectively most meaningful" (p.7). The salience of a particular social category may consequently be best seen as the cognitive system's immediate response to the social context, whilst the preservation of a positive social identity is part of a longer-term motivation which drives social cognition more generally. Accordingly, taking into account the salience of an organisation, in addition to a positive social identity motive, could arguably allow a fuller understanding of the factors which impact upon organisational identification.

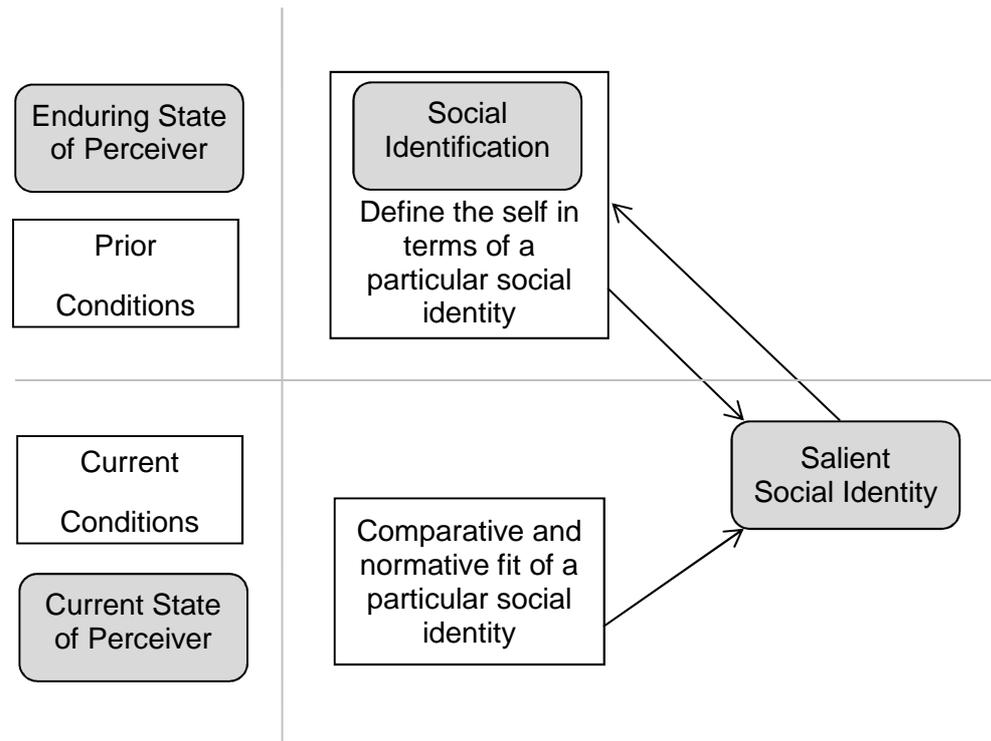
There is however some debate regarding the enduring impact of social identity salience on organisational identification. As depicted in Figure 2.2, it has been suggested that social identity salience and identification may be mutually reinforcing (e.g. Haslam et al. 2003). When an organisation is salient, the probability that an individual will identify with

that organisation is increased. In turn, the experience of identifying with an organisation means that social identity is likely to be more subjectively important and meaningful to the individual, increasing the relative accessibility of that particular social category, and the likelihood that that particular social identity will be activated and adopted as a result. From this perspective, the salience of an organisationally-relevant social identity could have a long-term impact upon the extent to which an individual identifies with an organisation.

Yet Rousseau (1998) has argued that when the situational cues which enhance the salience of a particular social identity are removed, organisational identification can quickly erode. For example, if symbols of shared group membership are taken away, or the threat from a particular out-group organisation dissipates, the salience of organisational membership will reduce; as a consequence so will the extent to which an individual actively identifies with an organisation. Moreover “salience shifts” between identities are thought to be relatively easy and common with an organisational context, where there exist many nested identities such as departments, workgroups and occupations (Ashforth and Johnson, 2001). Indeed these alternative “lower-level” identities are typically more meaningful and situationally relevant to the individual, and so are more readily activated during the course of their day-to-day working lives (van Knippenberg and van Schie, 2000). This is illustrated by meta-analytical findings from Riketta and van Dick (2005) which suggest that workgroup attachment is generally stronger than organisational attachment, which the authors attribute, at least in part, to the salience of the workgroup in comparison to the organisation.

In summary, the salience of the organisation has been shown to impact on the extent to which an individual identifies with an organisation. However the enduring effect of the salience of organisational membership on organisational identification over time can be questioned. Identification itself may heighten the accessibility of a particular social identity and so have a role to play in ensuring that the salience of an organisation remains relatively stable. Yet organisational salience may also be eroded quite easily, for example if situational cues regarding organisational membership are removed or because more proximal group memberships are typically more situationally relevant to the individual. In light of this, when identification is driven by the salience of the organisation, it may fluctuate over time in response to contextual factors. Nonetheless, the salience of an organisation may still be seen as an important factor in determining the extent to which an individual identifies with an organisation.

Figure 2.2: The Relationship between Social Identification and Social Identity Salience (adapted from Haslam et al., 2003)



2.6. Correlates and Outcomes of Organisational Identification

Organisational identification has consistently been shown to have a strong influence on individuals' actions and cognitions within organisations, and is associated with a range of notable work-related attitudes and behaviours. Correlations between organisational identification and reduced turnover intention are typically found to be significant, as individuals are thought to be much less likely to wish to leave an organisation which furnishes them with a sense of positive self-definition (Randsley de Moura et al., 2009; Olkkonen and Lipponen, 2006; Riketta, 2005; Wan-Huggins et al., 1998). A number of studies also indicate that organisational identification is significantly associated with job satisfaction (Amiot, Terry and Callan 2007; van Dick et al., 2004), in-role productivity and performance (Millward and Postmes, 2010; van Dick, Stellmacher et al., 2009; van Knippenberg, 2000; Wieseke, Ahearne, Lam and van Dick, 2009) as well as creativity at work (Carmeli et al., 2007). Findings of positive relationships have been extended to organisational citizenship behaviours (Olkkonen and Lipponen, 2006; van Dick et al., 2006), together with cooperative behaviours more generally (Dukerich et al., 2002) and support for organisational initiatives and organisational change projects (Fuchs and Edwards, 2012; Jimmieson and White, 2011). When a person closely identifies with an organisation, the distinction between self and organisation becomes blurred, and the successes of the organisation become their own successes (Mael and Ashforth, 1992).

For this reason, it has been suggested that when organisational identification is high, “efforts expended for the group [also] service the self” (Worchel et al., 1998, p.390), and help contribute to, and sustain, a positive social identity.

Discussion of the outcomes of organisational identification has tended to concentrate on the organisational benefits of identification. However as discussed above, the social identity mechanisms suggested to underpin organisational identification are motivated by a person’s need for positive self-esteem and uncertainty reduction (Hogg and Grieve, 1999; Hogg and Terry, 2000; Rubin and Hewstone, 1998; Tajfel and Turner, 1979). Research has also drawn links between social identification and health and wellbeing, with individuals who more closely identify with an organisation suffering less from physical illness and reporting lower levels of work-based stress (Haslam, Jetten, Postmes, and Haslam 2009; van Dick and Wagner, 2002). These findings highlight the benefits that an individual may also derive from identification with an organisation. Nonetheless, a number of researchers have emphasised the “dark side” (Dukerich, Kramer, & McLean Parks, 1998, p.245; Gossett, 2002) of organisational identification. Identifying with a particular group is considered within Social Identity Theory to be a fundamental aspect intergroup prejudice (Tajfel 1982), as a consequence organisational identification can present challenges when intergroup or inter-organisational interaction and collaboration is required (e.g. Hennessy and West, 1999). Identification can also be detrimental at an intragroup or intra-individual level and striving for the advancement of the organisation has been shown to result in negative, as well as positive, consequences. For example individuals who identify strongly with an organisation are more likely to engage in unethical behaviour on behalf of the organisation (Umphress, Bingham and Mitchell, 2010), are prone to workaholicism (Avanzi, van Dick, Fraccaroli and Sarchielli, 2012) and can become more susceptible to groupthink (Haslam, Ryan, Postmes, Spears, Jetten and Webley, 2006)². The myriad positive and negative consequences of organisational identification at both an individual and an organisational level thus indicate that continued exploration of this construct is of considerable value within studies of organisational behaviour.

2.7. Temporal Dynamics in Organisational Identification

Organisational identification is typically not construed as a one-off evaluation of one’s self in relation to the organisation, and instead is viewed as part of a member’s on-going relationship with the organisation (e.g. Ashforth et al., 2008). Whilst some researchers have observed relative stability in the level of organisational identification individuals tend

² Haslam et al. (2006) however do question the notion of groupthink as a psychological weakness suggesting that it could conversely have positive outcomes and be implicated in commitment to group projects in the face of adversity.

to report with a particular organisation (e.g. Bartels, Pruyn and de Jong, 2009; Wan-Huggins et al., 1998), others have observed that identification can both increase and decrease across time (e.g. Bullis and Bach, 1989; Gleibs, Mummendey and Noack, 2008). The degree to which an individual identifies with an organisation can therefore evolve, strengthening or weakening in response to individual, social or contextual factors. As a result, an important aspect of the study of organisational identification is an understanding of the temporal dynamics of this construct.

One key determinant of members' continuing identification with an organisation is thought to be a sense of continuity in the perceived identity of the organisation (e.g. Rousseau, 1998; Ullrich, Wieseke and van Dick, 2005; van Dick, Ullrich et al., 2006). If an organisation is subjectively experienced as possessing the same identity over time, identification will typically remain stable. Yet if a group changes (for example following organisational mergers or restructuring) and subjectively no longer feels like the same organisation as before, organisational identification can decline (van Knippenberg and van Leuwen, 2001; van Knippenberg, van Knippenberg, Monden and Lima, 2002; Van Leuwen and van Knippenberg, 2003). Thus from this perspective, organisational identification stability or discontinuity is a product of an individual's continuing evaluation of the organisation's identity, and not a one-off appraisal of the extent to which they share the same attributes as the organisation.

Others studies suggest that a dynamic relationship between organisational identification and its antecedents can also account for the presentation of organisational identification over time. For example researchers have observed a "buffering" effect of initial organisational identification. Here initial identification serves to mitigate the impact of later negative impressions of, or experiences within, the organisation. As such, these experiences have a more limited impact upon work outcomes, or indeed on subsequent organisational identification (e.g. Lipponen et al., 2011; van Knippenberg, et al., 2007). Research has also pointed to the existence of identification "feedback loops" (e.g. DiSanza and Bullis, 1999; Dukerich et al., 2002; Dutton et al., 1994; Haslam, 2004; Rousseau, 1998). Here the extent to which an individual initially identifies with an organisation influences how they respond to subsequent information about, or experiences within, the organisation. Thus an individual who identifies with an organisation is likely to construe subsequent experiences more positively, whilst an individual who does not identify (or disidentifies) with the organisation will construe subsequent experiences more negatively (DiSanza and Bullis, 1999). This in turn can encourage an increasing, or decreasing, level of identification over time. To illustrate how the extent to which an individual initially identifies with an organisation may impact upon

their reaction to later experiences, events or impressions, these buffering and feedback loop mechanisms will be discussed in greater depth below.

2.7.1. Buffering Effect of Organisational Identification

Studies have shown that factors such as role stressors, a poor exchange relationship or even abusive supervision can have a more limited impact upon work outcomes when identification is high (e.g. Decoster, Camps, Stouten, Vandevyvere and Tripp, 2013; Jimmieson, Mckimmie, Hannam, and Gallagher, 2010; Newton and Teo, 2014; van Knippenberg et al., 2007). Such studies suggest that organisational identification can act as a buffer against the impact of negative experiences within an organisation. In accounting for this observation, van Knippenberg et al. (2007) suggest that when a person's organisational identification is high, a desire for continuity and consistency within their self-concept means that physical or psychological withdrawal from the organisation is not a viable response, even when they experience low levels of support from the organisation. Jetten and colleagues (e.g. Haslam Jetten and Waghorn 2009; Jetten, O'Brien and Trindall, 2002) moreover have proposed that the sense of belonging brought about by identifying with a social group may act as a form of coping mechanism, which enables group members to more actively resist stressors or identity threats. In either instance, the experience of identifying with an organisation appears capable of moderating individuals' responses when subsequently faced with threatening or challenging circumstances.

There is evidence from social psychological studies to indicate that identification might also act as a buffer at a cognitive or perceptual level, for example limiting the impact that information that threatens the value of the group has on an individual's perception that the group is a source of positive social identity. In particular, these studies have suggested that a person who strongly identifies with a social group will more readily adopt "social creativity" strategies which enable them to preserve a consistent and positive impression of that group. Research from Doosje, Spears and Ellemers (2002), for example, suggests that individuals who closely identify with a group attend less closely to information that brings the status of the group into question, lessening the effect that this information has on their enduring identification with the group. Cadinu and Cerchioni (2001) have also found that high identifiers compensate when the status of their in-group is challenged by instead emphasising alternative aspects of the group which are considered to be more favourable. Finally, high identifiers have additionally been shown to attribute group failures to external or unpredictable causes rather than factors under the group's control (Sherman, Kinias, Major, Kim, and Prenovost, 2007; Van Vugt and Hart, 2004) or to a lack

of effort rather than a lack of ability (Costarelli, 2012). In doing so, the perceived value of the group remains unthreatened.

Identification is associated with the integration of the organisation into an individual's self-concept and a sense of shared fate with that organisation (e.g. Ashforth and Mael, 1989; Ashmore, Deux and McLaughlin-Volpe, 2004; Coats et al., 2000). As a consequence, when a group is initially felt to be highly self-definitive, a threat to the group brought about by the receipt of negative information about the group is also a threat to themselves by extension (Sherman and Kim, 2005). This can have a detrimental impact upon one's self-image if left unchecked (e.g. McCoy and Major, 2003; Barbier, Dardenne and Hansez, 2013). As such, highly identified individuals can have a vested interest in viewing the organisation positively. This can lead to the perceptual or interpretive biases discussed above when in receipt of negative or threatening information concerning the organisation. As these biases can protect the view that the organisation is a source of positive social identity, they might also help to preserve an individual's organisational identification by extension. Thus initial identification can ultimately limit the impact of negative information about the organisation on subsequent organisational identification.

Studies within an organisational context however suggest an alternative temporal dynamic between initial identification and its antecedents and consequences. In keeping with the antecedents of organisational identification discussed in Section 2.5, recent research by Edwards and Edwards (2013) showed that employees' initial perceptions of the prestige of an organisation positively predicted their organisational identification both cross-sectionally and up to a year later. Despite this, the researchers found that changes in the perceived prestige of the organisation over time did little to affect individuals' subsequent identification with the organisation. Accordingly, in this study it appeared that early impressions of the organisation's status, rather than those made later on in an individual's tenure, were most influential in determining organisational identification. In contrast to the findings of merger studies discussed above, this could be taken to indicate that, once established, organisational identification is less susceptible to erosion by changing perceptions of the organisation.

Lipponen et al. (2011) have suggested that initial identification may actually moderate the relationship between subsequent impressions of the organisation and subsequent identification; thus accounting for the relationship between identification and its antecedents over time observed by Edwards and Edwards (2013). In a study of military personnel, Lipponen et al. (2011) found that the impact that perceptions of fairness had on organisational identification was moderated by the extent to which recruits had previously identified with the organisation. Such findings suggest that when an individual comes to

see the organisation as self-definitive, subsequent impressions of the organisation could have a more limited impact upon their level of organisational identification. Contrary to the social psychological studies outlined above, this implies that high identifiers do attend to information that may challenge their view of the organisation as a source of positive social identity. However this information will not necessarily influence their identification with the organisation.

To explain this observation, it is possible to draw on Ashforth and Mael's (1989) argument that organisational identification involves "personally experiencing the successes *and* failures of the group" (p.21, emphasis in original). As such, challenges to the value of the organisation may be recognised, but these are experienced as a threat to the self, rather than simply as an external evaluation of the extent to which the organisation provides them with a positive social identity. Ellemers, Spears and Doosje (2002) similarly argue that because high identifiers' self-concepts are closely intertwined with the group, these individuals tend to engage in group-affirmation strategies when the status or value of the group is threatened. Hence instead of distancing themselves from the organisation, an individual is likely to actually display stronger affiliation with the group, for example through greater expression of group loyalty or increased self-stereotyping as a member of the organisation (e.g. Spears, Doosje and Ellemers, 1997). Through this, they might begin to counter the threat to their group, which is, by extension, a challenge to their own self-concept. Therefore identification may indeed increase, or at least not decrease, in the face of threats to the status or distinctiveness of the group.

The observation that subsequent impressions of the organisation have a more limited impact on organisational identification could alternatively be traced back to a motivation to preserve a consistent self-view. It has been suggested the extent to which an organisation satisfies a desire for self-consistency, in addition to fulfilling self-esteem and self-distinctiveness needs, will also contribute to the belief that the organisation is a source of positive social identity and so also impacts upon organisational identification (Scott and Lane 2000; Dutton et al. 1994). Thus by identifying with an organisation an individual looks to establish not only a positive, but also a stable, sense of who they are. As such, when organisational identification provides continuity and consistency within one's self-concept, distancing oneself from that organisation may often not be the most feasible way to preserve a positive self-view (van Knippenberg et al., 2007). Therefore even if impressions of the organisation change over time, this might not correspond to a similar change in the level of organisational identification experienced.

Furthering this contention, previous research which has contrasted self-consistency and self-enhancement motives indicates that cognitive responses tend to be dominated by a

wish to maintain self-consistency, in contrast to affective responses which are more frequently driven by self-enhancement needs (Jussim, Yen and Aiello, 1995; Shrauger, 1975; Swann, Griffin, Predmore and Gaines, 1987). From this perspective, when there is a conflict between self-consistency and self-enhancement needs, organisational identification, as an initially cognitive response to the organisation (e.g. Bergami and Bagozzi, 2000), may be most readily affected by a desire to hold a consistent self-view. Consequently, a highly identified individual may attend to, and acknowledge, information which brings into question the organisation as a source of self-enhancement. However this may not subsequently lead to a decline in the level of organisational identification they experience because the organisation still facilitates the fulfilment of self-consistency needs.

In conclusion, the above discussion presents us with two feasible means through which initial identification could buffer the relationship between subsequent identification and its antecedents. Organisational identification has been shown to limit the extent to which an individual attends to, and integrates information which may threaten their positive view of the organisation. Furthermore initial identification has been found to moderate individuals' responses when the status or value of the organisation is challenged. As a consequence, these judgements have a more restricted impact upon later organisational identification. Either buffering mechanism nonetheless highlights how identification at an earlier point in time may impact upon how an individual sees or relates to the organisation later on in their tenure.

2.7.2. Feedback Loop of Organisational Identification

As discussed in Section 2.5.1, studies of organisational identification indicate that a person is more likely to define themselves in terms of an organisation when it provides them with a positive social identity. In particular, factors that emphasise the status and distinctiveness of an organisation, as well as an individual's standing within the group, have consistently been found to positively relate to organisational identification (e.g. Lipponen et al. 2005; Mael and Ashforth, 1992; Riketta, 2005). However there is similarly reason to suppose that organisational identification can also lead an individual to perceive an organisation more favourably, reinforcing the very antecedents of identification as a result (Ashforth and Mael, 1989). Pettit and Lount (2011) for example, have shown that highly identified group members perceive the status of their group to be higher than group members with lower levels of identification. When we identify with a social group it becomes more closely integrated within our self-concept and we come to hold overlapping mental representations of self and organisation (e.g. Coats et al., 2000). Under these conditions, group-serving judgements will also have a self-serving function (Sherman and

Kim, 2005). There is therefore a vested interest in construing the group positively (Ellemers and van Knippenberg, 1997), because holding positive impressions of a group with which one identifies can, by extension, enable the conservation of a positive self-view.

The proposition that a positive impression of, and relationship with, an organisation can be both an antecedent and a consequence of organisational identification has led some to suggest that identification can occur within a “feedback loop” or “generative spiral” (e.g. DiSanza and Bullis, 1999; Dukerich et al., 2002; Dutton et al., 1994; Rousseau 1998). A person’s belief that an organisation will contribute to a positive social identity promotes heightened organisational identification, which, in turn, can encourage the subsequent formation of more favourable impressions of the organisation. These later impressions can themselves strengthen an individual’s initial attachment to the organisation. The supposed presence of identification feedback loops therefore again indicates that a core driver of an individual subsequent impressions of, and identification with, an organisation is the extent to which that organisation is initially seen to be self-definitive.

Identification feedback loops are also thought to present themselves through a growing salience of the organisation for the individual, as discussed in Section 2.5.2 (e.g. Haslam et al. 2003; McGarty, 1999; McGarty and Grace, 1999). Relatedly, members’ behavioural responses to the organisation have similarly been argued to have a reciprocal relationship with organisational identification. For example, highly identified members are more likely to increase the amount of contact they have with the organisation or the level of discretionary effort they exert on the organisation’s behalf (e.g. Dutton et al., 1994; Slater, 2007; Rousseau, 1998). Through this increased engagement with the organisation, individuals are believed to maintain a sense of self-consistency, again leading to a stable self-concept and continuing identification with the organisation over time (Ashforth et al., 2008; Dutton et al., 1994). Thus identification feedback loops also appear capable of satisfying a desire for consistency, as well as enhancement, within one’s self-concept.

Longitudinal studies do indicate the presence of positive identification feedback loops for both members’ perceptions of, and behavioural engagement with, the organisation (e.g. Di Sanza and Bullis, 1999; Dukerich et al., 2002; Klandermans, Sabucedo, Rodriguez and De Weerd, 2002). However there is also evidence to suggest that negative feedback loops can also occur (e.g. Di Sanza and Bullis, 1999) whereby an initial feeling of separation from, or disidentification with, the organisation, can lead to the negative construal of subsequent information about the organisation or counter-organisational actions (e.g. Elsbach and Bhattacharya, 2001). This serves to strengthen the sense of separation from the organisation. The observation of negative feedback loops again

indicates a self-consistency as well as self-enhancement motive. Individuals seemingly interpret information in a way that is compatible with their initial view of the organisation, whether positive or negative, rather than simply seeking out information which makes them feel good about their membership of the organisation.

Clear similarities can be found between this feedback loop mechanism and the buffering mechanism previously discussed. In particular, both propose that individuals will attend to, interpret or respond to subsequent information or events in a way that is consistent with their initial identification with the organisation. The feedback loop mechanism suggests that a highly identified individual would typically interpret subsequent experiences within the organisation more positively than an individual with lower levels of identification. Similarly, if that highly identified individual subsequently encountered experiences which threatened their positive view of their group, they may engage in particular cognitive or behavioural “defence strategies” to limit the impact of these experiences on their relationship with the organisation in the long-run. Either response however emphasises the potential temporal dynamic at play within organisational identification, with initial identification interacting with subsequent impressions of the organisation to impact upon their enduring attachment to, and relationship with, the organisation.

2.8. Conclusion

This chapter has presented the reader with an overview of the extant literature that has addressed organisational identification from a Social Identity perspective. In particular the literature review has outlined what is currently known about the antecedents and consequences of organisational identification within a post-entry context, as well as the relationship between these antecedents and consequences across time. The conclusions drawn from our current understanding of post-entry identification provide an important starting point to consider the specific antecedents and consequences of anticipatory identification, which are explored further within Chapter Three.

CHAPTER THREE: ANTICIPATORY IDENTIFICATION

3.1. Chapter Summary

This chapter introduces the reader to the concept of anticipatory identification. It first revisits the view of organisational identification as an overlap between the mental representations an individual holds of themselves and of the organisation (e.g. Bergami and Bagozzi, 2000; Coats et al., 2000; Foreman and Whetten, 2002) to discuss why future members are capable of identifying with an organisation prior to entry. Next, informed by the antecedents of organisational identification examined in Chapter Two, the hypothesised antecedents of anticipatory identification are discussed. Particular attention is paid here to the impact that a drive for a positive social identity and the pre-entry salience of an organisation may have on anticipatory identification. The chapter then moves to present the hypothesised post-entry consequences of anticipatory identification; it initially considers the direct outcomes of anticipatory identification before drawing on the buffering and feedback loop mechanisms described in the preceding chapter. From this, a series of hypotheses are developed and drawn together to present a conceptual model of the antecedents and consequences of anticipatory identification.

3.2. Anticipatory Identification

In Chapter Two, the conceptualisation of identification as an overlap between self and in-group mental representations was discussed. An overlap in mental representations corresponds with an individual perceiving there to be shared attributes between themselves and the organisation, contributing to a greater sense of oneness with that organisation (e.g. Bergami and Bagozzi, 2000; Foreman and Whetten, 2002; Schubert and Otten, 2002; Shamir and Kark, 2004; Whetten, 2007). This conceptualisation allows us to set aside the distinction between individuals considered “typical” members of an organisation and other forms of organisational stakeholder, for example previous employees, consumers or shareholders, all of whom are thought equally capable of identifying with the organisation (Cardador and Pratt, 2006; Pratt, 1998). From this perspective, organisational membership is a cognitive phenomenon; occupying a formal membership position within an organisation is therefore not necessary for organisational identification to occur. Anyone can identify with an organisation, regardless of the form or purpose of their relationship, provided that there is overlap between the mental representations they hold of themselves and the organisation (Scott and Lane, 2000; Whetten, 2007).

Studies have indeed observed organisational identification amongst alumni (Iyer, Bamber and Barfield, 1997; Mael and Ashforth, 1992) and consumers (Ahearne, Bhattacharya and

Gruen, 2005; Bhattacharya, Rao and Glynn, 1995), providing support for this assumption. However several researchers have also suggested that a person can identify with an organisation in advance of taking up membership (e.g. Celani and Singh, 2011; Herriot, 2004; Mael and Ashforth, 1995); what may be termed *anticipatory identification* (Ashforth, 2001). It is possible for newcomers to enter organisations with relatively high levels of organisational identification (Devos and Banaji, 2003) which, given the limited tenure of these individuals, is likely to be influenced, at least in part, by their relationship with the organisation prior to entry (Mael and Ashforth, 1995). Amiot, de la Sablonniere, Terry and Smith (2007) argue that before joining a new social group individuals will often look to give meaning to their impending group membership. This can mean that they come to already see themselves in terms of their new social identity and experience a sense of unity with their future group. Such initial sense-making can serve as a foundation for newcomers' initial identification with the organisation, and thus contribute to anticipatory identification prior to entry.

The argument that a person's identification with an organisation begins before that individual actually joins the organisation finds useful parallels with research concerning other elements of employees' attachment to their employer. For example it has been suggested that a person's psychological contract with an organisation (e.g. Rousseau, 2001) and their perceptions of the quality of their exchange relationship with their supervisor (e.g. Erdogan and Liden, 2002) can begin to form prior to that person taking up membership of the organisation. Similarly organisations can begin to socialise newcomers during the pre-entry period, most notably during recruitment and selection, and through this influence a range of attitudes and behaviours after entry (e.g. Anderson, 2001; Scholarios, Lockyer and Johnson, 2003). Importantly, such work suggests that a newcomer's experiences of an organisation prior to joining have the potential to impact upon their reaction to, and relationship with, that organisation after formally taking up membership.

Anticipatory identification may accordingly be seen as another important, yet currently underexplored, aspect of the relationship between individual and organisation that spans the boundary from pre- to post-entry. As a consequence, a greater understanding of anticipatory identification could provide further valuable insight into the factors affecting newcomers' relationships with organisations. Informed by the antecedents and consequences of organisational identification set out in Chapter Two, consideration is therefore given below to the factors which may lead an individual to identify with an organisation prior to joining, as well as the potential outcomes of anticipatory identification once that individual has joined the organisation.

3.3. Antecedents of Anticipatory Identification

As discussed above, there is reason to believe that newcomers are capable of identifying with a new organisation prior to entry (e.g. Ashforth 2001; Devos and Banaji 2003; Mael and Ashforth 1995). An important next step is to understand what leads an individual to experience a sense of anticipatory identification before taking up membership of an organisation. Stephens and Dailey (2012) have made some progress in exploring the antecedents of anticipatory identification, finding a person's exposure to an organisation during the pre-entry period to be a significant predictor of their anticipatory identification. Thus an individual who interacts with an organisation prior to joining (in Stephens and Dailey's research this took the form of university employees attending courses run by the institution before they began their employment) is more likely to identify with an organisation than an individual who has no pre-entry contact. Yet what is not clear from this research is how and why this exposure encourages an individual to define themselves in terms of the organisation prior to entry.

One way to understand the antecedents of anticipatory identification is to consider the more widely explored antecedents of post-entry organisational identification. As discussed in the previous section, organisational identification has been considered equivalent across different stakeholder groups (e.g. Pratt, 1998; Scott and Lane, 2000; Whetten, 2007). As a consequence, those factors that influence identification in employees (or other individuals who hold formal positions within an organisation) may be expected to have comparable effects in anyone who categorises themselves in terms of the organisation (e.g. Cardador and Pratt, 2006; Scott and Lane, 2000). Research concerning consumers (e.g. Bhattacharya et al. 1995) and alumni (e.g. Iyer et al., 1997; Mael and Ashforth, 1992) does indeed indicate a similar pattern of antecedents amongst these "non-member" stakeholders to that of employees within the organisation. Moreover, whilst not widely explored within the literature, future members of an organisation have also been acknowledged as organisational stakeholders (e.g. de la Cruz Déniz-Déniz and De Saá-Pérez, 2003; Donaldson and Preston, 1995). Therefore factors that influence organisational identification amongst formal members of an organisation may equally have the potential to impact upon newcomers' anticipatory identification. In view of this, it is possible to draw on findings concerning the antecedents of post-entry organisational identification discussed in Chapter Two, to consider what may lead an individual to identify with an organisation prior to entry.

A second way through which we may understand the possible antecedents of anticipatory identification amongst newcomers to an organisation is a reflection on anticipatory identification within another context, that of individual social mobility and an individual's desire to move from one social group to another. Ellemers, van Knippenberg and Wilke

(1990), for example, have explored the factors that encourage an individual who is a member of one social group to seek out membership of an alternative group instead. It must be recognised that Ellemers et al.'s findings highlight the factors that lead an individual who is a member of one social group to feel an affinity with a group they are not currently a member of, rather than newcomers' anticipatory identification per se. Nonetheless this research can make an important contribution when looking to understand what leads a newcomer to identify with an organisation before joining and can complement inferences drawn from an analysis of the antecedents of post-entry identification.

Bringing together these two strands of research, relating firstly to the antecedents of post-entry identification and secondly to the antecedents of anticipatory identification within the context of social mobility, we may come to develop a greater understanding of what encourages an individual to identify with an organisation prior to entry. This premise is expanded further below, with a focus on two key antecedents of identification highlighted in Chapter Two: a positive social identity motive and the salience of the organisation prior to entry.

3.3.1. *Positive Social Identity Motive*

Ellemers et al.'s (1990) research introduced above focussed upon Tajfel and Turner's (1979) proposition of individual social mobility (see also Jackson, Sullivan, Harnish and Hodge, 1996). This proposition states that when an individual sees themselves as a member of a low status social group, one way to achieve a more positive social identity is through upward mobility to another, higher status, social group. When achieving membership of a higher status group is possible, Ellemers and colleagues (Ellemers et al. 1990; see also Ellemers, 1993; Ellemers et al., 1988) have shown that members tend to display more limited identification with their current group and increased identification with this more favourable group instead. Accordingly, a potentially important determinant of a newcomer's identification with their future organisation is likely to be the extent to which that new organisation is perceived to facilitate the development and maintenance of a positive self-concept. In a similar vein, Bartels, Douwes, Jong and Pruyn (2006) have found that a key predictor of employees' expected identification with a soon to be merged organisation was the perceived utility of the merger. Thus in this context, an individual was more likely to expect to identify with newly merged organisation if that new organisation was seen to facilitate some form of self-enhancement, whether in terms of productivity, efficiency or prestige.

To advance the proposition that anticipatory identification may be influenced by a drive for positive social identity, we can also draw on the observation that antecedents of organisational identification appear to be relatively consistent across stakeholder groups (e.g. Bhattacharya et al., 1995; Iyer et al., 1997; Mael and Ashforth, 1992). Factors that influence organisational identification amongst formal members can similarly impact upon identification in other stakeholder groups; this could also include future members of an organisation. Returning to the Group Engagement Model (e.g. Blader and Tyler, 2009; Tyler, 1999; Tyler and Blader, 2003), individuals' perceptions that their organisation holds high status and that they are respected and valued by the organisation contribute to the belief that an organisation is a source of positive social identity. This, in turn, elevates the level of organisational identification experienced by members of that organisation (e.g. Edwards 2009; Fuller et al. 2006). Focussing specifically on anticipatory identification, it would similarly be contended that when a person has pride in, and experiences respect from, an organisation during the pre-entry period, the organisation is more likely to be seen as a source of positive social identity prior to joining.

When an individual sees a future organisation as a source of positive social identity, integration of the new organisation-related social identity within their self-concept may well begin in advance of membership (Amiot, de la Sablonniere et al., 2007). For instance a newcomer may look to assimilate prototypical attributes of the organisation into their self-concept or more explicitly define themselves as a member of that organisation. Through this they can more readily "bask in the reflected glory" (Cialdini, Borden, Thorne, Walker, Freeman and Sloan, 1976, p.366; cf. Smidts et al., 2001) of their future organisation and experience a sense of self-enhancement and self-esteem prior to entry. As a consequence of these pre-entry identity processes the newcomer would be expected to experience a heightened sense of anticipatory identification in advance of formally taking up membership of the organisation.

More recent research has specifically looked at the impact that positive social identity judgements can have on applicants' rating of the attractiveness of an organisation prior to joining. Boezeman and Ellemers (2008) have shown that intergroup and intragroup status judgements made by potential recruits were linked to their attraction to an organisation. Whilst this research does not focus specifically on their anticipatory identification with the organisation per se, it nonetheless indicates that newcomers can, and do, make evaluations regarding an organisation as a source of positive social identity prior to entry, and that this influences their initial attraction to that organisation. Lievens et al. (2007) moreover have found overlap between the attributes associated with applicants' attraction to an organisation and the attributes which promoted identification amongst current members of the organisation, for example along dimensions such as the perceive

competence of the organisation. Accordingly, these two constructs appear to share at least some of the same antecedents. Taken together with the research of Ellemers et al. (1990) and the antecedents of post-entry identification discussed above, this lends support for the proposal that anticipatory identification will be influenced by the extent to which a newcomer sees an organisation as a source of positive social identity prior to entry. The following hypothesis is therefore advanced:

Hypothesis 1: Pre-entry social identity judgements will be positively related to anticipatory identification.

3.3.2. Social Identity Salience

It was noted in Chapter Two that an individual's identification with an organisation is also associated with the extent to which that organisation is salient to the individual (e.g. Haslam et al., 2003). The principle of social identity salience states that a person will tend to define themselves in terms of a specific identity when it has prior meaning for them and fits with relevant comparative and normative aspects of their social environment (e.g. Oakes, 1987; Oakes et al., 1991; Turner et al., 1994). Therefore when an organisation is particularly meaningful or situationally relevant to an individual, identification with that organisation is likely to be enhanced (e.g. van Dick et al., 2005). It may equally therefore be contended that when a future organisation is salient to the individual prior to entry, they will experience a greater degree of anticipatory identification with that organisation.

Factors such as a previous positive experience with an organisation or perceived similarity with other applicants have been argued to enhance the salience of an organisational identity during the pre-entry period (e.g. Celani and Singh, 2011). Herriot (2002) moreover has reasoned that core aspects of the recruitment and selection process, for example the selection methods adopted, the characteristics of the selectors or the perceived fairness of the process, can all impact upon which social identity is most salient to applicants. Therefore, through a combination of both individual and organisational stimuli, organisational salience can be heightened prior to entry. If anticipatory identification shares the same antecedents as identification within other contexts, this heightened salience could similarly impact upon the degree of anticipatory identification experienced by a newcomer.

Findings from Ellemers et al.'s (1990) study of anticipatory identification within a social mobility context might also be taken to indicate that the salience of a particular social identity prior to entry can impact upon anticipatory identification. For example anticipatory identification was found to be greatest when group boundaries were permeable, leading to an increased readiness for the social identity of the new group to become activated within

the individual. Similarly, participants more closely identified with a group other than their own when the status of the individual and that alternative group were felt to be equal, resulting in increased comparative fit with the group. Whilst the concept of pre-entry salience was not explicitly addressed in Ellemers et al.'s research, such findings arguably provide some support for the proposition that a newcomer is more likely to identify with an organisation when that organisation is particularly salient during the pre-entry period.

Indeed it can be suggested that the salience of the organisation could be an especially relevant factor for social identity processes prior to entry. Amiot, de la Sablonniere, et al. (2007), for example, emphasise that prior to entry an individual will typically not have had extensive interaction with other members of their new organisation. As a consequence, they will not have a full awareness of the defining attributes of the organisation, including whether that organisation is indeed a source of positive social identity (Otten and Epstude, 2006). Under these circumstances, a newcomer will often use their self-knowledge and project their own attributes onto the organisation to “fill in the gaps” in their representation of the organisation. Through this overlapping mental representations of self- and organisation can be formed and the newcomer experiences an initial sense of identification with the organisation (e.g. van Veelen, Hansen and Otten, 2014; van Veelen, Otten and Hansen, 2013).

This process, known as “self-anchoring” (e.g. Cadinu and Rothbart, 1996), is thought to be governed by the extent to which an individual categorises themselves as a member of their new organisation (e.g. Clement and Krueger, 2002; Jones, 2004); a key determinant of which is the salience of that particular social identity (e.g. Oakes, 1987; Oakes, et al. 1991; Turner et al., 1994). Hence when organisational membership is situationally relevant or is particularly meaningful to the newcomer prior to entry, they may look to categorise themselves a member during the pre-entry period. However, in the absence of a well-defined prototype of the organisation, a process of self-anchoring ensues. The newcomer will consequently come to hold overlapping representations of themselves and the organisation prior to entry, and through this experience a sense of anticipatory identification with the organisation. Accordingly even when an individual has only minimal familiarity with an organisation prior to entry, when that organisation is salient, they may nonetheless more closely identify with the organisation during the pre-entry period. It can therefore be hypothesised that:

Hypothesis 2: The salience of an organisation prior to entry will be positively related to anticipatory identification.

3.4. Post-Entry Consequences of Anticipatory Identification

Stephens and Dailey (2012) have recently observed a positive association between newcomers' anticipatory identification and post-entry outcomes; both in terms of their evaluation of information received during orientation and their subsequent post-entry organisational identification. These findings provide a preliminary indication that pre-entry identification could have an important impact upon how one sees and relates to an organisation after entry. However this study required participants to retrospectively report their anticipatory identification after joining the organisation. Thus there remains uncertainty as to the direction of the relationship between variables. Furthermore, whilst an understanding of the relationship between anticipatory identification and attitudes to orientation is useful, it does not clarify the impact of pre-entry identification on important work outcomes typically associated with identification, for instance turnover intention. Accordingly, further research which allows anticipatory identification to be measured prior to entry into an organisation is required to fully understand the post-entry consequences of anticipatory identification, both in terms of its relationship with post-entry identification and in terms of important work outcomes.

3.4.1. Organisational Identification

Longitudinal studies that have explored organisational identification have suggested that where the perceived identity of the organisation remains constant, the level of organisational identification experienced by an individual can remain relatively stable over time (e.g. Bartels et al. 2009; Wan-Huggins et al. 1998). When an individual initially identifies with an organisation, they will come to define themselves in terms of the organisation and integrate it within their self-concept. Organisational identification can thus contribute to a sense of self-consistency; by maintaining an attachment to the organisation one can preserve stability in one's sense of self as well (e.g. Dutton et al., 1994; Scott and Lane, 2000). In line with this view, Schaubroeck, Peng, and Hannah (2013) have recently found an individual's identification on their first day within a new organisation to be a strong positive predictor of their organisational identification over three months into their tenure. Whilst this study did not shed light on the extent to which these participants identified with their organisation prior to entry, it nonetheless points to a clear relationship between newcomers' very early organisational identification and the extent to which they identify with the organisation some considerable time later.

Extending this proposition further, it can be contended that post-entry identification is one important consequence of anticipatory identification. When an individual identifies with an organisation prior to entry, they will arguably have begun to assimilate the organisation into their self-concept before they join, and come to see it as self-definitive. A drive for

self-consistency may thus mean that the level of identification prior to becoming a member will be maintained after they formally take up their position within the organisation. On the basis of this premise, it would be expected that the consequences of anticipatory identification highlighted within the retrospective report study of Stephens and Dailey (2012) would also be observed when participants' reporting of anticipatory identification precedes their entry into the organisation. In view of this, it may be hypothesised that:

Hypothesis 3: Anticipatory identification will be a significant predictor of post-entry organisational identification.

3.4.2. Turnover Intention

In Chapter Two, the consequences of organisational identification in terms of important work outcomes were discussed. One consistently observed product of organisational identification is a reduced desire to leave the organisation (e.g. Abrams, Ando and Hinkle, 1998; Cole and Bruch, 2006; Mael and Ashforth, 1995; Olkkonen and Lipponen, 2006; Smith et al., 2010; van Dick et al., 2004). To account for this observation, van Dick et al. (2004) again draw on the notion that when an individual identifies with an organisation they become psychological intertwined with that organisation, and it becomes an important part of their self-concept. As a consequence, the authors argue that leaving the organisation has the potential to be highly damaging to an individual's self-concept, because leaving would result in a loss of part of their self. Further advancing this position, Smith et al. (2010) have found that organisational identification amongst newcomers is a particularly important factor in determining a desire to remain a member of the organisation at the beginning of their tenure. Accordingly, the extent to which an individual initially defines themselves as a member of an organisation may be viewed as a key determinant of their early turnover intention.

Extending this proposition further, anticipatory identification could also impact upon newcomers' desire to remain a member of their new organisation. Again, from this perspective, the more an individual identifies with an organisation before joining, the more they will define themselves in terms of their membership of their future organisation. As a result of this pre-entry assimilation of the organisation into their self-concept, the prospect of spending a long period of time within the organisation would be perceived favourably by the newcomer, and their membership would not simply be seen as a "stop gap" until another, more suitable position came along at another organisation. These positive attitudes towards enduring tenure within the organisation may subsequently be carried forward from pre- to post-entry once the individual eventually joins the organisation, and thus similarly influence their turnover intentions at the beginning of their tenure.

Alternatively, and in line with Hypothesis Three, anticipatory identification could instead be a more proximal predictor of turnover intentions, by influencing the level of organisational identification an individual experiences after joining the organisation. As discussed above, individuals' post-entry organisational identification has been shown to be a key predictor of their desire to remain within an organisation.

Hypothesis 4: Anticipatory identification will be a significant predictor of post-entry turnover intentions.

3.4.3. Job Satisfaction

Researchers have also previously established a relationship between organisational identification and employees' job satisfaction; the more an individual identifies with an organisation the more satisfaction they also report within their job role (e.g. Randsley de Moura et al., 2009; van Dick et al., 2004; van Dick, van Knippenberg, Kerschreiter, Hertel and Wieseke, 2008). Turnover intention and job satisfaction are typically construed as closely related, yet theoretically distinct constructs (Tett and Meyer, 1993). However unlike the studies of the relationship between organisational identification and turnover intention discussed above, the direction of the relationship between organisational identification and job satisfaction is more ambiguous in nature (van Knippenberg and van Schie, 2000).

One approach is to view organisational identification as an antecedent of job satisfaction (e.g. Amiot, Terry et al., 2007; van Dick et al., 2004; van Dick et al., 2008). Adopting this position, and in keeping with the arguments advanced in Chapter Two, highly identified individuals are likely to construe the organisation more positively in general, and similarly not attend to potentially negative features of the organisation. An individual's job role represents one specific aspect of their relationship with the organisation, and thus by extension will be seen more positively when organisational identification is high. In contrast, Randsley de Moura et al. (2009) have presented job satisfaction as an antecedent of organisational identification. From this perspective it is argued that undertaking a more satisfying job over time can lead to more positive attitudes towards the organisation, and as a consequence to a closer identification with it. Using a meta-analytical design, Randsley de Moura et al. (2009) indeed found evidence to suggest that job satisfaction was a predictor of organisational identification when characteristics such as culture, organisational type and demographic differences were taken into account.

Turning attention to the post-entry consequences of anticipatory identification, these divergent perspectives on the relationship between job satisfaction and organisational identification have different implications regarding the nature of the relationship between

anticipatory identification and post-entry job satisfaction. If identification is construed as a consequence of job satisfaction, and in particular a consequence that is predicated on a sustained positive experience within one's job role over time, as posited by Randsley de Moura et al. (2009), we would not expect to see a positive relationship between anticipatory identification and job satisfaction. Anticipatory identification is, by its nature, experienced by an individual in advance of taking up their position within an organisation. Accordingly it would not be feasible for a newcomer's identification with the organisation before they join to be influenced by their satisfaction once in their new job.

Alternatively, if organisational identification is best seen as an antecedent of job satisfaction, as suggested by the research of van Dick and colleagues (e.g. van Dick et al., 2004; van Dick et al., 2008), it is conceivable that anticipatory identification could be a significant predictor of post-entry job satisfaction. As previously discussed, when an individual identifies with an organisation prior to entry, they may be thought to possess overlapping mental representations of themselves and the organisation even before formally becoming a member, and to define themselves according to the same attributes that they believe define their future organisation. Forming a favourable impression of all aspects of their relationship with their new organisation, including their role within that organisation, consequently also reflects favourably upon themselves, preserving a positive self-concept and positive self-esteem. We might therefore expect individuals who identify with their organisation prior to entry to have an increased disposition to perceive their job as satisfying and fulfilling after they actually join the organisation. Thus under these circumstances, anticipatory identification would be a significant predictor of post-entry job satisfaction.

Reflecting on these contrasting perspectives, it appears that whilst there is evidence that job satisfaction can be viewed as an antecedent of identification, there is nonetheless a similar level of support for the proposition that the extent to which an individual identifies with an organisation will influence their level of satisfaction within their job. In addition, longitudinal research that has explored these relationships (e.g. Jetten et al., 2002) has so far not conclusively substantiated either proposition. However Amiot, Terry et al. (2007) have found using path analyses that statistical models which treat organisational identification as a mediator between perceptions fairness within the organisation and job satisfaction, have a better fit to the data than models representing a direct relationship between these variables. These analyses may be thought to provide some further support for the notion that organisational identification precedes an individual's satisfaction within their job role. In addition, this conceptualisation arguably possesses greater consistency with the hypothesised consequences of anticipatory identification presented throughout this thesis. Exploration of this possible post-entry outcome of anticipatory identification

thus provides a further valuable test of the theoretical propositions underpinning the model as a whole. It is therefore hypothesised that:

Hypothesis 5: Anticipatory identification will be a significant predictor of post-entry job satisfaction.

3.5. Temporal Dynamics of Anticipatory Identification

In order to extend our understanding of anticipatory identification, it is useful to move beyond the unidirectional relationship between identification and its consequences discussed above to consider the temporal dynamics of anticipatory identification. In doing so, we can be more confident that constant factors such as consistent employer branding (e.g. Edwards, 2009) or an individual's need for identification (e.g. Glynn, 1998; Kreiner and Ashforth, 2004) or their personality (e.g. Bizumic et al., 2012) may have an equivalent impact on identification before and after entry. When investigating the temporal dynamics of anticipatory identification we may take into account the propositions discussed in Chapter Two. Firstly, it was reasoned that initial identification can buffer the relationship between organisational identification and its antecedents. Secondly, identification feedback loops were highlighted, through which initial identification may lead an individual to arrive at more (or less) favourable impressions of the organisation over time. These mechanisms enable us to consider how anticipatory identification may similarly impact upon the relationship between post-entry identification and its post-entry antecedents. A hypothesised anticipatory identification buffering mechanism is therefore explicated in Section 3.5.1, followed by an anticipatory identification feedback loop mechanism in Section 3.5.2.

3.5.1. Buffering Effect of Anticipatory Identification

In Chapter Two, a series of studies was discussed which suggested that initial identification may moderate the impact that subsequent experiences within, or impressions of, an organisation have on later organisational identification. For example, initial identification has been found to moderate the relationship between later perceptions of the organisation and organisational identification (e.g. Lipponen et al., 2011). Similarly, initial identification can influence the way information that threatens a positive view of the organisation is attended to, encoded or interpreted by the individual (e.g. Doosje et al., 2002). To date, studies that have explored the buffering effect of initial identification on subsequent identification have focussed on these relationships only once that individual is a member of that organisation. Nonetheless it is conceivable that anticipatory identification could also interact with post-entry variables to impact upon newcomers' organisational identification after joining.

Lending weight to this proposition, there is evidence from outside the field of organisational identification to suggest that pre-entry variables can interact with post-entry variables to predict important work outcomes. Meyer, Irving and Allen (1998), for example, found that newcomers' pre-entry values moderated the relationship between post-entry experiences and post-entry organisational commitment. Research by Holton and Russell (1997) has also suggested that proactive anticipation prior to entry interacts with human capital variables to predict post-entry work outcomes including job satisfaction, organisational commitment and turnover intention. Hence experiences or cognitions that originate before an individual has joined an organisation can continue to influence their attitude towards that organisation after entry. Importantly, moreover, these pre-entry factors also have the power to influence the relationship between post-entry variables. If anticipatory identification is found to have a similar impact, this points to a potentially important post-entry role for anticipatory identification.

Chapter Two presented two separate buffering mechanisms through which initial identification has been shown to impact upon subsequent identification. These separate mechanisms can be drawn on to understand how anticipatory identification might influence subsequent post-entry identification. Firstly, initial identification has been found to moderate the relationship between the feedback an individual receives regarding their group and the extent to which that group is seen as a source of positive social identity. When initial identification is high, individuals appear to engage more readily in social creativity strategies to maintain their positive impression of the group. For instance, information which challenges the self-enhancing nature of the organisation may not be attended to, may be trivialised or may be attributed to factors not under the control of the group (e.g. Cadinu and Cerchioni, 2001; Costarelli, 2012; Doosje et al., 2002; Sherman et al., 2007; van Vugt and Hart, 2004). Accordingly, when these social creativity strategies are adopted, the organisation continues to facilitate self-enhancement, and ultimately organisational identification remains unaffected.

Extending this suggestion to include anticipatory identification, it can be proposed that the extent to which an individual identifies with an organisation in advance of formally taking up membership of the organisation will similarly be capable of moderating the relationship between post-entry experiences and post-entry identification. When an individual identifies with an organisation prior to entry, we would expect that the organisation will have become more closely integrated within their self-concept during the pre-entry period. As a result, there may be a drive to preserve a positive impression of the organisation after joining, maintaining a positive self-concept by extension (e.g. Ellemers and van Knippenberg, 1997; Sherman and Kim, 2005). For this reason, an individual with high levels of anticipatory identification might employ the same social creativity strategies used

by existing members of the group. Adoption of these strategies could help mitigate the impact of negative post-entry information which could challenge their earlier positive view of the organisation. As a consequence, organisational membership continues to be seen as a source of self-enhancement and post-entry identification is not deleteriously affected.

Indeed there is reason to suppose that a desire to satisfy self-enhancement needs may be particularly prevalent during the process of organisational entry. For example, Easterbrook and Vignoles (2012) have shown satisfaction of a drive for self-esteem to be a pervasive factor associated with newcomers' identification across different forms of novel groups. This has also been observed in studies of post-decisional dissonance, which have found a newcomer's evaluations of the attractiveness of their organisation increases after they chose to join that organisation (Lawler, Kuleck Rhode and Sorensen, 1975). Furthermore, self-esteem specifically derived from one's organisation appears capable of limiting the negative effects of factors such as uncertainty or anticipated change (e.g. Hui and Lee, 2000). As such, in addition to a general desire for positive self-esteem, preserving this self-enhancement may be especially beneficially to newcomers. Drawing on a self-enhancement-based approach it is therefore hypothesised that:

Hypothesis 6a: Anticipatory identification will moderate the relationship between post-entry identity relevant information and post-entry social identity judgements, so that the relationship between post-entry identity relevant information and post-entry social identity judgements is weaker when anticipatory identification is high.

Hypothesis 6b: Anticipatory identification will moderate the relationship between post-entry identity relevant information and post-entry identification so that the relationship between post-entry identity relevant information and post-entry identification is weaker when anticipatory identification is high.

Hypothesis 6c: Post-entry social identity judgements will mediate the interactive effect of post-entry identity relevant information and anticipatory identification on post-entry identification; i.e. a mediated moderation effect will be observed with the moderation predicted in Hypothesis 6a explaining the moderation predicted in Hypothesis 6b.

Alternatively, initial identification has also been shown to limit the extent to which threats to the positive image an organisation subsequently impact upon organisational identification (e.g. Lipponen et al., 2011). Negative experiences within the organisation may be seen as less detrimental or less important to an individual who closely identifies with an organisation. For example it has been argued that high identifiers respond to threats to the value of their group through increased loyalty and group-affirmation (e.g.

Ellemers et al., 2002); rather than attempting to distance themselves from the group, high identifiers will typically look for ways to collectively reassert the positive standing of the group. Identification is also thought to serve as a form of coping mechanism which could actually help an individual to actively resist subsequent threats to their identity (e.g. Jetten et al., 2002). Finally, a desire for self-consistency can make physical or psychological withdrawal from the organisation increasingly undesirable when initial identification is high (e.g. van Knippenberg et al., 2007), even if the value of the group comes under threat. As a consequence, the extent to which an individual initially identifies with an organisation appears capable of moderating the relationship between the perception that the organisation is a source of positive social identity and subsequent organisational identification.

Focussing on the post-entry consequences of anticipatory identification, these propositions may again be drawn upon to suggest that the extent to which an individual identifies with an organisation prior to entry could moderate the relationship between post-entry social identity judgements and post-entry identification. The process of joining a new organisation is likely to be associated with a period of considerable adjustment as well as threats to one's current identity (e.g. Ethier and Deaux, 1994; Kammeyer-Mueller and Wanberg, 2003). Maintaining stable levels of identification after entry, and with this a consistent self-view, may arguably be even more pressing under these circumstances, and psychological withdrawal from the organisation even more detrimental to the individual's self-concept. Continuing to identify however could provide the newcomer with a sense of security and stability during what may be a potentially challenging transition (Iyer, Jetten, Tsivrikos, Postmes and Haslam, 2009); in effect functioning as a coping mechanism to protect them from post-entry identity threats (Jetten et al., 2002). As a consequence, even if the individual finds their new organisation does not provide them with a positive social identity once they become a member, they might nonetheless seek to preserve a consistent self-view (e.g. van Knippenberg et al., 2007), and maintain stable levels of identification after entry, even if this is at the expense of the self-enhancement motives previously discussed.

In contrast to the first buffering mechanism considered above, from this perspective newcomers may be seen to attend to, and cognitively process, subsequent post-entry information which poses a threat to the organisation as a source of positive social identity. However from this perspective, when a newcomer identifies with an organisation prior to entry this information is rationalised or accepted, and so has a more limited impact upon post-entry organisational identification. Taking this self-consistency-based approach, an alternative hypothesis can therefore be presented:

Hypothesis 7: Anticipatory identification will moderate the relationship between post-entry social identity judgements and post-entry identification, so that the relationship between post-entry social identity judgements and post-entry identification is weaker when anticipatory identification is high.

3.5.2. Feedback Loop of Anticipatory Identification

The concept of an identification feedback loop was introduced in Chapter Two. Here the reciprocal nature of identification was highlighted, drawing on the proposition that an individual's initial identification with an organisation can impact upon their subsequent impressions of, and interaction with, the organisation (Ashforth and Mael, 1989; Pettit and Lount, 2012). These subsequent experiences can serve to strengthen an individual's identification with the organisation over time (Di Sanza and Bullis, 1999; Dukerich et al., 2002; Dutton et al., 1994; Rousseau, 1998). As such, an individual who closely identifies with an organisation is likely to construe subsequent experiences within the organisation more positively than an individual with lower levels of organisational identification. These positive experiences would, in turn, positively impact upon their later organisational identification. Turning attention to the pre-entry period, it is possible to conceive that such feedback loops may also span the boundary between pre- and post-entry, so that newcomers' initial anticipatory identification positively impact upon their perceptions of, and identification with, the organisation after entry.

There is evidence to indicate that newcomers' perceptions of an organisation prior to entry can have an important impact upon post-entry outcomes. Carr, Pearson, Vest and Boyar (2006) for example have demonstrated that perceptions of value congruence with an organisation prior to joining were a significant predictor of newcomers' turnover intentions upon entering the organisation. Similarly, Riordan, Weatherley, Vandenberg and Self (2001) found that pre-entry perceptions of fit predicted post-entry job satisfaction and organisational commitment. Although not specifically addressing newcomers' identification with an organisation before joining, such studies nonetheless indicate that pre-entry perceptions of congruence with an organisation can have a notable impact upon post-entry work outcomes. Organisational identification can be seen another form of congruence, albeit relating to an overlap between the identities of an individual and their organisation. These studies therefore lend weight to the proposal that anticipatory identification may similarly positively affect relevant post-entry outcomes.

Research has previously also indicated the presence of feedback loops that span the boundary between pre- and post-entry, for example within the area of organisational socialisation. Payne, Satoris, Culbertson, Boswell and Barger (2008) have shown that

favourable perceptions of an organisation prior to entry predicted proactivity during socialisation; whilst this proactivity has also previously been found to be related to a more positive view of the organisation and a newcomers' place within it (e.g. Wanburg and Kammeyer-Mueller, 2000; Saks, Gruman and Cooper-Thomas, 2011). It therefore appears reasonable to suggest that the pre-entry and post-entry periods are best seen not as separate and discrete episodes in an individual's involvement with an organisation, but as interconnected and interacting elements of the same on-going relationship. If so, initial experiences prior to joining could be construed as the starting point for a feedback loop which, so far, has tended to be examined only after an individual has joined the organisation.

We can return to the recent research of Stephens and Dailey (2012) to find initial support for the proposition that anticipatory identification may lead to more positive perceptions of, and relationships with, the organisation after entry. These researchers uncovered a positive correlation between newcomers' pre-entry identification and how helpful and relevant they found the information they subsequently received during their post-entry orientation training. However their findings also indicated that the quality of the orientation information was a significant predictor of the change in an individual's identification from before to after joining. When orientation information was perceived more positively, there was a greater increase in newcomers' identification between pre- and post-entry into the organisation. Accordingly, anticipatory identification served to positively influence both post-entry evaluation of training and post-entry identification.

Yet whilst this research is informative, several limitations prevent it from providing us with a thorough understanding of the post-entry impact of anticipatory identification. Firstly, as previously noted, anticipatory identification was retrospectively reported after newcomers had joined the organisation. As a result, we cannot be confident that the variable impacting upon post-entry outcomes is indeed the extent to which individuals identified with the organisation prior to entry. Secondly, whilst the findings of this study point to a positive feedback loop, this mechanism was not specifically explicated or tested within the research. Finally the main post-entry variable of interest within Stephens and Dailey research was orientation information quality. As such, research that has explored the links between anticipatory identification and post-entry consequences has not yet examined how anticipatory identification may positively impact upon social identity-based antecedents of organisational identification. Further analysis is therefore needed to ground the concept of anticipatory identification feedback loops within a Social Identity approach to organisational identification.

Drawing specifically on a Social Identity approach highlights several key explanations why identification feedback loops might be expected to span the boundary from pre- to post-entry. As discussed above, when an individual initially closely identifies with an organisation they are more likely to subsequently construe it as a source of positive social identity, which consequently reinforces their identification (e.g. Dutton et al., 1994; Dukerich et al., 2002; Pettit and Lount, 2011). Drawing again on self-enhancement motives, it can be argued that when an organisation becomes closely assimilated within an individual's self-concept, maintaining a positive impression of that organisation allows the individual to maintain a positive self-view as well (e.g. Ellemers and Van Knippenberg, 1997; Sherman and Kim, 2005). Anticipatory identification similarly entails the integration of the organisation into a newcomer's self-concept, albeit before, rather than after, joining the organisation. Hence in these circumstances, positive construal of subsequent post-entry experiences may, by extension, also contribute to the preservation of a positive self-concept. As discussed above, this positive self-concept may be particularly relevant to newcomers, facilitating their adjustment to the organisation and justifying their original decision to join the organisation (e.g. Hui and Lee, 2000; Lawler et al., 1975).

An anticipatory identification feedback loop can alternatively be seen within the context of self-consistency motives. Maintaining a consistent impression of an organisation with which we identify, has been suggested to help also preserve stability and coherence within one's self-concept (e.g. Ashforth et al., 2008; Scott and Lane, 2000). This desire for self-consistency can be an important factor in determining how information is attended to and processed (Swann et al., 1987), with self-consistent information more readily sought out, and recalled than self-inconsistent information (Swann and Read, 1981). Accordingly, when an individual identifies with an organisation prior to entry, they may be thought more likely to attend to, interpret and recall post-entry experiences in a way that is consistent with their initial anticipatory identification. This could enable the newcomer to preserve a self-view that is stable from pre- to post-entry and sustain the identification they experienced before joining the organisation. Again, during organisational entry this could be especially beneficial in enabling a sense of stability in what might otherwise be a period of considerable transition and upheaval (Iyer et al., 2009).

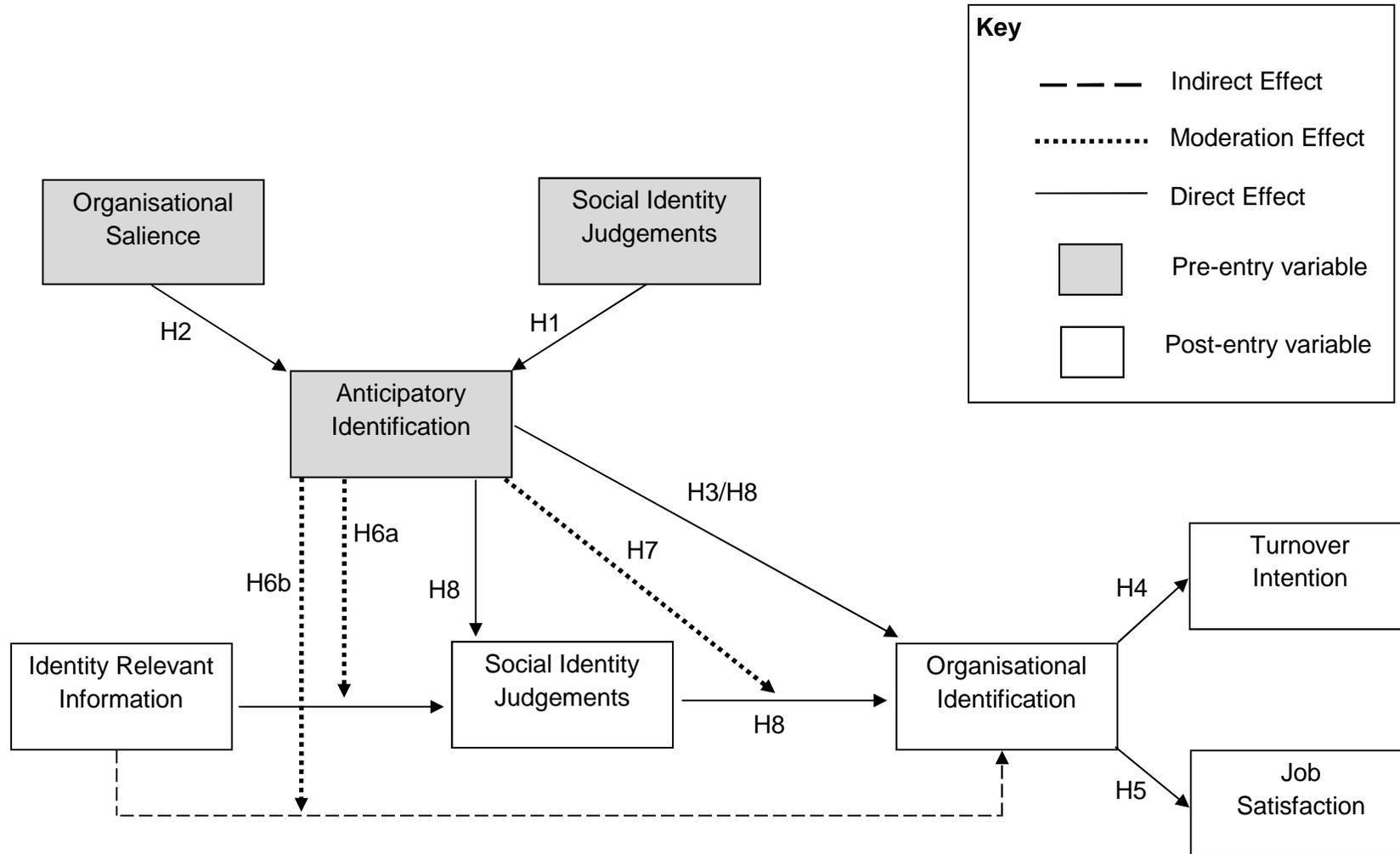
These propositions suggest that anticipatory identification could not only moderate the relationship between post-entry impressions of the organisation and post-entry identification, but could actually be implicated in the development of these impressions. The extent to which a newcomer identifies with an organisation prior to entry may therefore predict the extent to which that individual sees the organisation as a source of positive social identity after entry. Through these post-entry social identity judgements

anticipatory identification may also be thought to indirectly impact upon the level of organisational identification experienced after entry. It may therefore be hypothesised that:

Hypothesis 8: The relationship between anticipatory identification and post-entry identification will be mediated by post-entry social identity judgements.

The eight hypotheses outlined above can be drawn together to arrive at a conceptual model delineating the potential antecedents and consequences of anticipatory identification. This conceptual model is presented in Figure 3.1 below and will form the basis for the subsequent analysis discussed within this thesis.

Figure 3.1: Conceptual Model of the Antecedents and Consequences of Anticipatory Identification



CHAPTER FOUR: STUDY AIMS AND HYPOTHESES

4.1. Chapter Summary

This chapter set out the aims of the four studies which comprise this thesis. The primary objectives of the research are first outlined for each study, followed by the research hypotheses under examination. The reader is then presented with a revised version of conceptual model, representing the specific focus of that particular study.

4.2. Study One

Study One was a pilot study to provide an initial test of the hypothesised pattern of relationships between pre- and post-entry variables. A simpler version of the conceptual model was explored in Study One; focussing on the interaction between pre-entry and post-entry social identity judgements, anticipatory identification and post-entry identification. This model is presented in Figure 4.1. This allowed the four core tenets of the conceptual model to be assessed: first, the antecedents of anticipatory identification; second, anticipatory identification's relationship with post-entry identification; third, the buffering mechanism consequence of anticipatory identification; and fourth, the feedback loop consequence of anticipatory identification. Support for each of these four key aspects of the model would provide justification for further, and more detailed, scrutiny of the research hypotheses and conceptual model within subsequent studies. Accordingly, the following hypotheses were addressed within Study One:

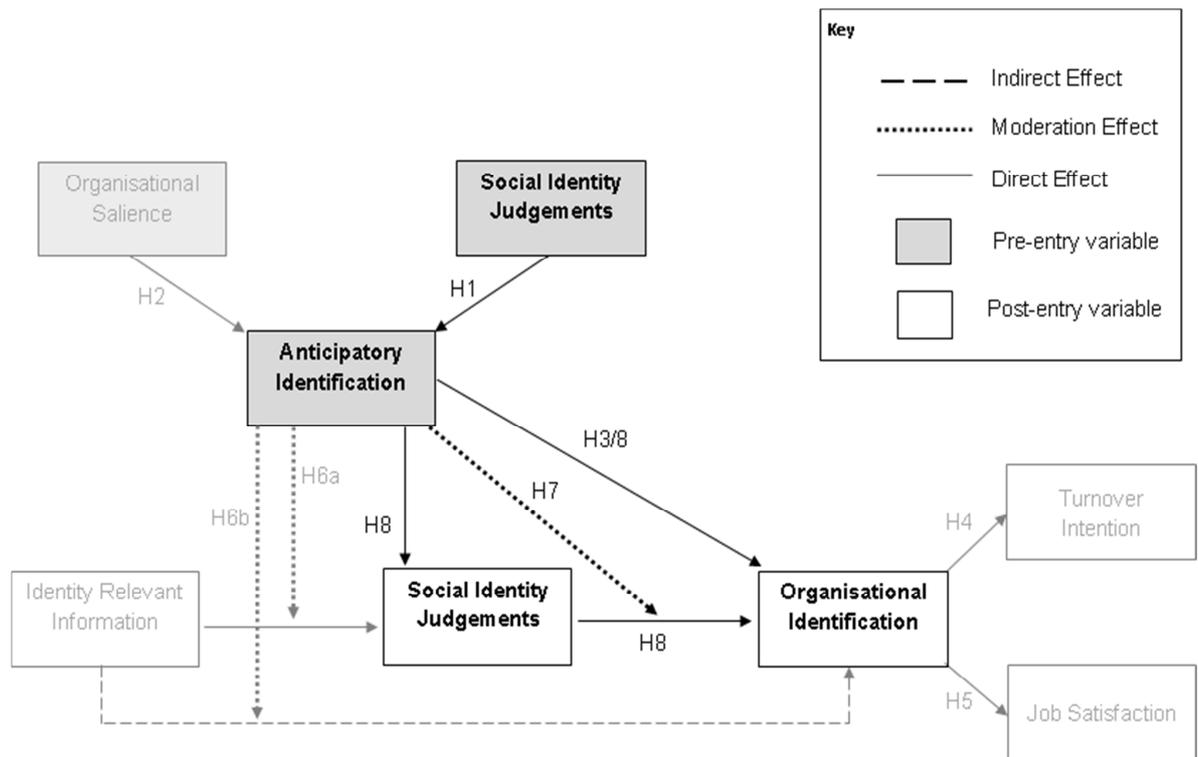
Hypothesis 1: Pre-entry social identity judgements will be positively related to anticipatory identification.

Hypothesis 3: Anticipatory identification will be a significant predictor of post-entry organisational identification.

Hypothesis 7: Anticipatory identification will moderate the relationship between post-entry social identity judgements and post-entry identification, so that the relationship between post-entry social identity judgements and post-entry identification is weaker when anticipatory identification is high.

Hypothesis 8: The relationship between anticipatory identification and post-entry identification will be mediated by post-entry social identity judgements.

Figure 4.1: Conceptual Model Study One



4.3. Study Two

Study Two looked to investigate the role of pre-entry saliency as an alternative antecedent of anticipatory identification. This study also analysed both permutations of the buffering consequence of anticipatory identification discussed in Chapter Three (i.e. that anticipatory identification would moderate the relationship between post-entry identity relevant information and post-entry social identity judgements, or that anticipatory identification would moderate the relationship between post-entry social identity judgements and post-entry identification). In addition, the feedback loop consequence of anticipatory identification was again explored, to investigate whether post-entry social identity judgements might mediate the relationship between anticipatory identification and post-entry identification using a different research design. Figure 4.2 presents the aspects of the conceptual model explored in Study Two, relating to the following research hypotheses:

Hypothesis 2: The saliency of an organisation prior to entry will be positively related to anticipatory identification.

Hypothesis 3: Anticipatory identification will be a significant predictor of post-entry organisational identification.

Hypothesis 6a: Anticipatory identification will moderate the relationship between post-entry identity relevant information and post-entry social identity judgements, so that the relationship between post-entry identity relevant information and post-entry social identity judgements is weaker when anticipatory identification is high.

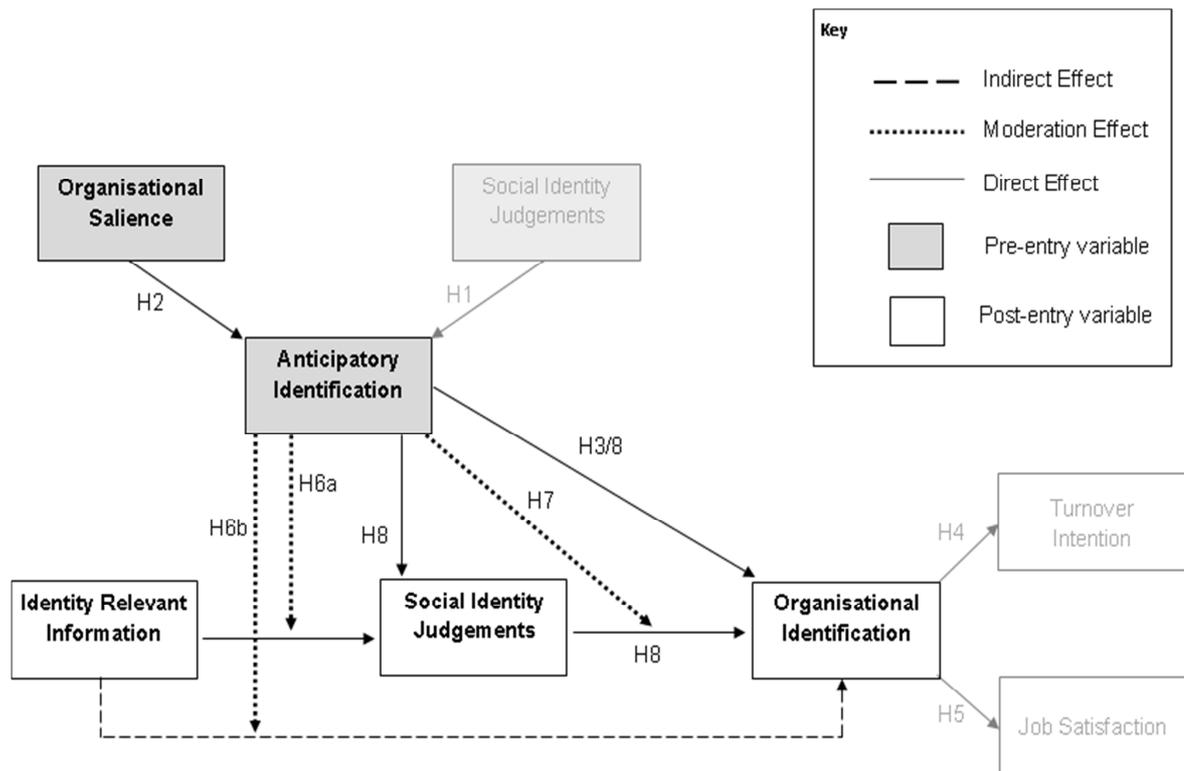
Hypothesis 6b: Anticipatory identification will moderate the relationship between post-entry identity relevant information and post-entry identification so that the relationship between post-entry identity relevant information and post-entry identification is weaker when anticipatory identification is high.

Hypothesis 6c: Post-entry social identity judgements will mediate the interactive effect of post-entry identity relevant information and anticipatory identification on post-entry identification; i.e. a mediated moderation effect will be observed with the moderation predicted in Hypothesis 6a explaining the moderation predicted in Hypothesis 6b.

Hypothesis 7: Anticipatory identification will moderate the relationship between post-entry social identity judgements and post-entry identification, so that the relationship between post-entry social identity judgements and post-entry identification is weaker when anticipatory identification is high.

Hypothesis 8: The relationship between anticipatory identification and post-entry identification will be mediated by post-entry social identity judgements.

Figure 4.2: Conceptual Model Study Two



4.4. Study Three

Study Three considered a positive social identity motive as an antecedent of anticipatory identification for a second time. Attention was again also paid to the post-entry consequences of anticipatory identification, by exploring the hypothesised feedback loop consequence of anticipatory identification as well as both buffering mechanisms outlined in Chapter Three (see Figure 4.3). Through the analysis of both buffering mechanisms, Study Three provided an extension to the initial pilot study, where only the second buffering mechanisms set out in the conceptual model had been investigated. The following hypotheses were therefore tested within Study Three:

Hypothesis 1: Pre-entry social identity judgements will be positively related to anticipatory identification.

Hypothesis 3: Anticipatory identification will be a significant predictor of post-entry organisational identification.

Hypothesis 6a: Anticipatory identification will moderate the relationship between post-entry identity relevant information and post-entry social identity judgements, so that the relationship between post-entry identity relevant information and post-entry social identity judgements is weaker when anticipatory identification is high.

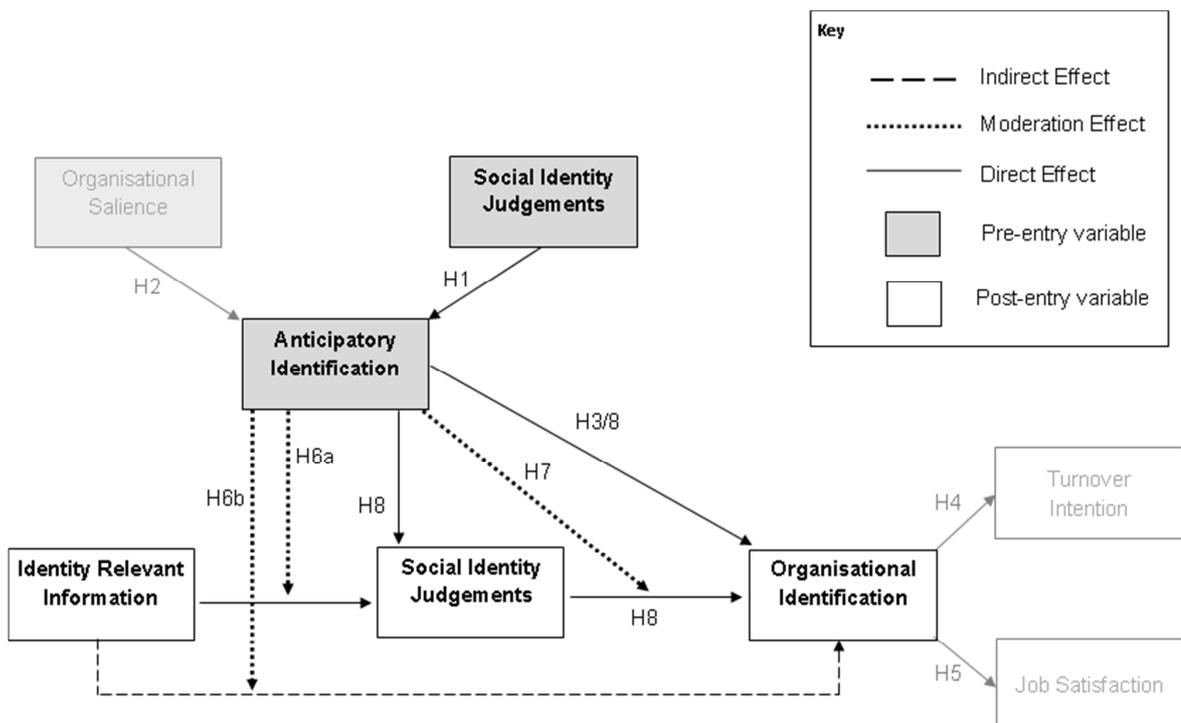
Hypothesis 6b: Anticipatory identification will moderate the relationship between post-entry identity relevant information and post-entry identification so that the relationship between post-entry identity relevant information and post-entry identification is weaker when anticipatory identification is high.

Hypothesis 6c: Post-entry social identity judgements will mediate the interactive effect of post-entry identity relevant information and anticipatory identification on post-entry identification; i.e. a mediated moderation effect will be observed with the moderation predicted in Hypothesis 6a explaining the moderation predicted in Hypothesis 6b.

Hypothesis 7: Anticipatory identification will moderate the relationship between post-entry social identity judgements and post-entry identification, so that the relationship between post-entry social identity judgements and post-entry identification is weaker when anticipatory identification is high.

Hypothesis 8: The relationship between anticipatory identification and post-entry identification will be mediated by post-entry social identity judgements.

Figure 4.3: Conceptual Model Study Three



4.5. Study Four

Study Four explored the same pattern of relationships between pre-entry and post-entry variables to Study Three, yet this time relied on naturally occurring, rather than manipulated, social identity judgements within an organisational context. In keeping with Study One, this study focussed only on the second of the two buffering mechanism consequences outlined in Chapter Three, namely that anticipatory identification would moderate the relationship between post-entry social identity judgements and post-entry identification. Study Four also explored the consequences of anticipatory identification in terms of specific work outcomes, in particular job satisfaction and turnover intention, for the first time. Figure 4.4 presents the conceptual model investigated in Study Four. The following hypotheses were tested within this study:

Hypothesis 1: Pre-entry social identity judgements will be positively related to anticipatory identification.

Hypothesis 3: Anticipatory identification will be a significant predictor of post-entry organisational identification.

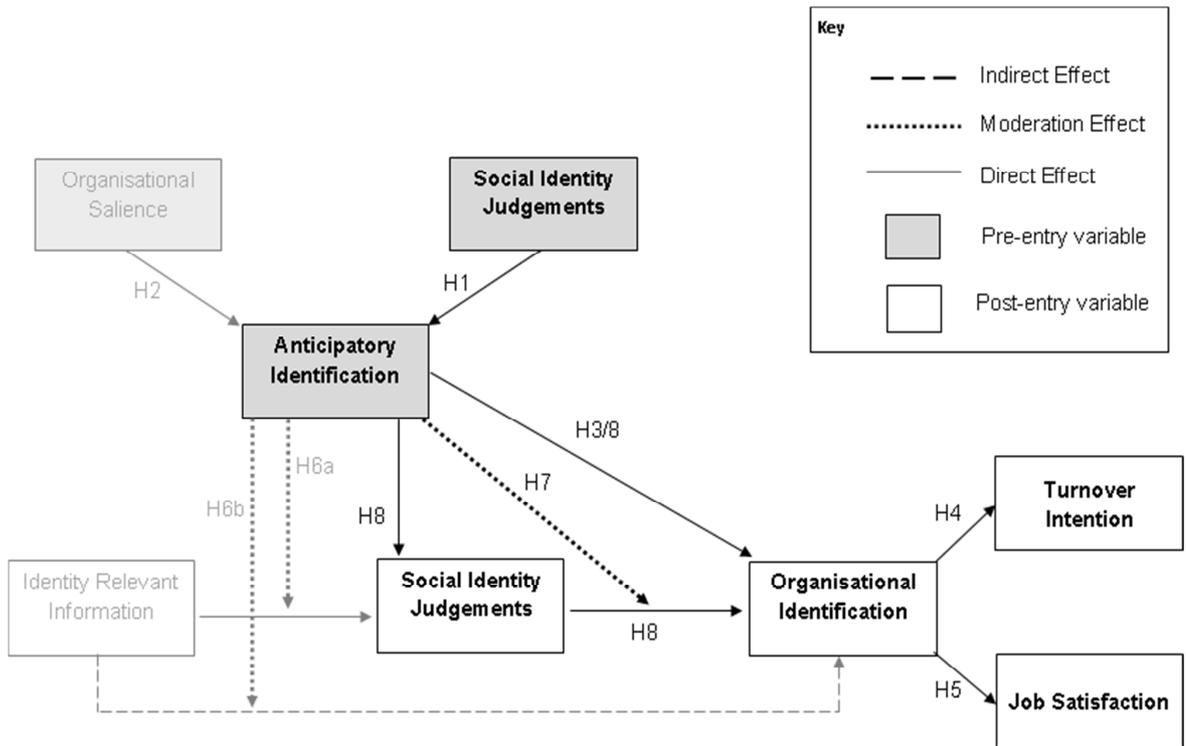
Hypothesis 4: Anticipatory identification will be a significant predictor of post-entry turnover intentions.

Hypothesis 5: Anticipatory identification will be a significant predictor of post-entry job satisfaction.

Hypothesis 7: Anticipatory identification will moderate the relationship between post-entry social identity judgements and post-entry identification, so that the relationship between post-entry social identity judgements and post-entry identification is weaker when anticipatory identification is high.

Hypothesis 8: The relationship between anticipatory identification and post-entry identification will be mediated by post-entry social identity judgements.

Figure 4.4: Conceptual Model Study Four



CHAPTER FIVE: RESEARCH METHODOLOGY

5.1. Chapter Summary

This chapter describes the methodology for the four research studies. After discussing the research paradigm which underpins the methodological approach, the research design and data collection methods for the four studies are presented. For each study, the reader is first provided with a rationale for the research design adopted, including the key considerations relevant to the use of that design. The specific methodology for the study is next outlined; this includes the sampling method and participants, the procedure followed and variables measured. The chapter concludes with a discussion of the main ethical issues relevant to the research and how these issues were addressed.

5.2. Research Paradigm

Exploration of identity and identification has a long history within the social sciences, and has been approached from numerous theoretical perspectives since the turn of the 20th Century (e.g. Erikson, 1959; Goffman, 1959; James, 1890; Mead, 1934, Strauss, 1959; Stryker, 1968; Tajfel, 1978). Cote and Levine (2002) suggest that within these theoretical perspectives, two clear disciplines have emerged: psychological and sociological perspectives on identity; a fundamental difference between these two perspectives being their understanding of the “locus” of identity:

“Psychologists tend to look for the locus of identity within the individual – as part of the psyche or “inner workings”... identity elements are accessed through the mental processes that people can communicate to the researcher ... For sociologists identity is both “internal” and “external” to the individual. It is internal to the extent that it is seen to be subjectively “constructed” by the individual, but it is external to the extent that this construction is in references to... day-to-day interactions, social roles, cultural institutions and social structures” (p.48 – 49).

This differentiation provides a useful framework to understand how researchers have construed identity and identification within an organisational context. Moreover it points to two core paradigms from which researchers approach the study of social identity; these may be categorised as “Social Constructivism” and “Logical Positivism” (e.g. Unger, Draper and Pendergrass, 1986), with a Social Constructivist paradigm most closely aligned to a sociological perspective on identity, whilst Logical Positivism underpins psychological investigations of identity and identification. However not only do these paradigms influence how researchers view identity processes within organisations, they also direct the specific research questions asked and the methodological approach adopted to address these research questions (Gubba, 1990).

Social constructivism posits that there is no objective, external social reality; the social world is instead subjectively constructed through interaction between social actors (Bryman, 2004). Gergen (1985; p. 271) argues that this means that “the self-concept is removed from the head and put within the sphere of social discourse”. Identity is not simply an internal, psychological construct, but instead a constituent part of an on-going social process. Researchers have increasingly drawn on a social constructionism approach to understand identity within organisations; arguing that people actively “work” on their identities within an organisational context (Watson, 2008). Organisational identification thus stems from this process of social meaning-making; it is associated with how individuals define themselves and make sense of who they are relative to the organisation (e.g. Ashforth et al., 2008).

From this perspective, organisationally-relevant identities are thought to be created, reworked or maintained in relation to a socially constructed understanding of what are expected and accepted identities within the organisation (e.g. Ashforth and Kreiner, 1999; Thornbarrow and Brown, 2009; Wieland, 2010). In addition, such identities are viewed as being claimed and granted through active social interaction with others, both inside and outside the organisation (Ashforth, 2001; de Rue and Ashford, 2010; Weick, 1995). Researchers who have adopted a social constructivist approach have, for example, focussed on how discursive resources are used by an individual to shape, negotiate and express their organisational identification (e.g. Bullis and Bach, 1991; Kuhn and Nelson, 2002) or the process through which individuals undertake “identity work” within an organisation (e.g. Beyer and Hannah, 2002; Ibarra, 1999; Pratt, Rockmann and Kaufmann, 2006). To explore these research questions, research methodologies have tended to be qualitative in nature. Researchers have adopted methodologies which allow them to explore intersubjective meaning-making, for example in-depth interviews, case study analysis or naturalistic observation (Schwandt, 1990), in order to gather the first-hand impressions and experiences of individuals as they come to construct and negotiate their identity within an organisation (Cote and Levine, 2002).

However whilst a notable body of research has adopted social constructionist approaches to organisational identification, for the past two decades the study of identity processes within organisations has been dominated by a Social Identity approach (Edwards, 2005; He and Brown, 2013). As introduced in Chapter Two, this term is used to describe two closely linked theories: Social Identity Theory and Self-Categorisation Theory (Haslam, 2004). Social Identity Theory (e.g. Tajfel, 1978; Tajfel and Turner, 1979) originated as part of a movement within social psychology which encompassed the drive for a more *social* social psychology (Taylor and Brown, 1979). This movement argued that the wider social environment has a crucial role to play alongside cognition in influencing a person’s

behaviour within the social world, at a time when mainstream social psychology was criticised for reductionism by focussing purely on cognitive or perceptual processes (e.g. Israel and Tajfel, 1972; Pepitone, 1981). These researchers argued for:

“a genuinely social psychology, which would have as its basis the idea that man and society have a reciprocal effect upon the mode of existence and behaviour of each other; thus ... the rejection of concepts implying a one-way causation, whatever direction the causation is presumed to take.” (Tajfel 1972, p.5)

Social Identity Theory was therefore established as a theory that considered the role of both social and cognitive determinants and consequences of an individual's identity. Importantly it was intended to construe social factors as preceding and influencing cognition and perception, rather than simply being a consequence of these individual psychological processes (Tajfel, 1981). However despite placing emphasis on both social and psychological determinant of individual's identity, Social Identity Theory research has in practice tended to focus on the “psychologization of behaviour” (Hogg, Terry and White 1995, p.264), and has lent towards the methodological tradition of the natural sciences to explore social identity (Jenkins, 2008).

This emphasis is particularly evident within Self-Categorisation Theory, a subsequent extension to Social Identity Theory which addressed the cognitive processes underlying social identity with the purpose of exploring intragroup behaviour (e.g. Turner et al., 1987). A fundamental assumption of this approach is that an individual holds mental representations (or schemata) of themselves and the organisation; organisational identification is conceptualised as the extent to which these representations overlap (e.g. Bergami and Bagozzi, 2000; Whetten, 2007). From this perspective, identification is essentially a cognitive phenomenon. Information about oneself and about the organisation is stored in memory in a very similar manner, albeit with potentially differing levels of complexity and variety. It is thus possible to hold a cognitive representation of oneself that is commensurable with one's view of the social groups of which one is a member, and for these representations or schemata to overlap to a greater or lesser degree (e.g. Coats et al. 2000).

Organisational identification research that has adopted a Social Identity approach has however typically attended less to how these representations are created and stored and more to the individual, organisational or social factors that influence this creation and storage. These studies were discussed in depth in Chapter Two (e.g. Carmeli et al., 2007; Lipponen et al., 2005; Mael and Ashforth, 1992; Reade, 2001; Smidts et al., 2001). Such a standpoint more closely mirrors Tajfel and colleagues initial conceptualisation of social identity (Tajfel, 1978; Tajfel and Turner, 1979), with aspects of the social world having a direct and meaningful impact upon individual cognitive processes. Moreover, and in

keeping with Tajfel's (1972) proposal of a reciprocal relationship between individuals and the social world, studies have also considered the behavioural consequences of organisational identification (see Riketta, 2005), and hence how the outcomes of a cognitive state of identification can impact upon social and organisational outcomes. Nonetheless, whether Social Identity researchers have focussed only on intra-individual cognitive processes or have instead looked to explore the interaction between social factors and individual cognition, they still remain grounded in a philosophical tradition that assumes the existence of a "real world", governed by natural or social laws and mechanisms (Jenkins, 2008). In this, a Social Identity approach to identity and identification is most closely aligned to a positivist paradigm.

Logical positivism (also termed logical empiricism) is founded on the notion there are a set of laws governing individuals' social behaviour, akin to the laws that govern phenomena within the natural world. It is therefore a social researcher's role to identify, test and codify laws of behaviour (May, 2011). Accordingly social researchers follow an objectivist epistemology, looking to explore these laws and mechanisms in a non-interactive, value-free manner (Gubba, 1990). Social phenomena therefore can and should be studied 'in the same state of mind as the physicist, chemist or physiologist when he probes into a still unexplored region of the scientific domain' (Durkheim, 1964: p.xiv). Barone, Maddux and Snyder (1997 p.9) suggest that three main factors guide the methodological approach aligned to this paradigm: first, that observation should be objective and quantifiable; second, that controlled experimental research is necessary to test theoretical concepts; and third, that laws concerning psychological processes are universal and so can be extrapolated to the wider population without loss of predictive power.

Schwandt (1990) highlights a number of research designs that allow a scientific methodological approach to be pursued: experimental designs, ex post facto designs and descriptive designs (for example correlational studies and survey research). Each approach allows the development, testing and falsification of research hypotheses, most notably through the use of quantitative, statistical methods of analysis (Gubba, 1990). This in turn contributes to the continuing development and refinement of theories regarding the nature of social reality (Black, 1999), which furthermore can be extended out of the current research setting to inform understanding and practice within a wider social context (Burrell and Morgan, 1979).

The merits of knowing how an individual within an organisation subjectively negotiates and constructs their identity have been increasingly recognised by researchers who have espoused a Social Identity approach to organisational identification (e.g. Ashforth et al., 2008). Despite this, a desire to understand the socially shared aspects of human

behaviour, and moreover to do so in a way that that can have practical relevance for the improvement of social relations, sits at the origins of Social Identity Theory (see Turner, 1996, for a historical discussion of Tajfel's work). Organisational identification research within a Social Identity tradition arguably continues to maintain this emphasis, looking to understand identity and identification not only within the immediate research setting but in a way that can be generalised across organisational contexts; and which furthermore can have practical benefits for social relations within organisations. As a consequence a focus on hypothesis testing, control and the extension of findings to practice remains a key driver behind the research in this field. This focus similarly underpinned the research presented within this thesis.

The methodological approach adopted within the present research was therefore informed by logical positivism. The intention of this methodological approach was to allow the testing of a series of theoretically-derived hypotheses; the results of which could be generalised across social settings and have practical application within an organisational context. To this end, research strategies advocated by Schwandt (1990), namely experimental and survey-based designs, were pursued. The data obtained from these studies was analysed using inferential statistics to explicitly address the research hypotheses set out in Chapter Three and so extend and refine a Social Identity approach to organisational identification.

5.3. Study One Methodology

Study One adopted a retrospective report design to address the specific research hypotheses set out in Chapter Four and presented in Figure 4.1. In this study, a survey-based data collection method was used to obtain information from new students regarding their identification with, and social identity judgements concerning, their university both before and after joining. Surveys were administered during students' first month at the university. Participants were asked to report their current impressions of the university as well as reporting their pre-entry impressions of the university within the same measurement instrument. Responses were collected anonymously using a series of pre-existing, pre-validated Likert-type scales. Key aspects of the methodological approach adopted in Study One, most notably the use of retrospective reporting and self-report surveys, are discussed below, followed by a more detailed outline of the procedure used within this study and the specific variables under examination.

5.3.1. Retrospective Reporting

Retrospective reporting designs are intended to obtain longitudinal data through use of a cross-sectional survey, asking participants to report their experiences of particular

phenomena at more than one point in time using the same measurement instrument (Metts, Sprecher and Cupach, 1991). Retrospective reporting can have advantages over traditional cross-sectional surveys as it can capture more complex, temporal relationships between variables (ibid.). Moreover, this approach may be the only way to capture past-event data, when the researcher does not have access to the population at the relevant time to enable longitudinal data collection (Miller, Cardinal and Glick, 1997). However use of retrospective reporting does present a number of challenges for researchers which can impact upon the validity of the findings obtained.

Huber and Power (1985) highlight two relevant reasons why participants may provide inaccurate or biased information through retrospective reports. First, there can be a deliberate motivation to provide inaccurate information, for example for impression management purposes or to conform to particular social norms or expectations. This might also help participants to present themselves as consistent and rational, regardless of their true sentiments or beliefs (e.g. Podsakoff, MacKenzie, Lee and Podsakoff, 2003). In addition, inaccurate reporting is also thought to be the consequence of “universal perceptual and cognitive limitations of people as information processors” (Huber and Power, 1985 p.173). In other words, a range of both conscious and unconscious perceptual-cognitive biases and heuristics can impact upon participants’ recollection of past events. Of particular relevance in the current study is the observation that reports of past events are strongly influenced by participants’ current state or by a generic personal memory about what they normally do, or how they normally feel (e.g. Brewer, 1993; Stone and Shiffman, 2002). As a consequence, participants’ current social identity judgements, organisational identification or reflections on their relationship with the organisation in general all had the potential to impact upon their recollection of these constructs before joining.

Steps were taken within Study One to limit the impact of such biases on participants’ retrospective reporting. In particular, data was collected as close to entry to as possible. This was intended to increase the accuracy of pre-entry impressions of the organisation and to reduce the time available for participants to develop generic personal memories on the basis of their post-entry experiences within the organisation. The instructions provided to participants also clearly specified that reporting should be informed by either their current or pre-entry experiences at the relevant points within the measurement instrument. Furthermore, whilst retrospective reporting can impact upon the accuracy of responses, it is important to consider these concerns with reference to the primary rationale of this study. Study One acted as a pilot study, providing an initial exploration of the hypothesised pattern of relationships between constructs as a starting point for more detailed analysis within later studies. If the hypothesised relationships were indeed

observed this would provide justification for continued investigation of the conceptual model, even in light of the potential limitations of this research design.

5.3.2. Self-Report Surveys

Self-report surveys are commonly used to collect quantitative data within social science research. This data collection method can be designed in a way that enables easy and systematic measurement of variables, allowing researchers to establish the presence and magnitude of relationships between variables (Alreck and Settle, 2004; Bryman and Bell, 2003). Surveys can similarly enable large sample sizes to be achieved in a way that is relatively cost- and time-effective (Creswell, 2003). Accordingly, survey-based data collection methods have the capacity to collect generalisable data and to identify phenomena even with small effects sizes within a population (Robson, 1999). The adoption of a survey-based methodology in Study One therefore allowed initial exploration of the conceptual model in a simple, convenient, yet nonetheless systematic and quantitative, manner.

Survey-based data collection methods however typically do not allow the researcher to establish causal relationships between variables (Oppenheim, 2003). Regardless of the level of control or rigour employed, causality can rarely be conclusively determined (Alreck and Settle, 2004; Krauth, 2000). This must be borne in mind when making inferences on the basis of research findings derived from surveys. However, again, the aim of Study One was to provide an initial test of the hypothesised relationships between pre- and post-entry variables. Later studies, in particular Studies Two and Three, explored causal relationships between the constructs in more detail. In view of this, the inability to convincingly establish causality was not a substantial concern for Study One, provided that the hypothesised pattern of relationships was observed.

An additional challenge relating to the sole use of self-report surveys is common method variance (Pace, 2010). Common method variance is variance that is “attributable to the measurement method rather than the constructs the measures represent” (Podsakoff et al. 2003, p. 879). When a single instrument is used to collect all data within a research study, this can lead to systematic measurement error and provide inflated estimates of the extent to which variables are related (Bagozzi, Yi and Phillips, 1991). One of the most commonly recognised sources of common method variance are the social desirability effects resulting from participants’ motivation to present themselves positively and in line with cultural norms and values (e.g. Ganster, Hennessey and Luthans, 1983). As social desirability effects can often drive responses to all scales within a measurement instrument, correlations amongst variables can be spuriously high (Kline, Sulsky and

Rever-Moriyama, 2000). A number of studies have however indicated that social desirability may have a more limited impact than generally assumed (e.g. Ganster et al., 1983; Moorman and Podsakoff, 1986; Spector, 1987). Accordingly, this source of common method variance need not necessarily bias results provided that scales and instruments are properly designed (Spector, 1987).

Nonetheless, a range of additional sources of common method variance exist which also must be taken into account. Podsakoff and Organ (1986) highlight two further factors of particular relevance within Study One. First, common method variance may arise as a consequence of participants' desire to maintain consistency within their responses, also known as the consistency motif. As highlighted above, participants are thought to try to present themselves as consistent and rational beings by answering questions they consider to be similar in a similar way; this desire may be particularly strong when required to provide retrospective accounts of attitudes and perceptions, as in the current study (Podsakoff et al., 2003). Second, Podsakoff and Organ (1986) suggest that participants' reporting may be influenced by mood states, both transient and more permanent in nature. Thus in Study One, participants may perceive all aspects of their relationship with the organisation as either generally positive or generally negative or they may respond positively or negatively as a consequence of their immediate circumstances and affective state. The use of a single measurement instrument means that this impacts equally upon pre-entry and post-entry reporting.

However whilst common method variance can present a challenge to the validity of research findings, steps can be taken to address its impact. Where it is not possible to separate measures either temporally or across different sources, effective questionnaire design can help minimise common method effects. For example, Lindell and Whitney (2001) recommend reverse coding items, counterbalancing the order of outcome and predictor variables, including "filler scales" to reduce the proximity of outcome and predictor variables and ensuring effective wording of scale items by minimising ambiguity, priming and value-laden statements. These steps were employed within Study One to help mitigate the impact of common method variance on the research findings of this study. Furthermore, Spector (2006) argues that the prevalence of common method variance within monomethod designs has been overstated. Crompton and Wagner (1994) for instance have found that correlations between variables measured using a single data collection method were significantly higher than multi-method correlations in only 27% of studies sampled. Thus whilst, common method variance is problematic within single source, self-report questionnaires, its occurrence is by no means ubiquitous. The potential impact of common method variance in Study One was noted, however the threat this

posed to the validity of the research was felt to be appropriate in light of the overall utility of this research design.

5.3.3. Sampling Method and Participants

Students enrolled on undergraduate and postgraduate degrees within Aston Business School were invited to participate during their first weeks of university. Participants were selected using a convenience sampling approach, a non-probability sampling method where participants are sampled on the basis of ease of access rather than through random selection (Bryman, 2004). This sampling method provides many benefits to researchers in terms of simplicity and convenience; however it can result in a non-representative sample, thus limiting the generalisability of the findings (Breakwell, Smith and Wright, 2012). Nonetheless, Berkowitz and Donnerstein (1982) have argued that an equally convincing test of generalisability, rather than relying on the assumed representativeness of one sample in one study, is the replication of findings across different methodological approaches and different samples. Accordingly, whilst it is possible to question the population validity of Study One on the basis of the sampling method adopted, both the intended aims of this study and its location within a wider programme of research suggested that this method was appropriate.

For undergraduate students, the module leader for Introduction to Organisational Behaviour (a compulsory module which all first year students within the Business School were required to complete) acted as a gatekeeper in the distribution of surveys to students. A URL link to the survey was sent as a Blackboard™ announcement and students received a further reminder one week after the original survey was distributed. Postgraduate students were contacted directly by the researcher via email. Again, participants initially received a URL link to the online survey, followed by a reminder email one week later. Because the focus of this research was on participant's identification with the university before joining, postgraduate students were advised that they would only be eligible to participate if they had not also completed their undergraduate degree at the university.

Of the 1433 students enrolled on first year undergraduate and postgraduate courses, 125 returned completed surveys, representing a 9% response rate. These participants had an average age of 21, ranging from 17 to 45. 63% of participants were female. 79% of participants were undergraduate students and 21% were enrolled on postgraduate degrees. Participants were also asked to report whether they were home students, EU students or non-EU international students. The proportion of students falling into each category was 67%, 11% and 22% respectively.

5.3.4. Procedure

Participants completed an online survey hosted by Bristol Online Surveys™; for undergraduate students the survey was completed during the first two weeks of term. Data collection for postgraduate students took place later than undergraduate students, approximately one month into their first term at the university. Within the online survey, participants were asked to report their anticipatory identification with the university before starting their degree as well as their evaluations of the extent to which the university was a source of positive social identity prior to joining. Participants were also asked to report their current identification with the organisation, their current social identity judgements, as well as a number of additional control variables discussed below. To measure each of these constructs, participants were asked to indicate the extent to which they agreed with a series of statements using five-point Likert-type scales (1=Strongly Disagree to 5 = Strongly Agree).

5.3.5. Measures

The scales employed to measure variables within Study One are discussed below. A full list of the items included within these scales can be found in Chapter Six, and the measurement instrument used is presented in Appendix One.

5.3.5.1. Anticipatory Identification/Post-Entry Identification

A number of scales have been developed to measure organisational identification from a Social Identity Theory perspective (e.g, Bergami and Bagozzi, 2000; Edwards and Peccei, 2007; Mael and Ashforth, 1992; Van Dick et al., 2004). Of these, Mael and Ashforth's (1992) has generally been one of the most commonly used measures (Riketta, 2005). However there has been considerable criticism of this scale. A particular area of concern is that items included within this scale, for example "*I am very interested in what others think about my organisation*" actually measure the outcomes of identification more than awareness, and evaluation, of one's membership of an organisation (Bergami and Bagozzi, 2000; Ellemers et al., 1999). Doosje et al.'s (1995) four-item scale is thought to be suitable for use with both real and ad hoc groups as well as measure both enduring and temporary states of identification (Haslam, 2004). As a consequence this scale was considered particularly useful to overcome some of the noted limitations of Mael and Ashforth's (1992) scale and also to allow consistent measurement of anticipatory identification across the four different studies within this thesis.

The extent to which participants identified with the university before and after entry was therefore measured using four items taken from Doosje et al.'s (1995) Social Identification

scale. Some amendment to the original wording was made within the measure of anticipatory identification to allow retrospective reporting. For example the item “*I see myself as a member of Aston University*” was included within the post-entry identification scale however was adapted to read “*before joining, I saw myself as a member of Aston University*” within the anticipatory identification scale. The authors reported a Cronbach’s alpha of 0.83 for this scale within a post-entry context. According to Nunnally (1978), Cronbach’s alpha coefficients above 0.70 indicate an acceptable level of internal consistency. This scale was therefore considered to have sufficient reliability for inclusion within the measurement instrument.

5.3.5.2. Social Identity Judgements

“Pride” (intergroup status): Participants’ pride in the university was measured using Tyler and Blader’s (2002) seven-item Autonomous Pride scale. This scale was specifically designed for use with a student population, making it particularly appropriate for the current context. Items were used in their original form for participants’ current reporting of post-entry pride, however were again amended slightly to allow for retrospective reporting of pre-entry pride. Original items on the seven-item Autonomous Pride Scale included “*I cannot think of another university I would rather attend*”; and were adapted to “*before I joined, I could not think of another university I would rather attend*” to capture participants’ pre-entry pride. The Cronbach’s alpha reported by Tyler and Blader (2002) for the original post-entry scale was 0.93, exceeding the 0.70 recommended by Nunnally (1978).

“Respect” (intragroup status): Participants’ perceptions of the respect received from the university were measured using Tyler and Blader’s (2002) five-item Autonomous Respect scale, which again was initially designed for use with a student population. Post-entry items included “*If they knew me well, most members of the Aston University community would respect my values*”. These were again adapted to allow retrospective reporting of pre-entry respect, for example to “*before I joined, I felt that most members of the Aston University community would respect my values*”. The authors reported a reliability coefficient of 0.95 for this scale within a post-entry context.

5.3.5.3. Control Variables

A number of control variables were also included within the measurement instrument. In addition to demographic variables including age, gender and nationality, participants were asked to report on their need for identification, whether Aston University had been their first choice university, whether they were living on and off campus and their degree programme.

Need for Identification: Participants' need for identification was measured using six items taken from Mayhew, Gardner and Ashkanasy's (2010) Need for Identification (Self-Definition) scale. These items measured participants' general desire for self-definition in relation to social groups and included "my understanding of who I am comes from the groups I am part of" and "without the groups I am part of, I would feel incomplete". The scale had a reported Cronbach's alpha coefficient of 0.86.

Choice of University: Participants were also asked to indicate whether Aston University had or had not been their first choice university. It has previously been suggested that applicants' identification with an organisation can impact upon self-selection choice and their decision to join that organisation over other organisations (e.g. Celani and Singh, 2011; Herriot, 2004). It was therefore supposed that participants who had wanted to join the university in the first instance might have experienced a higher level of identification with the university than participants who had initially wanted, but had been unable, to attend another university, and had therefore joined Aston University as an alternative choice.

Accommodation: Participants were asked whether they currently lived on the university's campus or whether they live away from campus, for example in private rented accommodation or with their parents or family. Drawing on research concerning remote working (e.g. Wiesenfeld, Raghuram and Garud, 2001) it was thought that the amount of contact with the university, and the spatial distance between participants and the university, could have impacted upon the extent to which students categorised themselves as a member of the university.

Degree Programme: Postgraduate and undergraduate students were sampled separately within this study, accordingly it was necessary to control for the degree programme participants were enrolled on in order to account for discrepancies between these two samples. However, in addition to this methodological reason, there was also a theoretical motivation for controlling for degree programme. Whilst the majority of undergraduate students were unlikely to have studied at university before, postgraduate students would have experience of at least one other university or comparable institution. Researchers have previously argued that experienced newcomers approach organisational entry differently to novices (e.g. Cooper-Thomas, Anderson and Cash, 2012). Thus previous experience within a similar university could have shaped how participants viewed and related to their new university prior to entry. Determining participants' degree programme allowed this prior experience to be controlled within Study One.

5.4. Study Two and Study Three Methodology

Studies Two and Three adopted an experimental design to address the research hypotheses outlined in Chapter Four and presented in Figures 4.2 and 4.3. The rationale for adopting this experimental approach is discussed in detail below. Students were invited to participate in what was ostensibly an online group decision-making task. This however was a cover story to mask the true aims of the studies. In Study Two, the salience of the group prior to entry was primed by informing participants that their likely involvement with the group was either higher or lower than average; an approach adopted in previous studies of social identification (e.g. Ellemers et al., 1997; Pettit and Lount, 2011). In Study Three, the status of the group prior to entry was primed by informing participants that their group's "decision-making capacity" was either above or below average, and that as a consequence they would be completing either a "high-level" or a "low-level" decision-making task.

From this point onwards the procedure of Studies Two and Three converged; participants' anticipatory identification was measured and the online group activity was then completed. Participants subsequently received feedback on their group's performance, indicating that their group had either performed above or below average during the activity. The feedback provided was pre-programmed and unrelated to students' actual performance on the task in order to manipulate social identity judgements. In response to this feedback participants were asked to report their perceptions of the status of the group as well as their subsequent post-entry identification with that group. The key aspects of this methodological approach, namely the adoption of a between-groups experimental design as well as the use of minimal groups, are presented below. The specific participants, variables and procedure for Study Two are then set out, followed by the participants, variables and procedure for Study Three.

5.4.1. Experimental Design

One of the core benefits of an experimental design for social research is its capacity to determine causal relationships between variables (e.g. Field and Hole, 2003; Sapsford and Jupp, 1996). Within experiments, researchers look to manipulate a hypothesised causal variable (the independent variable) and measure the effect of this manipulation on another variable (the dependent variable) whilst controlling for all other variables that have the potential to influence the dependent variable. If the only consistent difference between experimental conditions is the manipulation of an independent variable, we can discount the influence of alternative causal mechanisms and conclude that changes in the

dependent variable are likely to be the consequence of that manipulation (Breakwell et al. 2012).

5.4.2. Causal Relationships

The exploration of causal relationships in Studies Two and Three provided a valuable extension to the cross-sectional design adopted in Study One. This experimental approach was moreover felt to possess an important advantage over longitudinal correlational designs. Although longitudinal correlational designs allow us to establish the temporal ordering of relationships between variables, they still do not allow us to make causal statements about these relationships (Field and Hole, 2003). We cannot infer causality because one variable precedes another within longitudinal designs, for example because there may be a third variable that influences predictor and outcome variables across different time periods (Krauth, 2000). Systematic manipulation of the independent variable however provides increased confidence that observed relationships are causal in nature, rather than simply the result of covariance between variables. This principle provided a key justification for the methodology used within Studies Two and Three.

It is however important to note that whilst experiments can help identify causal relationships between variables, they do not actually allow us to ascertain why these relationships occur (Sapsford and Jupp, 1996). Accordingly, it is contended that experimental designs are most valuable when they look to establish causal chains and examine the intervening variables between cause and effect (Krauth, 2000; Shadish Cook and Campbell, 2002). By testing each step within a theoretically-derived chain of relationships, we begin to build support for the explanatory mechanisms set out by that theory. This focus on causal steps was a core aspect of Studies Two and Three. In addition to manipulating pre-entry salience or pre-entry status and post-entry performance information, Studies Two and Three looked to establish the chain of relationships which ultimately linked these two variables to post-entry identification. Thus the combination of experimental manipulation and a theoretically-specified pattern of relationships together allowed greater overall confidence in the validity of the research findings obtained.

5.4.3. Experimental Control

The value of experimental designs does not arise only from the deliberate manipulation of an independent variable, but also from the steps taken to minimise potentially confounding variables. Central to this research design are therefore efforts to ensure that the only systematic difference between experimental conditions is the manipulation of the independent variable (Breakwell et al., 2012). This more rigorous control leads to higher levels of internal validity within a research study over and above what can be achieved via

survey-based methodologies (Creswell, 2009). This experimental control offered an important addition to the other studies reported within this thesis and so provided a further justification for the adoption of this research methodology in Studies Two and Three.

A crucial way of ensuring that potentially confounding variables are unlikely to correlate with experimental conditions is through randomisation (Shadish et al., 2002). In Studies Two and Three, participants were randomly assigned to experimental conditions. The administration of the different conditions was also randomised across time to ensure that concurrent events, for example students' examinations or coursework deadlines, did not correlate with experimental conditions. Moreover steps were taken to ensure standardised testing, for instance by providing participants with exactly the same information and consistent wording of feedback and primes, to similarly help ensure that the manipulation of the independent variables was the only systematic difference between different conditions. As a result of these steps, confidence was increased that any causal inferences made in Studies Two and Three would not be biased by extraneous variables.

5.4.4. Demand Characteristics

A further factor necessitating specific consideration in relation to the experimental design adopted in Studies Two and Three was the potential for "demand characteristics" amongst participants. Participants are often motivated to provide responses they believe are socially desirable or that match the researcher's expectations, rather than a true reflection of their normal behaviour or attitudes (Orne, 1962). This can be more prevalent in experimental designs, for example due to the proximity of the researcher or because the pared down nature of the study facilitates hypothesis learning (Weber and Cook, 1972). Demand characteristics can therefore limit the extent to which research findings are likely to be observed outside of the current experimental setting, again presenting a challenge to the validity of the research. However actions can be taken to reduce the impact and likelihood of demand characteristics within an experiment. This includes the provision of "red herring" information. This information can create a focus for participants' suspicions, and allow naturally curious participants to feel that they have uncovered the true nature of the study, whilst retaining the integrity of experiment (Laney, Kaasa, Morris, Berkowitz, Bernstein and Loftus, 2008). The use of cover stories is also often adopted to mask the true nature of the research and prevent participants from trying to "second guess" what the researcher expects them to do (Haslam and McGarty, 2004). As discussed in Sections 5.4.8.5 and 5.4.9.5, Studies Two and Three undertook these actions in order to improve confidence in the validity of the research.

5.4.5. *Between-Groups Design*

Studies Two and Three relied on a between-groups design, whereby any one participant is exposed to only one possible experimental condition. This design raises additional considerations for researchers. Because each participant only completes one condition, greater potential for both systematic and non-systematic variation between groups is introduced into the research (Breakwell et al., 2012). The impact of systematic effects can be limited by the random assignment of participants to different conditions and by the rigorous standardisation of the administration of all aspects of the study (Shadish et al., 2002). These practices were adopted within Studies Two and Three. Yet, even when systematic differences between participants in different conditions are controlled, there will remain non-systematic variation between groups, which can increase the difficulty of detecting true differences between groups during statistical analysis (Field and Hole, 2003).

Rosenthal and Rosnow (1991) nonetheless argue that a between-groups design is particularly valuable when it is not possible to test the same participant in more than one condition, for instance as a consequence of the rationale of the research or the characteristics of participants. Participants' anticipatory identification could only be manipulated once, therefore adopting a within-groups design was thought unfeasible. If the post-entry impact of anticipatory identification was to be explored in a meaningful way, an individual could not be encouraged to experience a sense of high and low anticipatory identification with the same group. The studies could potentially have been designed in a way that enabled participants to join, and thus experience anticipatory identification with, different groups. However this in itself was likely to lead to contrast effects between groups, once again having an extraneous effect on dependent variables. As such, whilst the limitations of a between-groups design were recognised, this approach was felt to be most appropriate given the nature and rationale of Studies Two and Three.

5.4.6. *Minimal Group Approach*

The minimal group approach adopted in Studies Two and Three allocates participants to groups randomly or on the basis of arbitrary criteria, rather than in a way that has prior meaning to participants. This approach is widely used within the study of social identity (see Mullen, Brown and Smith, 1992) and more recently has been shown to also be appropriate for exploring identity processes within a virtual environment (e.g. Amichai-Hamburger, 2005). Yet whilst this approach is common, it has also been criticised for possessing low ecological validity (e.g. Schiffmann and Wicklund, 1992). For instance the minimal group paradigm recognises none of the complexity, including a shared history

and future, present in natural groups. This raises concerns about whether the phenomena observed in minimal group studies are truly illustrative of individuals' behaviour in social groups, or are in fact artefacts of the minimal nature of the experimental groups studied (e.g. Cadinu and Rothbart, 1996; Hertel and Kerr, 2001).

Nonetheless, social identity researchers (e.g. Brown, 1988; Mullins and Hogg, 1998) have argued that, even taking into account these limitations, minimal group studies provide a valuable way to investigate group behaviour. The approach allows the social cognitive underpinnings of inter- and intragroup relations to be examined more fully and more explicitly than in many other research designs. By using trivial grouping to create social groups, and by stripping away the majority of contextual factors that may typically impact upon social behaviour, researchers are able to explore the minimal conditions necessary and sufficient to evoke inter- and intragroup behaviour (e.g. Haslam, 2004). Moreover, by examining behaviour in ostensibly meaningless groups, we can be more assured that any behavioural, cognitive or affective outcomes are the consequence of group membership and not due to any pre-existing history between the individual and a particular social category (Tajfel, 1969). Accordingly, the minimal group approach adopted in Studies Two and Three provided a valuable and relevant supplement to the "real world" organisations examined in Studies One and Four.

5.4.7. Sampling Method

A non-probabilistic convenience sampling method was employed to recruit participants in Studies Two and Three. Participants were not contacted directly in the first instance and instead were required to respond to advertisements placed in university newsletters, within the university's psychology laboratories and on halls of residence noticeboards. The researcher's contact details were provided and potential participants were asked to contact the researcher for further details. This method of sampling can impact upon the external validity of research findings, as volunteers can have different characteristics to non-volunteers and are thought more likely to display demand characteristics (Rosnow and Rosenthal, 1976). To encourage a broader range of research participants, advertisements emphasised that all participants would receive payment of £5 as reimbursement for their time. It was intended that this would provide additional incentive for participation amongst individuals who would expect some form of recompense for taking part in research studies.

The payment of participants in itself however raises additional issues for researchers. This strategy raises ethical concerns which are discussed in detail below. Additionally, the provision of financial reward for participation can also intensify demand characteristics. A

participation fee can lead to the introduction of a perceived exchange relationship between participant and researcher, encouraging participants to behave in the manner they believe is expected of them by the researcher (Davis and Smith, 2005). To counter this, steps were taken within the research procedure to control for extraneous participant effects. In particular, participants were not informed of the true nature of the research until their participation had ended, and were instead presented with a cover story concerning the purpose of the research. As previously highlighted, this is thought to reduce demand characteristics amongst participants (Haslam and McGarty, 2004). Hence whilst payment of participants had the potential to bias research findings, it was felt that sufficient safeguards were put in place to minimise this occurrence.

5.4.8. Study Two

5.4.8.1. Participants

Study Two was conducted with 72 staff and students from Aston University. The sample comprised 44 female and 28 male participants with an average age of 21. Participants were equally and randomly assigned to conditions, however with approximately the same proportion of male and female participants in each condition. The number of participants used within this study was informed by the rule-of-thumb provided by Cohen (1992). Results from the pilot study suggested that large effect sizes may be anticipated within this study, thus indicating that this sample size would be sufficient to attain the necessary power within statistical testing.

5.4.8.2. Independent Variables

Two independent variables were manipulated. The first independent variable was Pre-Entry Group Salience. There were two levels for this variable (High/Low) which were manipulated by providing participants with false feedback regarding their “involvement” with the group. The nature of this manipulation is explained in further detail in Section 5.4.8.5 and has previously been adopted by Ellemers et al., (1997), who reported it be highly effective ($n = 101$, $F = 136.4$ $p < 0.001$). Manipulation of salience was checked using Haslam et al.’s (1999) one item measure “*being a member of this group is important to me*”. The second independent variable was Post-Entry Performance Information, which was treated as a categorical variable with two levels (Positive/Negative). This was manipulated by telling participants that their group’s performance was either above average or below average. Manipulation of group performance was checked by asking participants to indicate how well, on a scale of 1 to 10, they thought their group had performed during the activity.

5.4.8.3. Dependent Variables

Three main dependent variables were measured: Anticipatory Identification, Post-Entry Social Identity Judgements and Post-Entry Identification. Each construct was measured by asking participants to indicate the extent to which they agreed with a series of items using a five-point Likert-type scale (1 = Strongly Disagree to 5 = Strongly Agree). A full list of scale items is provided in Chapter Seven, and the measurement instruments used are presented in Appendix Two.

Anticipatory Identification and Post-Entry Identification were both measured using Doosje et al.'s (1995) four-item Social Identification scale, described in Section 5.3.8.1. Post-Entry Social Identity Judgements were measured using items based on Tyler and Blader's (2009, Study Two) Pride scale. The authors reported a reliability coefficient of 0.90 for this scale. Items in the current scale were adapted from Tyler and Blader's (2009) original scale to make them appropriate for use within a minimal group context. For example, the original item *"my company is one of the best companies in its field"* was adapted to *"this group is one of the best groups to belong to"* and the original item *"people are impressed when I tell them where I work"* was adapted to read *"people would be impressed if I told them I was a member of this group"*.

5.4.8.4. Control Variables

Demographic information concerning participants' gender and age was collected to control for individual differences between participants. In addition to John and colleagues version of the Big Five Inventory of personality factors (John, Donahue and Kentle, 1991; John, Naumann and Soto, 2008) was included within the pre-entry measurement instrument. There was reason to presume that personality factors may influence the extent to which an individual identified with the group. For example Bizumic et al. (2012) have shown that personality factors were generally positively correlated social identification (with negative correlations for neuroticism). Mayhew et al. (2010) have also shown participants' need for identification is positively predicted by their levels of extraversion, agreeableness and conscientiousness and negatively related to neuroticism. Measurement of personality factors was therefore also used as a proxy for participants' need for identification which was found to have questionable construct validity in Study One (see Section 6.3.1.7).

The use of the Big Five personality inventory however additionally served another purpose. This measure was also used as a "red herring" to divert participants' attention from the aims of the research. This inventory was given increased prominence during the pre-entry measurement instrument. This was felt to be a measure that participants would

have greater familiarity with and thus could direct participants' suspicions away from the true focus of the research.

The Big Five Inventory (John et al., 1991; John et al., 2008; John and Shrivstava, 1999) measures five personality factors, Neuroticism (Negative Emotionality), Extraversion, Agreeableness, Openness to Experience and Conscientiousness. A 44-item version of the inventory was used, which asked participants to indicate the extent to which they agreed with a series of statements, using a five-point Likert-type scale (1 = strongly disagree; 5 = strongly agree). Eight items were used to measure Neuroticism, including *"I am someone who can be tense"*; this subscale had a reported reliability coefficient of 0.84. Eight items were used to measure Extraversion, including *"I am someone who is talkative"*; a Cronbach's alpha value of 0.88 was reported for this subscale. The Agreeableness subscale included 9 items, such as *"I am someone who is helpful and unselfish with others"*, and had a reported reliability coefficient of 0.79. Openness to Experience was measured using a ten-item subscale with a reported Cronbach's alpha value of 0.81; example items include *"I am someone who is curious about many things"*. Conscientiousness was measured on a nine-item subscale, which included items such as *"I am someone who perseveres until the task is finished"* and had a previously reported reliability coefficient of 0.82³.

5.4.8.5. Procedure

Participants were initially asked to complete an online survey prior to taking part in a "virtual group activity". Adopting procedures set out by Pettit and Lount (2011), participants were told that the items within this survey could measure their probable involvement with the virtual group and that they would receive feedback on their responses before starting the group activity. Sample items included *"Do you generally start working on assignments as soon as you receive them or leave them until the last minute?"* and *"Do you think it is more important in life to be practical or creative?"* This procedure followed a "bogus pipeline" approach, whereby participants are led to believe that the researcher has direct access to psychological processes through their performance on a series of unrelated tasks. In the present study, items had no obvious relationship with participants' involvement with the group in order to avoid both self-presentation effects and inadvertent priming of either high or low identification (see Ellemers et al., 1997). Participants were instead told that people who are highly involved with virtual groups tended to offer a certain pattern of responses to these questions, whilst

³ All reliabilities coefficients taken from John and Shrivstava (1999)

people who typically are less involved with virtual groups tended to offer a different pattern of responses.

The feedback participants received concerning their group involvement was used to prime the salience of the group. Immediately prior to completing the virtual group activity, participants were informed via email that their group involvement score was higher than average for this type of group, meaning that they were likely to be more involved with the virtual group than the average person (High Pre-Entry Salience), or that their group involvement score was lower than average for this type of group, meaning that they were likely to be less involved with the virtual group than the average person (Low Pre-Entry Salience). The precise wording for each condition is provided below.

High Pre-Entry Salience Condition

“Your score on the virtual group involvement index is 33. This score is above average, indicating that you are likely to feel more involved with this virtual group than the average person. That is, your responses are very similar to other people who in the past have felt a greater level of involvement with virtual groups than average.”

Low Pre-Entry Salience Condition

“Your score on the virtual group involvement index is 33. This score is below average, indicating that you are likely to feel less involved with this virtual group than the average person. That is, your responses are very similar to other people who in the past have felt a lower level of involvement with virtual groups than average.”

At this point participants were provided with a URL link to the first pre-entry measurement instrument. Manipulation of salience was checked and anticipatory identification and control variables were measured using the manipulation check and pre-entry measures described above. Immediately after completing the pre-entry measures, participants took part in what was ostensibly a virtual group activity involving a series of nine decision-making scenarios. Participants were led to believe that there were four other participants taking part in the activity at the same time. They were told that the five group members had been put together purely on the basis of their preferred time and day to complete the activity, and that there was no other reason for this particular grouping. Participants were also informed that each group member would be taking part in the activity remotely without direct interaction with one another and that they would learn about the responses of their fellow group members via automated feedback. In fact, only one participant took part in the activity at a time. The responses of other participants were simulated using pre-programmed responses in order to minimise confounding effects such as the extent of agreement or disagreement between group members' responses or the potential withdrawal of participants whilst the activity was in progress. Participants were fully

debriefed regarding this deception on completion of the activity. The responses of any participant who indicated during debriefing that they were aware that they were the only group member taking part were removed prior to analysis.

Following procedures adapted from Ellemers et al. (1997), for each decision making scenario, participants were first provided with a short vignette, for example:

“You are the management team of a local branch of a national cinema chain. You have received notification from Head Office that the chain is looking to increase its profits, and so your cinema needs to make more money during the next financial year.”

They were then given with two possible solutions the problem (e.g. *“should you do this by putting on promotions to increase the number of customers coming to the cinema each month or increasing ticket prices”*). Participants were told that although both solutions were viable, a panel of experts had determined one solution to be preferable in each scenario, meaning that there was, in essence, a “correct” answer to each scenario. Participants were asked to report their preferred solution for three scenarios at a time, before being informed of their fellow group members’ preferred solutions for these scenarios, which had in fact been pre-programmed by the researcher. Pre-programmed solutions typically converged equally around each solution, to discourage conformity effects. On the basis of the feedback regarding other group members’ preferred solution, participants were required to respond with their final decision about which solution to adopt. Participants were informed that points were assigned on the basis of the number of group members who made the correct final decision and not according to the amount of agreement amongst members, again to discourage conformity within the group. A step-by-step account of the activity, including each of the vignettes presented to participants, is provided in Appendix Two.

After completing the activity, participants were asked to remain seated at their computers until they had received the feedback and completed a final survey. Five minutes after completing all of the decision-making scenarios, participants received feedback about the group’s performance via email. All participants told that their group score was 17, with no further information concerning how the score was calculated. Participants were instead informed that this score was either above average (Positive Performance Information) or below average (Negative Performance Information). The precise wording for this feedback is set out below.

Positive Performance Information

“Your group achieved 17 points within this activity. This score is above average compared to other groups who have completed the same activity. This suggests that

this group would be highly effective when making decisions within a virtual environment”

Negative Performance Information

“Your group achieved 17 points within this activity. This score is below average compared to other groups who have completed the same activity. This suggests that this group would be not be particularly effective when making decisions within a virtual environment”

Within the email, participants were also provided with a URL link to the post-entry measurement instrument. Manipulation of post-entry status information was checked and post-entry identification and post-entry pride were measured. After completion of the post-entry measures, participants were informed that their participation was over. As soon as responses were registered, the researcher contacted participants to arrange a timely and thorough debriefing regarding the research.

5.4.9. Study Three

5.4.9.1. Participants

Study Three was conducted with 72 staff and students from Aston University, none of whom had previously participated in Study Two. Participants had an average age of 30 and included 43 females and 29 males. 18 participants were randomly allocated to each of the four conditions, with approximately equal proportions of male and female participants in each group. The resulting sample size of 72 was deemed sufficiently large according to Cohen’s (1992) power primer to enable statistical analysis to detect large effect sizes.

5.4.9.2. Independent Variables

Two independent variables were manipulated in Study Three. The first independent variable was Pre-Entry Group Status. There were two levels for this variable (High/Low) which were manipulated by providing participants with false feedback about the “decision-making capacity” of the group. Manipulation of group status was checked by asking participants to rate on a scale of one to ten the status and prestige their group had compared to other groups (1 = could not have lower status; 10 = could not have higher status). The second independent variable was Post-Entry Performance Information for which there were two levels (Positive/Negative). This was manipulated by telling participants that their group’s performance was either above average or below average. Manipulation of group performance was checked by asking participants to indicate how well, on a scale of 1 to 10, they thought their group had performed in this activity (1= could not have performed worse; 10 = could not have performed better).

5.4.9.3. Dependent Variables

Three dependent variables were measured; these were Anticipatory Identification, Post-Entry Social Identity Judgements and Post-Entry Identification. Measurement of these variables used the same scales as those adopted in Study Two; example scale items and reported reliability coefficients can be found in Section 5.4.8.3 above. The measurement instruments used in Study Three are presented in Appendix Three.

5.4.9.4. Control Variables

To control for individual differences between participants, participants were asked to report their gender, age and complete John and colleagues' version of the Big Five Inventory of personality factors (John et al., 2008), full details of which can be found in Section 5.4.8.4 above. Participants' need for identification was introduced as an additional control variable within Study Three. This was measured using items Mayhew et al.'s (2010) Need for Identification (Self-Definition) scale. This scale included six items, for example *"my understanding of who I am comes from the groups I am part of"* and had a reported reliability coefficient of 0.86.

Employment status was also controlled in Study Three. The age of participants in this study, when contrasted to participants sampled within Studies One and Two raised concerns that the results obtained may be attributable to current employment status, for example as a result of diminished experimenter effects (e.g. Campbell, 1961) or prior work experience. Participants were grouped as students or staff post-hoc, by examination of the email address provided. Staff and student emails have a different format within the university, allowing for employment status to be determined without unnecessary priming effects.

5.4.9.5. Procedure

Prior to taking part in the online activity, participants were asked to complete Mann, Burnett, Radford and Ford's (1997) Melbourne Decision Making Questionnaire (DMQ). This 22-item measure assesses decision-making coping patterns and includes items such as *"I feel as if I'm under tremendous time pressure when making decisions"*, *"I like to consider all of the alternatives"* and *"I am inclined to blame others when decisions turn out badly"*. Although the DMQ is a validated measure of decision-making (Mann et al., 1997), in this experiment it was employed as part of a manipulation of participants' perceptions of the status of the group. To manipulate pre-entry status, participants were told that their responses to the DMQ would be combined with other group members to create an overall score for the "decision-making capacity" of the group.

Immediately prior to completing the virtual group activity, participants were informed that based on their group's decision-making score, the group had either a higher than average or lower than average decision-making capacity, and as a result they would be assigned to the high level decision-making activity (High Pre-Entry Status) or to the low level decision-making activity (Low Pre-Entry Status). Participants were told that the activity assigned would ultimately not affect the group's performance during the decision-making activity, and was used only to make sure that the decision-making scenarios were not too complicated (in the low status condition) or too easy (in the high status condition) for the group. The precise wording for each condition is provided below.

High Pre-Entry Status Condition

“Your group’s score on the Decision-Making Questionnaire is 33. This score is above average compared to other groups, indicating that your group is likely to have a high decision-making capacity compared to the average group. That is, your group’s score is very similar to other groups who in the past have shown a higher decision-making capacity than average.

On the basis of this information your group will be assigned to the high level decision-making activity. The activity to which your group is assigned is used to ensure that the decision-making scenarios you will shortly complete are not too easy for the group. This information cannot be used to predict how well your group will perform during the activity and does not affect the total points that can be awarded during the activity.

Please note that this is an aggregated group score which reflects the decision-making capacity of the group as a whole. We are unable to make judgements regarding your individual decision-making ability on the basis of this information.”

Low Pre-Entry Status Condition

“Your group’s score on the Decision-Making Questionnaire is 33. This score is below average compared to other groups, indicating that your group is likely to have a low decision-making capacity compared to the average group. That is, your group’s score is very similar to other groups who in the past have shown a lower decision-making capacity than average.

On the basis of this information your group will be assigned to the low level decision-making activity. The activity to which your group is assigned is used to ensure that the decision-making scenarios you will shortly complete are not too difficult for the group. This information cannot be used to predict how well your group will perform during the activity and does not affect the total points that can be awarded during the activity.

Please note that this is an aggregated group score which reflects the decision-making capacity of the group as a whole. We are unable to make judgements regarding your individual decision-making ability on the basis of this information.”

At this point participants were provided with a URL link to the first pre-entry measurement instrument. Manipulation of group status and anticipatory identification and control variables were measured. From this point forward, Study Three followed the same procedure as Study Two; full details of which can be found in Section 5.4.8.5 above.

5.5. Study Four Methodology

Study Four adopted a longitudinal design to address the specific research hypotheses set out in Chapter Four and presented in Figure 4.4; the use of this research design is justified below. In Study Four, a survey-based data collection method was employed to examine participants' identification with, and social identity judgements regarding, a new work organisation both before and after entry. Post-entry work outcomes, including job satisfaction and turnover intention, were also explored in this study, with responses once more collected using pre-validated Likert-type scales. Participants were undergraduate students completing a year-long industrial placement as part of their degree programme; online surveys were used to collect data before participants started their placement and again one month after entry. Key aspects of the longitudinal research design used in Study Four are discussed below and the procedure and variables are subsequently described in depth.

5.5.1. Longitudinal Design

Longitudinal designs involve the collection of data from a sample on at least two separate occasions, thus providing researchers with insight into the relationship between variables across time (Bryman, 2008). Rindfleisch, Malter, Ganesan and Moorman (2008) argue that this research design provides two main benefits for researchers: a reduction in common method variance and greater insight into the nature and direction of relationships between variables.

5.5.1.1. Common Method Variance

Common method variance was introduced with reference to Study One above. Cross-sectional survey research employing a single measurement instrument can be associated with systematic measurement error and thus provide inflated estimates of the relationship between variables (e.g. Bagozzi et al. 1991). Longitudinal surveys are one way to counter the impact of common method variance; temporal separation of the measurement of predictor and outcome variables can reduce the accessibility of previous responses within participants' short-term memory (Podsakoff, MacKenzie and Podsakoff, 2012). In other words, participants are less likely to remember their previous responses so are less likely to be influenced by these responses at later data collection points. As a result, factors

such as participants' desire to maintain consistency within their answers are less prevalent and do not bias reporting or lead to inflated correlations between variables (Podsakoff and Organ, 1986). Measurement of anticipatory identification and post-entry identification on separate occasions in Study Four thus provided greater assurance regarding the validity of the relationships between anticipatory identification and its hypothesised post-entry outcomes. This provided a core justification for the adoption of a longitudinal research design in this study.

Whilst common method variance effects may be more limited in longitudinal research, multiple-wave data collection can still result in priming effects amongst participants which can affect the accuracy of the responses they provide. In particular, longitudinal studies are subject to conditioning effects (Bryman, 2008). Here the subsequent behaviour and responses of participants are influenced by their prior experiences during the research process (Sturgis, Allum and Brunton-Smith, 2009). For example in Study Four, the questions asked during the first survey, coupled with the knowledge that there would be a subsequent post-entry survey, could have led participants to more actively attend to particular aspects of their relationship with the organisation. This had the potential to impact upon post-entry responses, or indeed increased the salience of the organisation thus enhancing organisational identification (e.g. van Dick et al., 2006). However although this confounding effect was possible, it was considered unlikely within the current research. Data were only collected on two occasions, rather than becoming a regular occurrence within a participant's life over a series of days or months. Furthermore the surveys used within Study Four were designed to be as short and unobtrusive as possible. Consequently it was improbable that there would be a clear or lasting memory of the initial survey items to bias how participants subsequently engaged with their new organisation. Hence, the longitudinal design adopted was felt capable of providing the benefit of lower common method variance, but was unlikely to have a significant priming effect upon participants.

5.5.1.2. Causal Inference

Longitudinal research designs allow greater confidence in statements of causality through the temporal ordering of variables (Rindfleisch et al., 2008). Whilst causal relationships cannot be determined directly from the data obtained within longitudinal studies, this research design can provide "relevant empirical evidence in a chain of reasoning about casual mechanisms" (Frees, 2004, p.29). Thus longitudinal studies often provide stronger support for the direction of relationships than cross-sectional research. Accordingly, Study Four was able to investigate a temporal chain of relationships between anticipatory identification and post-entry outcomes. This provided a particularly valuable addition to the

research findings of Study One, to confirm that post-entry identification was indeed influenced by anticipatory identification, and not vice versa.

Inferences regarding causality nonetheless still need to be theoretically-derived. Taris (2000) for example, argues that the temporal sequence of observed behaviours does not necessarily indicate that the earlier variable impacted upon the later variable; anticipation of future events for instance can influence an individual's current behaviour or attitudes. Similarly a third variable could be implicated in the relationship between predictors and outcome variables (Bryman and Cramer, 2009). In Study Four, however, there was thought to be a strong theoretical motivation for the hypothesis that anticipatory identification would impact upon post-entry identification. Moreover, Study Four was intended to explore the same pattern of relationship as Studies Two and Three, where causality could be more confidently discerned due to the research design adopted. Controls were also put in place to minimise the likelihood that a third variable was responsible for the observed relationship between anticipatory identification and post-entry identification, most notably individual differences such as participants' need for identification. In view of this, whilst longitudinal research may not always allow an accurate reflection of the temporal relationships between variables, there was increased conviction that Study Four would provide a meaningful insight into the relationship between anticipatory identification and post-entry outcomes.

In contrast to the experimental designs of Studies Two and Three, longitudinal surveys are thought to possess greater external validity (Leach, 1991). Participants' responses are provided within a "real-world" environment and in relation to an actual organisation. A critique of the minimal group approach adopted in Studies Two and Three was that such groups have little meaning to participants, and so responses provided within this context would not necessarily translate to how individuals interact with genuine groups (Schiffmann and Wicklund, 1992). For example, participants are thought to be particularly susceptible to experimenter effects in the absence of other sources of information about the group (e.g. Hertel and Kerr, 2001). Thus Study Four allowed exploration of the relationship between anticipatory identification and post-entry outcomes in a setting that was a closer approximation to an organisational entry process than had been possible in Studies Two and Three. This provided a useful extension to these earlier studies and provided a clear justification for the inclusion of a longitudinal survey-based study within the research programme.

5.5.1.3. Sample Attrition

An important challenge faced within longitudinal research is sample attrition. Participants often withdraw from the research after participating in one or more previous waves of the study; as a consequence these participants are lost for the remainder of the research (Robson, 1999). This attrition has two key outcomes. It can firstly lead to selection bias, which negatively impacts upon the validity of the research (Frees, 2004). Selective non-response can result in systematic differences between responders and non-responders, with the sample becoming increasingly unrepresentative of the population as a consequence (Gomm, 2008). It is however possible to examine statistically the differences between the answers of responders and non-responders via an independent samples t-test or an analysis of variance. This approach was adopted within Study Four to determine whether systematic differences did exist between participants who remained throughout the study and those who withdrew during the research process. Although this cannot identify differences between respondents and non-respondents within the sample population as a whole, it nevertheless provides important information regarding the external validity of the research findings obtained.

A second relevant outcome of attrition is the sample size ultimately achieved within the research. Increasing non-response over time can lead to relatively small sample sizes in longitudinal studies when compared to cross-sectional research, limiting the statistical power of the analysis (Tanis, 2000). At the same time the number of variables explored within longitudinal analysis often increases as researchers look to account for temporal dynamics as well as static relationships amongst variables (Singer and Willett, 2003). Low sample sizes in combination with a large number of variables can mean that the statistical power of a significance test is reduced considerably (Cohen, 1992). This can result in an incorrect failure to reject the null hypothesis (i.e. Type II errors). However whilst the consequences of sample attrition can limit the statistical power achieved within an analysis, the benefits of this research design, in particular when seen within the context of the earlier studies within this thesis, were felt to outweigh this limitation.

5.5.2. Sampling Method and Participants

Undergraduate students at Aston University who were due to complete an industrial placement in the 2013/14 academic year were invited to participate in the research in June 2013. A non-probabilistic convenience sampling methodology was adopted. The sampling frame possessed the necessary characteristics of the population of concern (i.e. they were individuals who would shortly be commencing employment within a new organisation) however participants were primarily sampled on the basis of ease of access.

The university's placement office acted as a gatekeeper and a link to the first survey was distributed to students via a Blackboard™ announcement. Students received a reminder email two weeks later. The focus of this research was on participant's identification with a new organisation prior to joining; students were therefore advised that they would only be eligible to participate if they had not been employed by the organisation before.

Of the 669 students contacted, 73 returned completed surveys. Two responses were discarded because according to the start date provided they had already commenced their placement. A total of 71 completed pre-entry surveys were therefore returned; representing a 10.2% response rate. Participants were asked to indicate their expected start date within the original pre-entry survey and four weeks after this start date were sent a link to second online survey via email. This was followed by a reminder email one week later, and a final reminder two weeks after the original email had been sent. Accordingly participants' post-entry responses were all collected between four and six weeks after entry. 45 completed post-entry surveys were returned: 63% of participants who had responded during the pre-entry period, and 6.4% of all students initially contacted. Participants had an average age of 21; 46% were female and 54% were male. Independent samples t-tests indicated that the pre-entry responses of participants who completed only the pre-entry survey did not differ significantly from those participants who returned both pre- and post-entry surveys ($t(69) \leq \pm 1.54$, $p \geq 0.13$).

Although the response rate obtained on first sight appeared limited, it was noted that a number of students were likely to have undertaken placements at organisations they were already a part of, including the university itself, and therefore would have been ineligible to participate. Moreover many students may have opted out of the placement year (an option available to international students). For example, in the preceding year, 28% of students within the Business School had chosen not to complete an industrial placement. Taking these factors into account, the response rate in Study Four may be seen as closer to the average response rate obtained within web-mediated surveys designs in a higher educational context (e.g. Sax, Gilmartin, and Bryant, 2003).

5.5.3. Procedure

Participants received a link via Blackboard™ to an online survey hosted by Survey Monkey™. Participants were asked to report their anticipatory identification with the placement organisation they would shortly be joining, as well as their social identity judgements regarding the organisation. To measure these constructs participants were asked to indicate the extent to which they agreed with a series of statements using five-point Likert-type scales (1=Strongly Disagree to 5 = Strongly Agree, unless specified

below). Participants were also asked to provide their anticipated start date and a contact email address in order to complete an additional survey after they had joined the organisation. Participants were contacted again four weeks after entry using the email address provided. The email contained a link to another online survey asking participants to report their current identification with, and social identity judgements regarding, the organisation, again using five-point Likert-type scales. Also incorporated within this measurement instrument were a number of items to measure job satisfaction and turnover intention.

5.5.4. Measures

The scales used to measure the variables within Study Four are discussed below. Scale items are outlined in full in Chapter Nine, and the measurement instruments are presented in Appendix Four.

5.5.4.1. Anticipatory Identification/Post-Entry Identification

In keeping with Studies One, Two and Three, anticipatory identification and post-entry identification were measured using Doosje et al.'s (1995) Social Identification scale. In addition, this study also asked participants to report their identification using Mael and Ashforth's (1992) six-item scale. Although, as discussed above, this scale has been subject to criticism (e.g. Bergami and Bagozzi, 2000; Ellemers et al., 1999) it nonetheless remains one of the most commonly adopted measures of organisational identification (Riketta, 2005). Inclusion of this measure in Study Four thus allowed comparison with Doosje et al.'s scale used to measure identification during earlier studies. Scale items include "*when I talk about the organisation I usually say 'we' rather than 'they'*" and "*when someone praises the organisation it feels like a personal compliment*" and the authors reported a Cronbach's alpha coefficient of 0.87.

5.5.4.2. Social Identity Judgements

Pride: Participants' pride in their organisation before and after entry was measured using five items based on Blader and Tyler's (2009, Study Two) Pride scale. Original scale items were used within the post-entry pride scale and minor adaptation from the original items were made within the pre-entry pride scale to make them appropriate for pre-entry reporting. For example, the item "*I am proud to tell other people where I will be working*" was used within the pre-entry scale whilst the item "*I am proud to tell other people where I work*" was used within the post-entry scale. A reliability coefficient of 0.90 was reported by the authors within a post-entry context.

Respect: Participants' perceptions of the respect received from their organisation before and after entry were measured using six items based on Blader and Tyler's (2009, Study Two) Respect scale. A Cronbach's alpha coefficient of 0.94 had previously been obtained by the authors for this measure. Again minor changes to the wording of some of the pre-entry scale items were made to allow for use prior to entry. For example the item *"managers will respect my unique contribution to the job"* was used within the pre-entry respect scale and the original item *"managers respect my unique contribution to the job"* was used within the post-entry respect scale.

5.5.4.3. Work Outcomes

Turnover intention: Turnover intention was measured using four items taken from De Jong and Schalk (2010). These items specifically focussed on turnover intention amongst temporary employees, thus were appropriate to measure the construct in the present study, as participants would ultimately be leaving the organisation to return to their studies. Example items included *"I often feel like quitting this organisation"* and *"despite the obligations I have made to this organisation, I want to quit my job as soon as possible"*. A reliability coefficient of 0.79 was reported for this measure.

Job Satisfaction: Job satisfaction was measured using four items taken from Randsley De Moura et al. (2009). Items included *"my job measures up to the sort of job I wanted when I took it"* and *"I enjoy the work that I do"*. These items were felt to be appropriate for participants who had relatively limited tenure within the organisation, as was the case within the current study. In addition the items had previously been used to explore the relationship between organisational identification and job satisfaction (e.g. Randsley De Moura et al., 2009). The authors report Cronbach's alpha coefficients of between 0.70 and 0.90 for this measure.

5.5.4.4. Control Variables

Participants' age and gender, as well as the size of the organisation were included as control variables within the study. In addition, participants' need for identification was measured using six items taken from Mayhew et al.'s (2010) Need for Identification (Self-Definition) scale, details of which were presented in Section 5.3.5.3.

A final control variable measured in Study Four was the time elapsed between the date of submission of the first survey and participants' start date. Although all participants were invited to complete the second survey four weeks after entry, the time between completion of the first survey and entry into the organisation differed between participants. Every participant received the questionnaire at the same time however placement start dates

ranged from the beginning of July to the beginning of September 2013. The number of days between the date of submission of the survey and the date of entry was therefore calculated and controlled within the analysis.

5.6. Research Ethics

Prior to undertaking the research described in this thesis, approval was sought, and obtained, from Aston Business School's Ethics Committee. The core ethical issues associated with this research, and the steps taken to address these issues, are discussed below.

5.6.1. Deception

One of the major ethical considerations in this research was the deception that was employed at several points during Studies Two and Three. Participants were not fully informed of the rationale of the research prior to taking part in these two studies. Participants were also provided with misleading information about the use and outcome of pre-entry testing in both studies, the nature of the group and the activity they completed. However, whilst deception should be avoided wherever possible within research, intentional deception may sometimes be the only way to effectively investigate a topic (Oliver, 2010). The British Psychological Society (2010) therefore states that in some circumstances use of deception can be considered an appropriate research strategy, provided that stringent safeguards are first put in place to protect participants. Withholding information from participants regarding the rationale of the research was thought to be required for the integrity of Studies Two and Three; participants' reporting of social identity judgements and identification was thought likely to be strongly influenced by social desirability effects if they had been aware of the true purpose of the study. Moreover, the use of a real rather than simulated group was also thought likely to bias participants' responses and attitudes during the study.

In Studies Two and Three, the provision of misleading information to participants about the use and outcome of pre-entry testing as well as the group activity was also considered necessary to effectively prime group salience and status perceptions. A quasi-experimental design was deemed inappropriate in this context. Pre-existing differences in identification or group performance were likely to have been determined by a wide range of additional variables, not all of which would be known, and thus controlled, in advance (Shadish et al., 2002). It was also felt necessary that the measures used to prime pre-entry identification and status perceptions did not directly relate to the constructs under consideration, so that priming came from the feedback of scores by the experimenter,

rather than inadvertently determined by participants' responses to the items within the measures (see Ellemers et al., 1997).

It was recognised that all research that involves deception will have an above minimal level of risk to participants, and researchers must take steps to mitigate these risks before proceeding (Oliver, 2010). However it was not felt that the extent and nature of the deception used in this research would have an adverse impact upon participants, provided they were appropriately debriefed at the end of the study (see Smith and Richardson, 1983). Following steps advocated by the British Psychological Society (2010), debriefing took place in person and participants were also provided with a written debriefing form. This sheet included contact details for the researcher to allow participants to seek further details or to withdraw from the study at a later point in time (see Appendices Five and Six). The researcher also ensured that participants fully understood the information provided in the debriefing form, and in particular the reason for the deception, to prevent any unintended outcomes associated with the initial withholding of information from participants.

The American Psychological Association (APA) further counsels that, if deception is used within research, this should not be in relation to significant aspects of the research which would affect willingness to participate, for example physical or emotional discomfort (American Psychological Association, 2010). In Studies Two and Three, the true purpose of the research was felt to be no less benign than the purported aims. There was therefore no reason to believe that participants who chose to participate on the basis of the information initially provided would not also have taken part if they had been fully aware of the true aims of the research, nor that they were likely to object or show unease once debriefed. Similarly the risk of psychological harm was thought to be no greater for the actual rationale of the research compared to the purported rationale. These attributes can thus be used to provide a further justification for the use of deception within this research (see Clarke, 1999). The main effects of the deception upon participants were thought to arise from the deception itself, rather than the withholding of information from participants. For example a sense of embarrassment or annoyance at having been misled during the study or a possible degradation of trust in both the researcher and potentially the research community at Aston University more widely (Smith and Richardson, 1983). These were important factors which could have had a serious effect upon participants. However it was again felt that the impact of this could be minimised by a full and thorough debriefing of participants on conclusion of the study.

5.6.2. Informed Consent

Alongside the ethical issues associated with the deception of participants, it was also recognised that withholding information prevented the acquisition of fully informed consent from participants prior to the start of the study (Baumrind, 1985). As discussed below, full consent was obtained following completion of the activities. Nonetheless participants' decision to take part in the research was made without a complete understanding of the details of the study and the implications of participation. Although this presented an important concern within the research, it should be noted that the initial lack of informed consent was restricted only to the rationale of the research and not to its conduct. Furthermore, as previously highlighted, it was not felt that the consequences of taking part would be different for participants in light of the actual rationale of the research, rather than the purported aims of the study. Whilst this did not in itself justify a failure to acquire fully informed consent, it may be taken to suggest that the risks this presented to participants were not significantly increased by only receiving fully informed consent from participants on completion of the study (see British Psychological Society, 2010).

The main impact of failure to acquire fully informed consent was once more believed to be limited to a sense of annoyance or frustration amongst participants that information was withheld from them as they began their participation. However these responses cannot be trivialised as they may also impact upon individuals' feelings of autonomy and create a sense of lack of control (Baumrind, 1985). Again, trust in the researcher or indeed researchers generally, may have been affected as a result. Yet, it was again felt that steps could be taken to assuage these feelings during the formal debriefing process. Consent was obtained at the start of the experiment and it was required that participants reaffirmed this consent following debriefing. If consent was not given at this stage, all data collected from that participant during the experiment would have been immediately destroyed (Oliver, 2010). It was however noted that, when the true nature of the research was provided during debriefing, no participant decided to withdraw from the study, nor indeed expressed any discontent or unease. This provided greater assurances that the procedures adopted within the research did not create psychological distress or mistrust amongst participants.

5.6.3. Risk of Coercion

Participants were informed that their participation in the research was entirely voluntary, that they could withdraw at any time without providing a reason and that their decision not to participate, or to withdraw during the research, would not result in any penalty. Nonetheless there were three aspects of the research design which could have led to an

increased risk of coercion to participate. These were the role of gatekeepers, the use of staff and students as research participants and the payment of participants.

5.6.3.1. Gatekeepers

Gatekeepers were not employed within Studies Two and Three, however in Studies One and Four, members of Aston University's faculty and staff acted as gatekeepers. Initial invitations to participate and subsequent reminders were received from the gatekeeper and not directly from the researcher. The use of gatekeepers meant that it was necessary not only to take account of the researcher's conduct but also to bear in mind the relationship between gatekeepers and research participants (Crowhurst and Kennedy-Macfoy, 2013). This is considered particularly relevant when gatekeepers hold positions of authority; participants can feel a greater obligation to take part due to the hierarchical relationship with the gatekeepers (Miller and Bell, 2002). In Studies One and Four, participants were informed that the research was part of an independent PhD research project and that the gatekeepers would not be directly involved in the research or know which students had chosen to participate. This was intended to minimise any pressure on students to participate because of their relationship with the gatekeeper.

5.6.3.2. Research Involving Staff and Students

University staff and students were the main research participants in the four studies described in this thesis. The use of staff and students did not represent an integral aspect of the research design within Studies Two and Three, and instead was primarily chosen for convenience purposes. In Study One and Four the use of students was a more fundamental aspect of the research design as these studies explored anticipatory identification within an actual organisational environment rather than with a minimal group. Whilst the research hypotheses related to anticipatory identification more generally and not only within a student population, the nature of university entrance or the commencement of an industrial placement meant that a larger number of new starters could be sampled simultaneously. This therefore provided the most efficient way to explore the identity dynamics that take place from pre- to post-entry. Despite this justification however, it was recognised that inviting staff and students to participate in research could increase the risk of coercion (e.g. Ferguson, Yonge and Myrick, 2004; Jung, 1969). To limit this, participants were informed at the beginning of the research process that their participation was voluntary and that they had the right to withdraw at any point. They were moreover told that withdrawal would have no effect upon their employment or academic assessment.

5.6.3.3. Payment of Participants

In Studies Two and Three, participants were paid £5 for taking part. This payment was considered a necessary and reasonable recompense for engagement in the research, given that participation entailed commitment over a longer period of time: participants were required to complete questionnaire and take part in activities across three separate occasions. Payment of participants can lead to an increased sense of obligation to participate (Oliver, 2010). However it was not felt that the amount offered would induce participation amongst those individuals who would otherwise have chosen not to take part in the research. As such, payment was construed as reimbursement rather than coercive (Bentley and Thacker, 2004). It was furthermore felt that payment of participants may in fact lead to a larger and more representative group of participants taking part, further justifying the use of this strategy within Studies Two and Three.

5.6.4. Confidentiality and Anonymity

Another important aspect of ethical psychological research is the confidentiality of participants' responses both during and after the study (British Psychological Society, 2010). Participants were informed how their data would be collected, stored and used within the participant information sheet provided prior to the commencement of each study; this included the steps taken by the researcher to maintain confidentiality. The information was reiterated during the debriefing at the end of participation or, when data was collected on more than one occasion, at each data collection point. Signed consent forms were immediately scanned and stored electronically and the original copies destroyed. Scanned forms were stored separately from data files and were password protected.

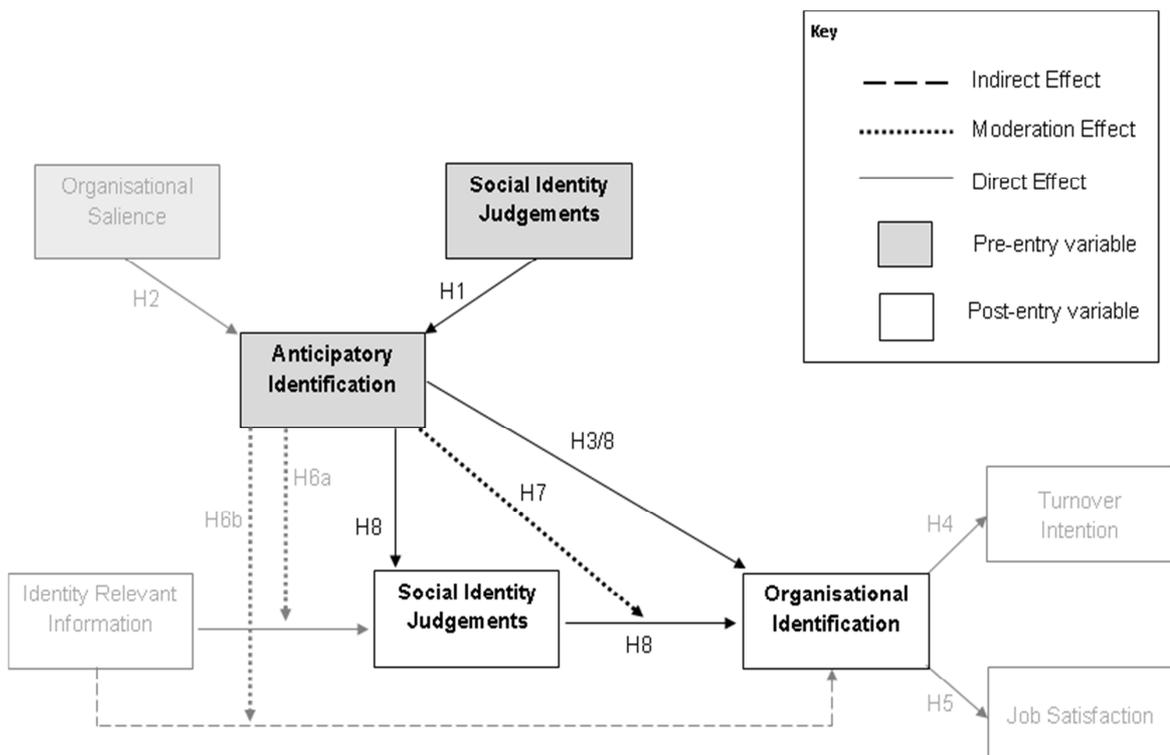
Participants responded anonymously in Study One however the procedure of Studies Two, Three and Four meant that participants were identifiable to the experimenter. This was necessary to provide appropriate primes to participants and to collect data from the same participant more than once. Steps were therefore taken to safeguard participants' confidentiality during and after completion of the research. Responses were accessed only by the researcher and data files were password protected. Data analysis also used participant numbers rather than participants' names, again preserving the confidentiality of those taking part. Furthermore research findings were presented in cumulative form within this thesis and associated publications; responses were therefore not attributable to a single participant at any point in the research process.

CHAPTER SIX: STUDY ONE RESULTS AND DISCUSSION

6.1. Chapter Summary

This chapter describes and discusses the results of Study One. As set out in Chapters Four and Five, Study One was a pilot study. This study adopted a retrospective self-report survey design using a sample of 124 university students to test the four core tenets of the conceptual model; operationalised as Hypotheses One, Three, Seven and Eight, and presented in Figure 6.1 below. In particular it looked to establish whether pre-entry social identity judgements could predict anticipatory identification, and whether anticipatory identification could in turn predict post-entry identification; either directly or through feedback loop or buffering mechanisms. The chapter first outlines the steps taken to determine the construct validity of the scales used within Study One. It then presents the results of the hypothesis testing for the four aforementioned hypotheses. The conceptual model as a whole is next assessed. The chapter concludes with a discussion of the results obtained, including the theoretical implications and limitations of this study, as well as the necessary next steps for subsequent studies.

Figure 6.1: Conceptual Model Study One



6.2. Scale Validation

The four studies within this thesis used pre-existing and pre-validated measures to test the research hypotheses outlined in Chapter Three; it was however necessary to assess

the construct validity of these scales prior to analysis of the data. As recommended by DeVellis (2011), factor analytic tools can be used for validation testing of scales. In particular Confirmatory Factor Analysis (CFA) is valuable to confirm a particular pattern of relationships between variables on the basis of previously developed theory (Harrington 2009; Thompson 2004). Accordingly, before embarking upon hypothesis testing within each of the four research studies, CFA was undertaken to determine the construct validity of the measures used.

To assess how well the data obtained fits with a hypothesised model, a number of goodness-of-fit statistics can be used. Commonly used fit statistics include Chi-square (χ^2), root mean square error of approximation (RMSEA), the goodness-of-fit index (GFI), the comparative fit index (CFI) and the normed fit index (NFI) (e.g. Byrne, 2001; Hu and Bentler, 1999; Tabachnick and Fidell, 2007). Although good fitting models will generally produce consistent results across different indices (Tabachnick and Fidell, 2007), a number of these indices are sensitive to sample size; this can lead to the incorrect rejection of good fitting models. There is broad recognition of the sensitivity of chi-square to both large and small sample sizes (e.g. MacCallum, Browne and Sugawara, 1996). Similarly, Hu and Bentler (1999) suggest that for sample sizes where N is less than 250, use of RMSEA can also lead to an over-rejection of true population models. Furthermore, the NFI has also been shown to underestimate the fit of a model when sample sizes are small (Bearden, Sharma and Teel, 1982). Accordingly, whilst cut-off criteria for these fit statistics are discussed, in light of the relatively small sample sizes throughout this thesis, these statistics were treated with caution. CFI and GFI are thought to be more appropriate for use with smaller sample sizes (Tabachnick and Fidell, 2007). However in order to balance the risk of both Type I and Type II errors, a range of fit statistics were considered for each scale assessed.

Using chi-square, a hypothesised model is considered to be a good fit to the data when χ^2 is non-significant. The probability level reported for χ^2 represents the probability of getting a chi-square value as large as the chi-square statistic when the null hypothesis (that all the specifications within the model are valid) is true (Byrne, 2001); thus the higher the probability, the closer the fit of the model to the population. For the root mean square error of approximation (RMSEA), MacCallum et al. (1996) suggest that RMSEA values between 0.05 and 0.08 indicate a good fit, between 0.08 and 0.1 indicate a mediocre fit, and values above 0.1 indicate a poor fit. The NFI, CFI and GFI indices all range from 0.0 to 1.0, with values approaching 1.00 taken to indicate goodness of fit (Byrne, 2001). Hu and Bentler (1999) suggest that values of 0.95 or above should be taken as a cut off when assessing the fit of a model using these fit indices; however values of 0.90 may be taken to suggest an adequate fit (Hair, Black, Babin, Anderson and Tatham, 2006).

The reliability of the measures used within the research studies was also assessed prior to analysis. The intention of reliability testing in the present context was to establish internal consistency between the scale items. Cronbach's alpha (α) was used to determine the level of internal consistency within each measure. Adopting the rule of thumb advocated by Nunnally (1978), reliability coefficients of 0.70 or above were taken to indicate that a measure had acceptable internal consistency for use within this research.

6.3. Study One Results

6.3.1. Scale Validation

6.3.1.1. Anticipatory Identification

Four items taken from Doosje et al.'s (1995) Social Identification scale were used to measure participants' identification with the university prior to joining (See Table 6.1). Confirmatory Factor Analysis indicated an acceptable fit of the one-factor model to the data. Whilst chi-square, RMSEA and NFI values indicated an inadequate fit ($\chi^2 (2) = 7.30$, $p = 0.03$; RMSEA = 0.15; NFI = 0.95), values for indices that are less sensitive to sample size were indicative of a good fit (GFI = 0.97; CFI = 0.96). A reliability coefficient of 0.76 was obtained for anticipatory identification, above the recommended lower limit of 0.70 proposed by Nunnally (1978). The scale was therefore also judged to have sufficient internal consistency and the four-item anticipatory identification scale was adopted within Study One.

Table 6.1: Anticipatory Identification Scale Items

Item Label	Item
AOID1	Before I joined, I saw myself as a member of Aston University
AOID2	Before I joined, I was pleased to be a member of Aston University
AOID3	Before I joined, I felt strong ties with Aston University
AOID4	Before I joined, I identified with other members of Aston University

6.3.1.2. Post-Entry Identification

Four items were also used to measure participants' identification with the university after joining (See Table 6.2). CFA provided support for the one-factor four-item solution. Chi-square and RMSEA suggested an inadequate fit ($\chi^2 (2) = 11.79$, $p = 0.003$; RMSEA = 0.20). However, as discussed above, these indices are particularly sensitive to sample

size (e.g. Hu and Bentler, 1999). Accordingly assessment of alternative indices was used to determine the fit of this model; GFI, NFI and CFI values all indicated a good fit to the data (GFI = 0.95; NFI = 0.95; CFI = 0.96). The Cronbach's α coefficient for the four-item post-entry identification scale was 0.85. This value was again in excess of 0.70, suggesting acceptable internal consistency for this scale. The four-item organisational identification scale was therefore adopted within Study One.

Table 6.2: Post-Entry Identification Scale Items

Item Label	Item
OID1	I see myself as a member of Aston University
OID2	I am pleased to be a member of Aston University
OID3	I feel strong ties with Aston University
OID4	I identify with other members of Aston University

6.3.1.3. Pre-Entry Pride

Seven items, taken from Tyler and Blader's (2002) Autonomous Pride scale, were used to measure participants' pre-entry pride prior to joining the university; two of the items were reverse coded (See Table 6.3). Confirmatory factor analysis indicated that this seven-item one-factor model did not have a good fit to the data ($\chi^2 (14) = 70.63$, $p < 0.001$; RMSEA = 0.18; GFI = 0.84; NFI = 0.81; CFI = 0.84). Examination of the modification indices suggested cross-loading across the two reverse-coded items, PREPRI6 and PREPRI7 (MI = 26.76). Visual exploration confirmed that the wording of these two items was very similar, indicating overlap between the two items. However this exploration additionally suggested that there may be a substantive difference between the two reverse-coded items and the remaining pre-entry pride items. These two items could be construed as indicators not of pride per se, but instead of withdrawal cognitions more generally.

CFA was therefore repeated, first removing only PREPRI7, the reverse coded-item with the highest modification index (MI = 17.47). This represented a better fit to the data than the seven-item solution ($\chi^2 (9) = 26.86$, $p = 0.001$; RMSEA = 0.13; GFI = 0.92; NFI = 0.91; CFI = 0.93). Next both reverse coded items were removed. This five-item model showed an excellent fit to the data ($\chi^2 (5) = 2.57$, $p = 0.77$; RMSEA = 0.00; GFI = 0.99; NFI = 0.99; CFI = 1.00). Akaike's Information Criterion (AIC) moreover suggested that the five-item model was a better fit to the data than either the seven-item (AIC Δ = 76.07) or six-item models (AIC Δ = 28.29). AIC allows the comparison of non-nested models (Hu and Bentler,

1999). Lower AIC values indicate a better fit of the model to the data; where a model has an AIC value of two or more greater than the “best” model, this model is considered to have a poorer fit to the data than the “best” model and can be rejected (Burnham and Anderson 2002). Accordingly the respecified five-item scale was adopted within Study One. This scale was found to have a reliability coefficient of 0.80, indicating good internal consistency between scale items.

Table 6.3: Pre-Entry Pride Scale Items

Item Label	Item
PREPRI1	Before I joined, I could not think of another university I would rather attend
PREPRI2	Before I joined, I was proud to think of myself as a member of the Aston University community
PREPRI3	Before I joined, when someone praised the accomplishments of a member of the Aston University community, I felt like it was a personal compliment to me
PREPRI4	Before I joined, I talked up Aston University to my friends as a good place to go to university
PREPRI5	Before I joined, I felt good when people described me as a typical Aston University student
<i>PREPRI6</i>	<i>Before I joined, I often thought about joining another university instead (r)</i>
<i>PREPRI7</i>	<i>Before I joined, I thought that I would probably look for an alternative university the following year (r)</i>

Excluded items in italics

6.3.1.4. Post-Entry Pride

In light of revision to the pre-entry pride scale discussed above, and to retain consistency between pre-entry and post-entry measures, five items were used to measure participants’ pride in the university after joining; with the items PRI6 and PRI7 removed from the analysis (see Table 6.4). Fit indices for the five-item post-entry pride scale indicated an adequate fit to the data, providing some support for the construct validity of this scale. CFA returned a significant chi-square value ($\chi^2 (5) = 24.22, p < 0.001$) and the RMSEA and NFI value was also suggestive of a poor fit (RMSEA = 0.18; NFI = 0.89). However, as discussed above, these values have been argued to underestimate model fit when N is less than 250 (e.g. Hu and Bentler, 1999; Bearden et al., 1982). Indices that

were less sample size-dependent suggested an acceptable fit to the data (GFI = 0.93; CFI = 0.91).

Furthermore, the five-item model showed a better fit to the data than the original seven-item one-factor model originally presented by Tyler and Blader (2002) ($\chi^2(14) = 139.857$, $p < 0.001$; RMSEA = 0.27; GFI = 0.78; NFI = 0.66; CFI = 0.68; AIC Δ = 123.64). There was therefore felt to be sufficient support for the adoption of the one-factor five-item scale within the current analysis. A reliability coefficient of $\alpha = 0.79$ was obtained for the five-item post-entry pride scale. This is comparable with the Cronbach's alpha obtained for the pre-entry pride scale ($\alpha = 0.81$) and above the 0.70 cut-off recommended by Nunnally (1978). The internal consistency of this scale was therefore also felt to be acceptable and the five-item post-entry pride scale was adopted within Study One.

Table 6.4: Post-Entry Pride Scale Items

Item Label	Item
PRI1	I cannot think of another university I would rather attend
PRI2	I am proud to think of myself as a member of the Aston University community
PRI3	When someone praises the accomplishments of a member of the Aston University community, I felt like it is a personal compliment to me
PRI4	I talk up Aston University to my friends as a good place to go to university
PRI5	I feel good when people describe me as a typical Aston University student
<i>PRI6</i>	<i>I often think about joining another university instead (r)</i>
<i>PRI7</i>	<i>I will probably look for an alternative university next year (r)</i>

Excluded items in italics

6.3.1.5. Pre-Entry Respect

Five items, taken from Tyler and Blader's (2002) Autonomous Respect scale, were used to measure the perceived respect participants received from the university prior to joining (see Table 6.5). Confirmatory Factor Analysis was conducted to provide support for the construct validity of the five-item scale. A significant chi-square value was obtained ($\chi^2(5) = 12.80$, $p = 0.03$) and the RMSEA value was just above the cut-off of 0.10 recommended by MacCallum et al. (1996) indicating a poor fit to the data (RMSEA = 0.11), however

goodness-of-fit statistics that were less contingent on sample size demonstrated an adequate or good fit to the data (GFI = 0.96; NFI = 0.92; CFI = 0.95). Moreover a reliability coefficient of $\alpha = 0.75$ was obtained, indicating sufficient levels of internal consistency between items. However, as discussed in Section 6.3.1.6 below, the five-item post-entry respect scale was subsequently found to have a poor fit to the data, and was respecified as a four-item scale with the removal of the item RES5. CFA for pre-entry respect was therefore repeated with a four-item scale and the item “before I joined, I believed that I would make a good impression on other members of the Aston University community (PRERES5)” removed from the analysis to allow parity between pre- and post-entry measures.

Confirmatory factor analysis found that the four-item pre-entry respect model had a better fit to the data than the original five-item model (AIC $\Delta = 15.60$), providing further support for the construct validity of the four-item model. All goodness-of-fit statistics revealed an excellent fit to the data ($\chi^2 (2) = 0.49$, $p = 0.79$; RMSEA < 0.001; GFI = 1.00; NFI = 1.00; CFI = 1.00). Accordingly, whilst the five-item scale did show an adequate fit to the data, the improved fit of the four-item pre-entry respect scale justified its adoption in this study. This four-item scale was found to have a Cronbach’s alpha coefficient of $\alpha = 0.72$, above the 0.70 threshold recommended by Nunnally (1978) and indicative of acceptable internal consistency between items. The four-item pre-entry respect scale was therefore adopted within Study One.

Table 6.5: Pre-Entry Respect Scale Items

Item Label	Item
PRERES1	Before I joined, I felt that most members of the Aston University community would respect my values
PRERES2	Before I joined, I felt that most members of the Aston University community would think I have accomplished a great deal in my life
PRERES3	Before I joined, I felt that most members of the Aston University community would approve of how I live my life these days
PRERES4	Before I joined, I believed that most members of the Aston University community would respect me
<i>PRERES5</i>	<i>Before I joined, I believed that I would make a good impression on other members of the Aston University community</i>

Excluded items in italics

6.3.1.6. Post-Entry Respect

Five items were initially used to measure the perceived respect participants received from the university after they had joined (see Table 6.6). Construct validation using CFA suggested that the five-item model did not have a good fit to the data according to any of the goodness-of-fit indices ($\chi^2(5) = 41.85$, $p < 0.001$; RMSEA = 0.25; GFI = 0.89; NFI = 0.87; CFI = 0.88). Examination of the modification indices indicated cross-loading between the items RES4 and RES5 (RES4 \leftarrow RES5: MI = 12.73, Par Change = 0.25; RES5 \leftarrow RES4: MI = 13.61, Par Change = .28).

Visual examination confirmed that there may be some overlap between these two items. Whereas the first three items require participants to report the respect they believe they receive with regards to certain specific aspects of their life, for example their values or their accomplishments, RES4 and RES5 both took a more global approach, focussing on general perceptions of respect. RES4 and RES5 had very similar factor loadings (0.76 and 0.77 respectively), however RES4 refers specifically to respect, whilst RES5 refers to “making a good impression”, which showed weaker links to the intragroup status construct under investigation. It was therefore felt more appropriate to delete the item “*I believe that I make a good impression on other members of the Aston University community*” and reassess the construct validity of a four-item scale.

Fit indices for the four-item post-entry respect scale indicated that this model represented a better fit to the data than the original five-item model ($AIC\Delta = 34.14$). Although chi-squared and RMSEA values indicated a poor fit ($\chi^2(2) = 11.71$, $p = 0.03$; RMSEA = 0.12), goodness-of-fit statistics less sensitive to sample size demonstrated a good fit to the data (GFI = 0.96; NFI = 0.95; CFI = 0.96). Subsequent reliability analysis indicated that this scale had a reliability coefficient of 0.85, above the recommended threshold of 0.70 and indicative of good internal consistency. The four-item post-entry respect model was therefore adopted.

Table 6.6: Post-Entry Respect Scale Items

Item Label	Item
RES1	If they knew me well, most members of the Aston University community would respect my values
RES2	If they knew me well, most members of the Aston University community would think I have accomplished a great deal in my life
RES3	If they knew me well, most members of the Aston University community would

	approve of how I live my life these days
RES4	I believe that most members of the Aston University community respect me
RES5	<i>I believed that I make a good impression on other members of the Aston University community</i>

Excluded items in italics

6.3.1.7. Need for Identification

Six items were used to measure participants' need for identification using Mayhew et al.'s (2010) Need for Identification – Self Definition scale (see Table 6.7). Confirmatory Factor Analysis was conducted to test the construct validity of the six-item one-factor model. This model was not found to be a good fit to the data ($\chi^2 (9) = 56.29, p < 0.001$; RMSEA = 0.21; GFI = 0.86; NFI = 0.87; CFI = 0.89). Examination of the modification indices suggested some cross-loading between the items NOID5 and NOID6 (MI = 19.24). However visual exploration of these items did not indicate redundancy: both were considered to be an accurate representation of the need for identification construct, yet addressed different aspects of individuals' need to identify. As such, it was believed that there was no substantive sense in respecifying the structural model (Byrne, 2001). Moreover, this scale was found to have good internal consistency between items ($\alpha = 0.89$). Accordingly the six-item scale was retained in Study One, with recognition that the sub-optimal construct validity of this scale may impact upon the validity of subsequent research findings.

Table 6.7: Need for Identification Scale Items

Item Label	Item
NOID1	When I think about myself, I think about the groups I am part of
NOID2	Being a member of groups provides me with a strong sense of who I am
NOID3	Being a part of groups provides me with an identity
NOID4	My understanding of who I am comes from the groups I am part of
NOID5	Without the groups I am part of, I would feel incomplete
NOID6	My groups illustrate who I am

6.3.2. Missing Data

Missing data were identified, and dealt with, prior to statistical analysis. One case in which more than 5% of the data were missing was removed; as a consequence 124 cases were used within the final analysis. Where cases had less than 5% of data missing, estimators of categorical data were obtained using the Expectation-Maximisation algorithm, an approach advocated by Hair et al. (2006). This approach was considered appropriate because data were deemed to be missing completely at random (MCAR). Data are considered MCAR when the probability that an observation is missing is not related to the value of that observation or to the value of any other variable within the analysis (Howell 2007). Missing values were distributed across items and cases and therefore the “missingness” of the data was likely to have occurred completely at random.

6.3.3. Data Screening

Multiple linear regression analysis was used within this study to establish the existence and strength of relationships between predictor and outcome variables. Linear regression is a parametric test and its utility rests on a number of assumptions being met. The four main assumptions are normality, linearity, independence of residual terms and homoscedasticity (Yan, 2009). A further necessary assumption specific to multiple linear regression is that variables will not demonstrate excessive multicollinearity (Giles, 2002). These assumptions were tested prior to embarking on inferential statistical analysis in order to confirm that the intended analytical approach would be appropriate for the current data set.

A combination of statistical analysis and visual inspection as recommended by Field (2009) showed no clear evidence that the data were not normally distributed. To test the assumption of linearity, Kachigan (1991) suggests the use of visual inspection of the plot of predictor against outcome variables within the data. Analysis of these plots shows clear evidence of linear relationships between variables. This analysis therefore supported the assumption of linearity. The independence of residual terms was tested using the Durbin-Watson test. Durbin and Watson (1951) state for a sample size of over 100, with more than 5 predictors within the model, the lower and upper statistical bounds are 1.44 and 1.65 respectively. Within the current regression model, a value of $d = 1.81$ was obtained. Both this value and $4 - d$ (as a test of negative autocorrelation) were above the upper bound and it was therefore concluded that residual terms were uncorrelated. The assumption of independence of errors was therefore also met within the current data set.

To determine the homoscedasticity of the data, Field (2009) suggests that standardised residuals for the regression model should be plotted against standardised predicted

values and the distribution of the residuals for both the entire regression model as well as the partial plots should be analysed. For the current data set, residual plots showed that cases were generally well-dispersed, with no clear evidence of “funnel-shaped” dispersions indicative of heteroscedasticity. Furthermore residuals showed limited deviation from a normal distribution. Accordingly the assumptions of normality and homoscedasticity were deemed to have been met.

The Variance Inflation Factor (VIF) of a variable can be used to determine whether multicollinearity is likely to be a problem within a regression model⁴. A VIF indicates the strength of the linear relationship between one predictor and the remaining predictor variables. Yan and Su (2009) recommend that a VIF greater than 10 should be taken to indicate potentially multicollinearity problems, however values considerably greater than one should be treated with caution. Analysis indicated that none of the values obtained were close to 10, however the magnitude of pre- and post-entry pride VIFs did raise some cause for concern (anticipatory identification: VIF = 1.62; pre-entry pride: VIF = 3.32; pre-entry respect: VIF = 1.62; post-entry pride: VIF = 3.20; post-entry respect: VIF = 1.20; need for identification: VIF = 1.37). It was therefore concluded that there was no clear evidence of multicollinearity within the regression model, however in light of the larger VIF values for pride judgements, findings must be treated with some caution. In sum, data screening indicated that the assumptions for multiple linear regression had been met and the use of this analytical approach was considered to be appropriate for the current data set.

6.3.4. Control Variables

A series of independent-samples t-tests were conducted to determine the extent to which the control variables included within the research had a significant impact on the outcome variables under investigation. These included whether Aston University had been students' first choice university, their accommodation status and their degree programme as well as demographic variables including gender and nationality. Correlation analysis was also conducted to determine the relationship between age and need for identification and outcome variables.

6.3.4.1. Choice of University

Table 6.8 shows that participants' choice of university, in terms of whether the university had been their first or second choice university, had an impact upon outcome variables. Participants for whom Aston University had not been their first choice university reported

⁴To obtain VIFs for each predictor variable, post-entry identification was entered into the regression model as an outcome variable; with all other variables entered as predictor variables

significantly lower levels of anticipatory identification ($m = 3.10$, $sd = 0.80$) than participants who had chosen to join Aston University in the first instance ($m = 3.42$, $sd = 0.80$); $t(122) = 2.12$; $p < 0.05$). Similarly “second choice” participants reported experiencing significantly lower pride in ($m = 3.28$, $sd = 0.77$) and respect from ($m = 3.46$, $sd = 0.50$) the university prior to joining compared to the pride ($m = 3.91$, $sd = 0.72$) and respect ($m = 3.69$, $sd = 0.54$) experienced by “first choice” participants (pre-entry pride: $t(122) = 4.46$, $p < 0.001$; pre-entry respect $t(122) = 2.32$, $p < 0.05$). Moreover, second choice participants also reported experiencing significantly less pride in the university after joining ($m = 3.65$, $sd = 0.66$) compared to first choice participants ($m = 4.09$, $sd = 0.58$), ($t(122) = 3.77$, $p < 0.001$). However there was no significant difference in post-entry respect between second choice ($m = 3.76$, $sd = 0.60$) and first choice participants ($m = 3.84$, $sd = 0.60$), ($t(122) = 0.77$, $p > 0.05$). Differences between second choice participants’ ($m = 4.13$, $sd = 0.65$) and first choice participants’ ($m = 4.28$, $sd = 0.55$) identification were similarly no longer significant after participants had joined the university, ($t(122) = 1.38$, $p > 0.05$).

Table 6.8: Independent Samples T-Test Choice of University

	t	df	Sig. (2-tailed)
Anticipatory Identification	2.12	122	.04*
Pre-Entry Pride	4.46	122	.00***
Pre-Entry Respect	2.32	122	.02*
Post-Entry Identification	1.38	122	.17
Post-Entry Pride	3.77	122	.00***
Post-Entry Respect	.77	122	.44
Need for Identification	1.28	122	.20

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

6.3.4.2. Accommodation

The impact of participants’ accommodation on the outcome variables is presented in Table 6.9. Overall, participants’ accommodation arrangements, and specifically whether they lived on- or off-campus, had limited association with the outcomes included within the current regression model. The only exception to this was participants’ need for

identification. Participants who lived off-campus ($m = 3.16$, $sd = 0.78$) had a significantly greater need for identification than participants who lived on-campus ($m = 2.79$, $sd = 0.80$), ($t(122) = -2.61$, $p = 0.01$).

Table 6.9: Independent Samples T-Test Accommodation

	t	df	Sig. (2-tailed)
Anticipatory Identification	.18	122	.86
Pre-Entry Pride	-1.24	122	.22
Pre-Entry Respect	-1.96	122	.05
Post-Entry Identification	-1.01	122	.32
Post-Entry Pride	-1.04	122	.30
Post-Entry Respect	-1.59	122	.12
Need for Identification	-2.61	122	.01**

** $p \leq 0.01$

6.3.4.3. Degree Programme

Participants' degree programme was found to be significantly related to a number of outcome variables. In particular, undergraduate students reported significantly higher anticipatory identification ($m = 3.44$, $sd = 0.75$) than postgraduate students ($m = 2.77$, $sd = 0.86$), ($t(122) = 3.91$, $p < 0.001$), as well as significantly higher post-entry identification ($m = 4.31$, $sd = 0.58$) compared to postgraduate students ($m = 3.93$, $sd = 0.53$), ($t(122) = 2.96$, $p < 0.01$). Furthermore undergraduate students reported significantly higher pre-entry pride ($m = 3.84$, $sd = 0.78$) than postgraduate students ($m = 3.18$, $sd = 0.63$), ($t(122) = 3.87$, $p < 0.001$), and significantly high post-entry pride ($m = 4.05$, $sd = 0.62$) than postgraduate students ($m = 3.56$, $sd = 0.57$), ($t(122) = 3.58$, $p < 0.001$). As Table 6.10 illustrates, no significant differences were found in the perceived respect experienced by undergraduate and postgraduate students either before or after joining the university, or in the need for identification between the two groups.

Table 6.10: Independent Samples T-Test Degree Programme

	t	df	Sig. (2-tailed)
Anticipatory Identification	3.91	122	.00***
Pre-Entry Pride	3.87	122	.00***
Pre-Entry Respect	1.33	122	.19
Post-Entry Identification	2.96	122	.004**
Post-Entry Pride	3.58	122	.00***
Post-Entry Respect	-.76	122	.43
Need for Identification	.18	122	.86

** $p \leq 0.01$; *** $p \leq 0.001$

6.3.4.4. Demographic Variables

On the whole, demographic variables had very little impact upon outcome variables. As illustrated in Table 6.11, there was no significant difference between outcome variables reported by male and female participants, with the exception of male and female participants' pride in the university after joining. Female participants reporting experiencing significantly higher post-entry pride in the university ($m = 4.04$, $sd = 0.64$) compared to male participants ($m = 3.78$, $sd = 0.61$) ($t(122) = -2.19$, $p < 0.05$). Furthermore, Table 6.13 shows that there was no difference in any of the outcome variables between home and international students. Generally significant correlations were not observed between participants' age and outcome variables, however there were two exceptions. A significant negative correlation was observed between age and post-entry identification ($r = -0.22$, $p < 0.05$) as well as between age and post-entry pride ($r = -0.21$, $p < 0.05$).

Table 6.11: Independent Samples T-Test Gender

	T	df	Sig. (2-tailed)
Anticipatory Identification	-1.64	121	.10
Pre-Entry Pride	-1.44	121	.15

Pre-Entry Respect	.04	121	.97
Post-Entry Identification	-1.39	121	.17
Post-Entry Pride	-2.19	121	.03*
Post-Entry Respect	-1.01	121	.31
Need for Identification	-1.75	121	.08

* $p \leq 0.05$

Table 6.12: Independent Samples T-Test Home/International Students

	t	df	Sig. (2-tailed)
Anticipatory Identification	.86	95	.39
Pre-Entry Pride	1.26	95	.21
Pre-Entry Respect	1.14	95	.26
Post-Entry Identification	1.05	95	.30
Post-Entry Pride	1.96	95	.054
Post-Entry Respect	-.73	95	.47
Need for Identification	-.24	95	.81

Table 6.13: Zero Order Correlations Age

	r	Sig.
Anticipatory Identification	-.05	.57
Pre-Entry Pride	-.17	.07
Pre-Entry Respect	-.02	.83
Post-Entry Identification	-.21	.02*

Post-Entry Pride	-.20	.03*
Post-Entry Respect	.05	.62
Need for Identification	.04	.69

* $p \leq 0.05$

6.3.4.5. Need for Identification

As reported in Table 6.14, participants' need for identification was found to be significantly correlated with all of the variables within the study. Need for identification was therefore also controlled within the hypothesis testing. Need for identification was however not found to moderate the relationship between any of the hypothesised predictor and outcome variables ($B \leq \pm 0.08$; $p_s > \pm 0.35$).

Drawing these findings together, all control variables, except for whether participants were home and international students, appeared to be related to at least some of the outcome variables of interest within the research. It was therefore decided to control for these variables, with the exception of the differentiation between home and international students, by entering them at Step One within subsequent hierarchical linear regression models.

6.3.5. Descriptive Statistics

Descriptive statistics and zero-order correlations are presented in Table 6.14. A significant positive correlation was found between anticipatory identification and post-entry identification ($r = 0.48$, $p < 0.001$). Anticipatory identification was also significantly and positively correlated with both pre-entry pride ($r = 0.59$, $p < 0.001$) and pre-entry respect ($r = 0.45$, $p < 0.001$). Post-entry identification was significantly and positively correlated with post-entry pride ($r = 0.65$, $p < 0.001$) and post-entry respect ($r = 0.50$, $p < 0.001$). Furthermore, anticipatory identification was found to be positively related to post-entry pride ($r = 0.47$, $p < 0.001$) and post-entry respect ($r = 0.23$, $p < 0.05$). Finally need for identification was also found to correlate significantly and positively with anticipatory identification ($r = 0.29$, $p < 0.01$) and post-entry identification ($r = 0.38$, $p < 0.001$). Accordingly, there was reason to suppose that there were indeed relationships between participants' anticipatory identification, pre- and post-entry social identity judgements and post-entry organisational identification. These relationships were subsequently explored further using more detailed statistical analysis.

Table 6.14: Means, standard deviations, reliability coefficients and zero order correlations of the measured variables

	Mean	SD	1	2	3	4	5	6	7
1 Anticipatory Identification	3.31	0.81	(0.76)						
2 Pre-Entry Pride	3.70	0.79	.59***	(0.80)					
3 Pre-Entry Respect	3.62	0.53	.45***	.50***	(0.72)				
4 Post-Entry Identification	4.23	0.59	.48***	.62***	.41***	(0.85)			
5 Post-Entry Pride	3.95	0.64	.47***	.79***	.50***	.65**	(0.81)		
6 Post-Entry Respect	3.81	0.60	.23**	.31***	.45***	.50**	.49**	(0.85)	
7 Need for Identification	2.94	0.81	.29**	.33***	.29***	.38**	.28**	.30**	(0.89)

** $P \leq 0.01$; *** $P \leq 0.001$

6.3.6. Antecedents of Anticipatory Identification

Hypothesis One: Pre-entry social identity judgements will be positively related to anticipatory identification.

Hierarchical linear regression analysis was conducted to test the hypothesis that seeing the organisation as a source of positive social identity prior to entry would positively predict participants' anticipatory identification. The control variables outlined above were entered into the regression model at Step One ($R^2 = 0.23$, $p < 0.001$). To also control for participants' current social identity judgements, post-entry pride and post-entry respect were entered at Step Two and were found to make a significant contribution to the regression model ($R^2\Delta = 0.10$, $p = 0.001$). Pre-entry pride and pre-entry respect were entered at Step Three and were shown to explain an additional 14% of the variance in anticipatory identification ($R^2\Delta = 0.11$, $p < 0.001$). This provided support for Hypothesis One.

Table 6.15: Multiple Regression Analysis of the Relationship between Pre-Entry Social Identity Judgements and Anticipatory Identification

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.23	.19	.23	5.75***
Gender	.05	.15	.03	.32				
Degree Programme	-.76	.19	-.38	-3.93***				
Accommodation	-.16	.14	-.10	-1.09				
University Choice	-.26	.15	-.15	-1.80				
Age	.03	.02	.17	1.74				
Need for Identification	.27	.09	.27	3.13**				
Step Two					.36	.28	.10	8.10***
Gender	-.01	.14	-.01	-.08				

Degree Programme	-.62	.19	-.31	-3.20**				
Accommodation	-.18	.14	-.11	-1.35				
University Choice	-.12	.15	-.07	-.81				
Age	.03	.02	.19	2.06*				
Need for Identification	.18	.09	.18	2.14*				
Post-Entry Pride	.42	.13	.33	3.26***				
Post-Entry Respect	.05	.13	.04	.42				
Step Three					.434	.39	.11	11.34***
Gender	.07	.13	.04	.56				
Degree Programme	-.48	.18	-.24	-2.67**				
Accommodation	-.19	.13	-.12	-1.53				
University Choice	.02	.14	.01	.11				
Age	.03	.02	.15	1.84				
Need for Identification	.10	.08	.10	1.24				
Post-Entry Pride	-.08	.17	-.07	-.50				
Post-Entry Respect	.03	.12	.02	.23				
Pre-Entry Pride	.46	.13	.45	3.59***				
Pre-Entry Respect	.33	.14	.21	2.39*				

** $P \leq 0.01$; *** $P \leq 0.001$

Analysis of the individual β values for this regression model indicated that post-entry pride was a significant predictor of anticipatory identification when entered at Step Two ($\beta = 0.33$, $p = 0.001$), however when pre-entry pride was held constant at Step Three, this

relationship was no longer significant ($\beta = -0.07$, $p = 0.62$). As highlighted above, whilst there was no clear evidence of multicollinearity within the dataset, the inflated VIF values for pre- and post-entry pride did present some cause for concern. The pattern of results obtained in the regression analysis compounded concerns regarding collinearity and caution was exercised in the interpretation of these findings.

6.3.7. Consequences of Anticipatory Identification

Hypothesis Three: Anticipatory identification will be a significant predictor of post-entry organisational identification.

Hierarchical multiple linear regression analysis was conducted to determine whether anticipatory identification was a significant direct predictor of post-entry identification independent from participants' social identity judgements. At Step One control variables were entered, along with participants' pre-entry and post-entry social identity judgements ($R^2 = 0.56$, $p < 0.001$). Anticipatory identification was entered at Step Two but was not found to make a significant contribution to the regression model ($R^2\Delta = 0.01$, $p = 0.06$); although it was noted that this relationship was only marginally non-significant. As a consequence there was no clear evidence to suggest that anticipatory identification was a significant direct predictor of post-entry identification when control variables and social identity judgements were held constant. Hypothesis Three was therefore not supported.

Table 6.16: Multiple Regression Analysis of the Relationship between Anticipatory Identification and Post-Entry Identification

	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.56	.52	.56	14.02***
Gender	-.04	.08	-.03	-.46				
Degree Programme	-.09	.12	-.06	-.75				
Accommodation	.01	.08	.01	.10				
University Choice	.16	.09	.13	.78				
Age	-.02	.01	-.12	-.60				
Need for Identification	.11	.05	.15	2.15*				

Pre-Entry Pride	.24	.08	.32	2.87**				
Pre-Entry Respect	-.01	.09	-.01	-.10				
Post-Entry Pride	.22	.11	.24	2.05*				
Post-Entry Respect	.25	.08	.26	3.21**				
Step Two					.57	.53	.01	3.49
Gender	-.05	.08	-.04	-.57				
Degree Programme	-.03	.12	-.02	-.28				
Accommodation	.03	.08	.03	.37				
University Choice	.15	.09	.12	1.78				
Age	-.02	.01	-.14	-1.91				
Need for Identification	.10	.05	.14	1.94				
Pre-Entry Pride	.18	.09	.25	2.14*				
Pre-Entry Respect	-.05	.09	-.04	-.51				
Post-Entry Pride	.23	.11	.25	2.16*				
Post-Entry Respect	.25	.08	.26	3.20**				
Anticipatory Identification	.11	.06	.16	1.87				

** P ≤ 0.01; *** P ≤ 0.001

Examination of the excluded variables for this analysis however indicated that anticipatory identification did make a significant contribution to the regression model when entered independently from pre-entry social identity judgements ($B = 0.21$, $p = 0.008$). Bootstrap confidence intervals provided some evidence that anticipatory identification partially mediated the relationship between pre-entry pride and post-entry identification, however

the size of this effect was negligible ($B = 0.05$, $SE = 0.03$; 95% CI, 0.003, 0.14; $z = 1.61$, $p = 0.17$)⁵. Thus pre-entry pride appeared to have a direct impact upon post-entry identification and this seemingly suppressed the impact of anticipatory identification on post-entry identification.

It was also noted within the analysis that, when pre-entry social identity judgements were held constant, the impact of post-entry social identity judgements on post-entry identification was more limited in contrast to previous published studies (e.g. Fuller et al. 2006). This impact was also smaller than the relationship between pre-entry social identity judgements and anticipatory identification highlighted above. The standardised regression coefficients for these predictors were however similar in magnitude to earlier findings (Post-Entry Pride: $\beta = 0.47$, $p < 0.001$; Post-Entry Respect: $\beta = 0.23$, $p = 0.004$) when pre-entry social identity judgements were allowed to vary. Pre-entry social identity judgements thus also appeared to suppress post-entry social identity judgements within the regression model as well as anticipatory identification.

6.3.7.1. Buffering Effect of Anticipatory Identification

Two potential buffering mechanisms were set out in Chapter Three. Hypothesis Six suggested that anticipatory identification would moderate the relationship between post-entry identity relevant information and post-entry social identity judgements Hypothesis Seven in contrast predicted that anticipatory identification would moderate the relationship between post-entry social identity judgements and post-entry identification. Only the latter of these mechanisms was explored within Study One.

Hypothesis 7: Anticipatory identification will moderate the relationship between post-entry social identity judgements and post-entry identification, so that the relationship between post-entry social identity judgements and post-entry identification is weaker when anticipatory identification is high.

The hypothesised buffering effect was assessed separately for the two post-entry social identity judgements. Hierarchical linear regression analysis was first conducted to determine whether anticipatory identification moderated the relationship between post-entry pride and post-entry identification, and specifically whether the relationship between post-entry pride and post-entry identification was weaker when anticipatory identification was high. As recommended by Aiken and West (1991), independent variables were mean-centred prior to analysis to limit covariance between the linear and interaction

⁵ Pre-entry respect was not found to be a significant predictor of post-entry identification therefore this analysis was not repeated for the second pre-entry social identity judgement.

terms. Control variables, pre- and post-entry respect and pre-entry pride were entered at Step One ($R^2 = 0.55$, $p < 0.001$). At Step Two, although the predictor variables collectively accounted for an additional 4% of the variance in post-entry identification ($R^2\Delta = 0.04$, $p = 0.03$), significant main effects or interaction effects were not observed for any of the individual predictors (post-entry pride: $\beta = 0.20$, $p = 0.10$; anticipatory identification: $\beta = 0.16$, $p = 0.07$; post-entry pride x anticipatory identification: $\beta = -0.09$, $p = 0.15$). The proposition that anticipatory identification would moderate the relationship between post-entry pride and post-entry identification was therefore not supported.

Table 6.17: Multiple Regression Analysis of the Interactive Effects of Anticipatory Identification and Post-Entry Pride on Post-Entry Identification

	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.57	.53	.55	14.69***
Gender	-.02	.08	-.01	-.21				
Degree Programme	-.11	.12	-.08	-.94				
Accommodation	.01	.08	.01	.11				
University Choice	.15	.09	.12	1.63				
Age	-.02	.01	-.13	-1.77				
Need for Identification	.10	.05	.14	2.00*				
Pre-Entry Pride	.35	.06	.47	5.51***				
Pre-Entry Respect	.32	.07	.32	4.31***				
Post-Entry Respect	.01	.09	.01	.09				
Step Two					.58	.53	.04	3.12*
Gender	-.04	.08	-.03	-.44				
Degree Programme	-.02	.12	-.01	-.15				

Accommodation	.04	.08	.03	.45
University Choice	.16	.09	.13	1.81
Age	-.02	.01	-.15	-2.03*
Need for Identification	.10	.05	.14	1.98*
Pre-Entry Pride	.19	.09	.26	2.24*
Pre-Entry Respect	.25	.08	.25	3.16**
Post-Entry Respect	-.04	.09	-.04	-.46
Post-Entry Pride	.12	.06	.16	1.95
Anticipatory Identification	.21	.11	.23	1.97
Post-Entry Pride x Anticipatory Identification	-.09	.07	-.08	-1.32

* $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$

The analysis was next repeated to explore whether anticipatory identification might instead moderate the relationship between post-entry respect and post-entry identification. Control variables, pre- and post-entry pride and pre-entry respect were entered into the regression model at Step One ($R^2 = 0.52$, $p < 0.001$). This time, main effects were found for both post-entry respect ($\beta = 0.28$, $p < 0.001$) and anticipatory identification ($\beta = 0.17$, $p = 0.05$). A significant interaction was also found between these two predictors ($\beta = -0.15$, $p = 0.03$). The two-way interaction plot for this interaction is presented in Figure 6.2.

Simple slopes analysis was conducted using conditional values of one standard deviation above and below the mean (Aiken and West 1991). This analysis indicated that there was a significant relationship between post-entry respect and post-entry identification when anticipatory identification was low ($B = 0.38$, $p < 0.001$). However the gradient of the slope did not differ significantly from zero when anticipatory identification was high ($B = 0.12$, $p = 0.21$). The Johnson-Neyman technique indicated that the relationship between post-entry respect and post-entry identification was significant up to and including values of anticipatory identification 0.68 standard deviations above the mean ($B = 0.17$, $p = 0.05$). Above this value post-entry respect was not a significant predictor of post-entry

identification. This analysis provided partial support for Hypothesis Seven; however as the moderation effect had only been observed for post-entry respect and not post-entry pride, rejection of the null hypothesis at this stage was considered inappropriate.

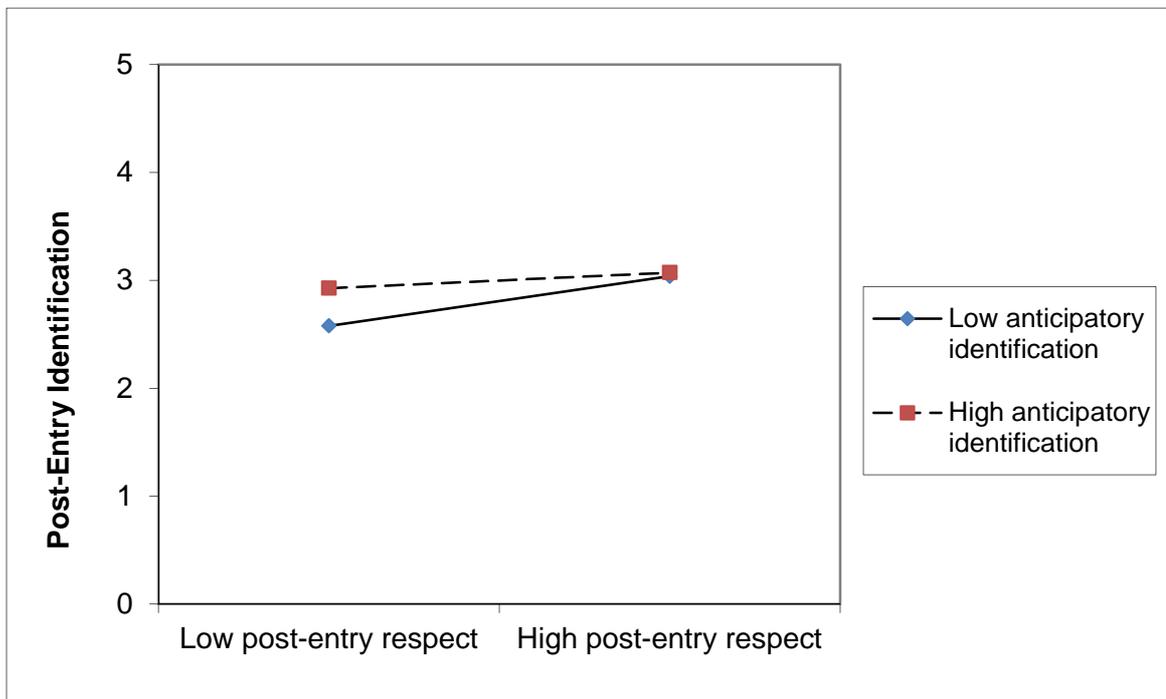
Table 6.18: Multiple Regression Analysis of the Interactive Effects of Anticipatory Identification and Post-Entry Respect on Post-Entry Identification

	B	SE B	β	t	R ²	Adj. R ²	ΔR^2	f
Step One					.52	.48	.52	13.24***
Gender	-.02	.09	-.02	-.28				
Degree Programme	-.01	.12	-.01	-.12				
Accommodation	.02	.08	.02	.24				
University Choice	.19	.09	.15	2.06				
Age	-.02	.01	-.12	-1.50				
Need for Identification	.14	.05	.19	2.55*				
Pre-Entry Respect	.07	.09	.06	.81				
Pre-Entry Pride	.19	.08	.26	2.27*				
Post-Entry Pride	.35	.10	.39	3.47***				
Step Two					.59	.54	.07	6.52**
Gender	-.04	.08	-.03	-.49				
Degree Programme	-.06	.12	-.04	-.55				
Accommodation	.06	.08	.05	.69				
University Choice	.13	.09	.11	1.54				
Age	-.02	.01	-.15	-2.01*				

Need for Identification	.11	.05	.15	2.12*
Pre-Entry Respect	-.03	.09	-.03	-.36
Pre-Entry Pride	.18	.08	.24	2.13*
Post-Entry Pride	.19	.11	.21	1.86
Anticipatory Identification	.12	.06	.17	2.08*
Post-Entry Respect	.25	.08	.26	3.30***
Post-entry Respect x Anticipatory Identification	-.16	.07	-.14	-2.24*

* $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$

Figure 6.2: Two-Way Interaction Plot of the Moderating Effect of Anticipatory Identification on the Relationship between Post-Entry Respect and Post-Entry Identification



6.3.7.2. Feedback Loop of Anticipatory Identification

Hypothesis Eight: The relationship between anticipatory identification and post-entry identification will be mediated by post-entry social identity judgements.

Hierarchical linear regression analysis was undertaken to determine whether post-entry social identity judgements mediated the relationship between anticipatory identification and post-entry identification. At Step One, control variables, pre-entry pride and pre-entry respect were entered into the regression model ($R^2 = 0.46$, $p < 0.001$). Anticipatory identification was entered at Step Two, however this variable was not found to make a significant contribution to the regression model ($R^2\Delta = 0.01$, $p = 0.16$); mirroring the observation discuss in relation to Hypothesis Three. Post-entry social identity judgements were entered at Step Three and explained an additional 8% of the variance ($R^2\Delta = 0.09$, $p < 0.001$).

The failure to observe a significant relationship between anticipatory identification and post-entry identification meant that a key condition of the “causal steps” approach to detecting mediation effects specified by Baron and Kenny (1986) was not met. However indirect effects can be present even when the conditions of true mediation are not met, for example with the mediator variable instead taking the role of an intervening variable between predictor and outcome variables (Hayes, 2009). Subsequent analysis was conducted to determine whether there may be a significant indirect relationship between anticipatory identification and post-entry identification. This analysis also found no evidence of an indirect relationship, through either post-entry pride ($B < 0.001$, $SE = 0.02$; $z = 0.03$, $p = 0.97$; 95% CI, -0.06, 0.05) or post-entry respect ($B = 0.001$, $SE = 0.01$; $z = -0.40$, $p = 0.69$; 95% CI, -0.07, 0.02). Hypothesis Eight was therefore not supported.

Table 6.19: Multiple Regression Analysis of the Relationship between Anticipatory Identification and Post-Entry Identification through Post-Entry Social Identity Judgements

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.46	.43	.46	12.31***
Gender	.02	.09	.02	.25				
Degree Programme	-.02	.12	-.02	-.18				
Accommodation	.03	.09	.02	.32				

University Choice	.18	.10	.14	1.89
Age	-.02	.01	-.14	-1.75
Need for Identification	.14	.06	.19	2.44*
Pre-Entry Pride	.38	.07	.52	5.71***
Pre-Entry Respect	.14	.09	.13	1.60

Step Two **.48 .43 .01 2.66**

Gender	.02	.09	.01	.17
Degree Programme	.03	.13	.02	.23
Accommodation	.05	.09	.04	.55
University Choice	.18	.09	.14	1.88
Age	-.02	.01	-.17	-2.03*
Need for Identification	.12	.06	.17	2.24*
Pre-Entry Pride	.34	.07	.46	4.69***
Pre-Entry Respect	.11	.09	.10	1.18
Anticipatory Identification	.11	.07	.15	1.63

Step Three **.57 .53 .09 12.06*****

Gender	-.05	.08	-.04	-.57
Degree Programme	-.03	.12	-.02	-.28
Accommodation	.03	.08	.03	.37

University Choice	.15	.09	.12	1.78
Age	-.02	.01	-.14	-1.91
Need for Identification	.10	.05	.14	1.94
Pre-Entry Pride	.18	.09	.25	2.14*
Pre-Entry Respect	-.05	.09	-.04	-.51
Anticipatory Identification	.11	.06	.16	1.87
Post-Entry Pride	.23	.11	.25	2.16*
Post-Entry Respect	.25	.08	.26	3.20*

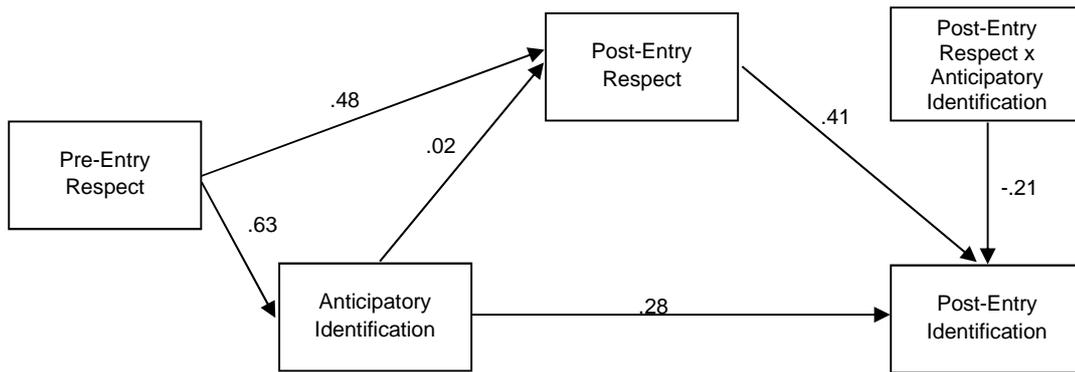
* $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$

6.3.8. Assessment of the Conceptual Model

Structural equation modelling was conducted to further explore how well the conceptual model fitted the data. In light of limited support for the hypothesised pattern of relationship between pre-entry pride, anticipatory identification, post-entry pride and post-entry identification, the conceptual model was, as expected, not found to have a satisfactory fit to the data ($\chi^2(47) = 101.53$, $p < 0.001$; RMSEA = 0.10; NFI = 0.81; CFI = 0.88)⁶. A further model was also tested which focussed solely on intragroup social identity judgements (i.e. pre- and post-entry respect). This condensed model was found to have a good fit to the data ($\chi^2(14) = 13.57$, $p = 0.48$; RMSEA = 0.000; NFI = 0.93; CFI = 0.10). The full and “respect-only” conceptual models were compared using Akaike’s Information Criterion (AIC). Analysis of the fit indices in Tables 6.20 and 6.21 suggested that the respect-only model overall was a better fit to the data (AIC Δ = 141.96). The path diagram for this model is presented in Figure 6.3.

⁶ GFI indices not available due to missing categorical data not addressed by EM algorithm

Figure 6.3 Path Diagram for “Respect-Only” Study One Conceptual Model



The full and respect-only conceptual models (Model One) were subsequently contrasted with a further four alternative models to determine that the hypothesised direction of relationships between variables did indeed represent the best fit to the data. These alternative models were:

Model Two (direct post-entry impact of pre-entry social identity judgements). To consider whether pre-entry social identity judgements rather than anticipatory identification were the more influential predictor of post-entry outcomes, Model Two specified that pre-entry social identity judgements would predict anticipatory identification, post-entry social identity judgements and post-entry identification.

Model Three (retrospective influence of post-entry social identity judgements). To address concerns that participants’ reporting of pre-entry social identity judgements and anticipatory identification was influenced by their current perceptions of the respect and pride in relation to the university, Model Four specified that post-entry social identity judgements would be a direct predictor of post-entry identification, anticipatory identification and pre-entry social identity judgements.

Model Four (retrospective influence of post-entry identification). To similarly consider the possibility that participants’ reporting of pre-entry social identity judgements and anticipatory identification was influenced by post-entry identification, Model Four specified that post-entry identification would be a direct predictor of post-entry social identity judgements, anticipatory identification and pre-entry social identity judgements.

Model Five (constant social identity model): To consider whether the reporting of pre-entry respect, anticipatory identification, post-entry respect and post-entry identification were influenced by a single variable (either representing a constant social identity or suggesting common method variance), Model Five specified one latent “Constant Social Identity” variable which would predict covariance in pre-entry respect, anticipatory identification, post-entry respect and post-entry identification.

Path diagrams for these additional models can be found Figure 6.4. Analysis of the fit indices and model comparisons in Tables 6.20 and 6.21 did indeed indicate that both the full and respect-only conceptual model had the best fit to the data in contrast to the alternative models outlined above. Moreover, neither of the retrospective report models (Model Four and Model Five) was found to have good fit to the data. This allayed some concerns, raised by the research design, that participants' reporting of their pre-entry social identity judgements and anticipatory identification may have been determined by their post-entry experience of these variables.

Table 6.20: Fit Indices (Full Conceptual Model)

Model	AIC	χ^2	df	p	RMSEA	NFI	CFI
Model One	215.53	101.53	47	0.00	0.10	0.81	0.88
Model Two	238.20	130.20	50	0.00	0.11	0.76	0.82
Model Three	306.15	206.15	54	0.00	0.15	0.62	0.66
Model Four	299.32	231.75	53	0.00	0.17	0.57	0.60
Model Five	276.21	174.21	53	0.00	0.14	0.68	0.73

Table 6.21: Fit Indices (Conceptual Model – Respect Only)

Model	AIC	χ^2	df	p	RMSEA	NFI	CFI
Model One	73.57	13.58	14	0.48	0.00	0.93	1.00
Model Two	132.64	70.64	23	0.001	0.13	0.66	0.71
Model Three	108.92	44.91	22	0.003	0.09	0.78	0.87
Model Four	126.52	64.52	23	0.00	0.12	0.69	0.76
Model Five	111.69	47.69	22	0.01	0.10	0.77	0.85

Figure 7.3: Path Diagrams for Alternative Models Study One

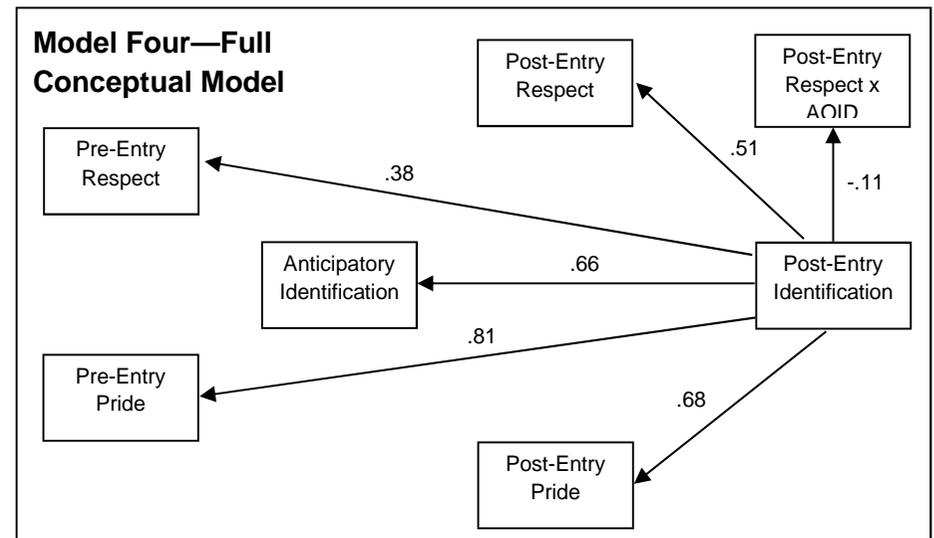
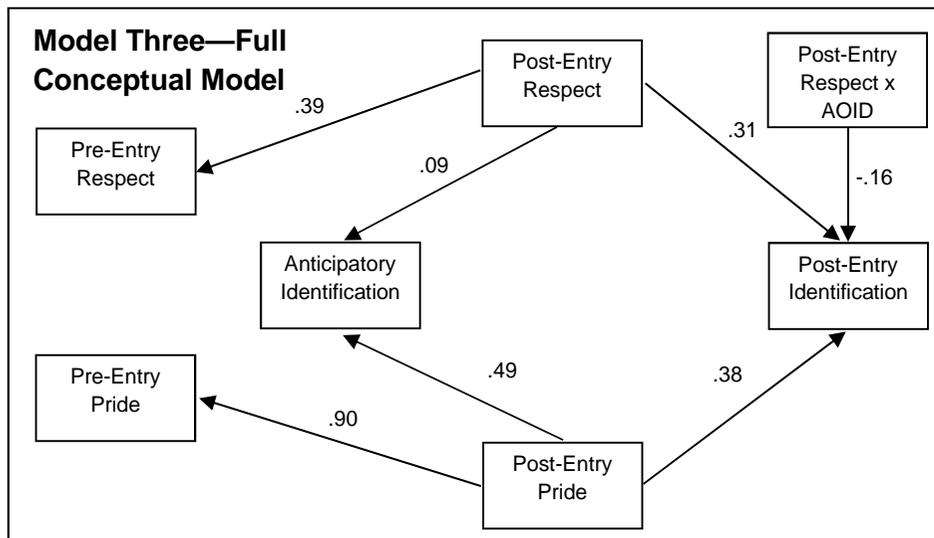
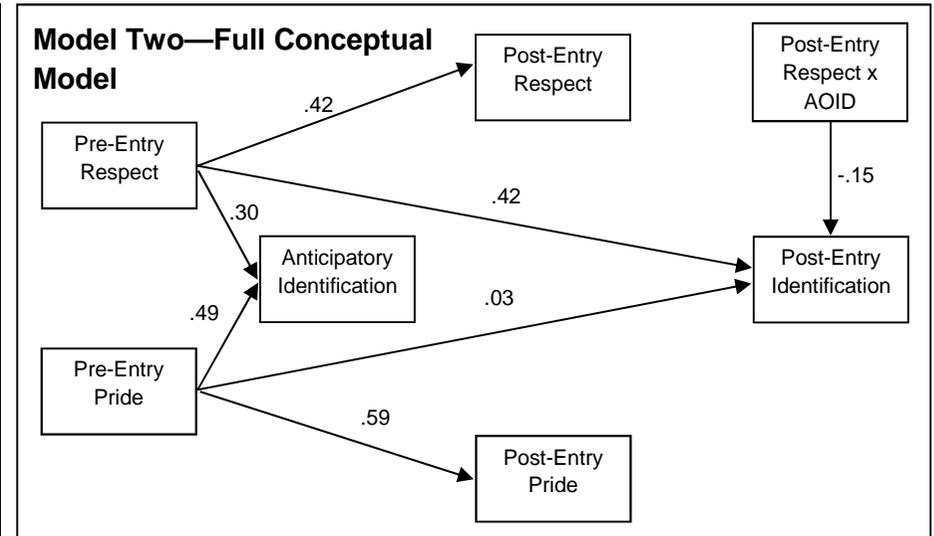
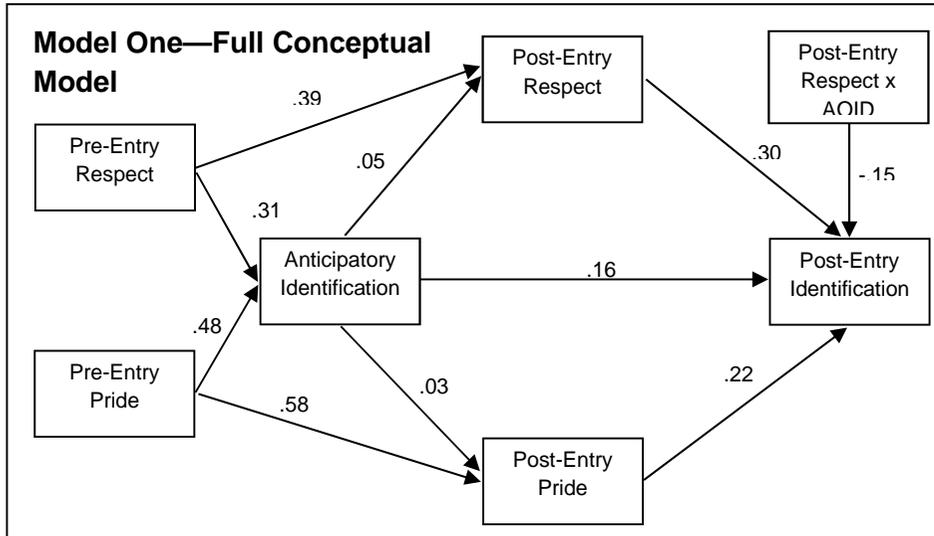


Figure 7.3 (Continued): Path Diagrams for Alternative Models Study One

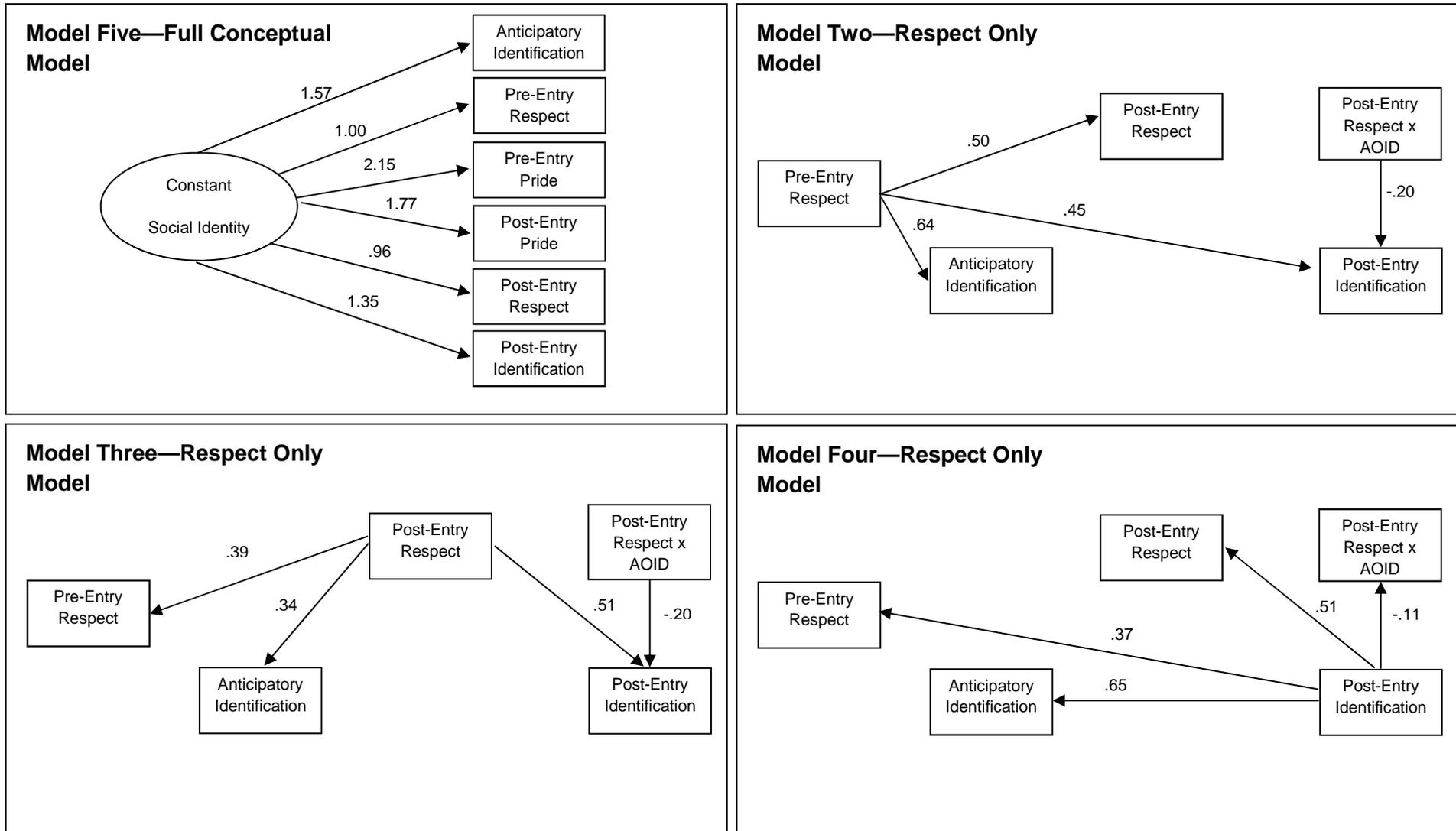
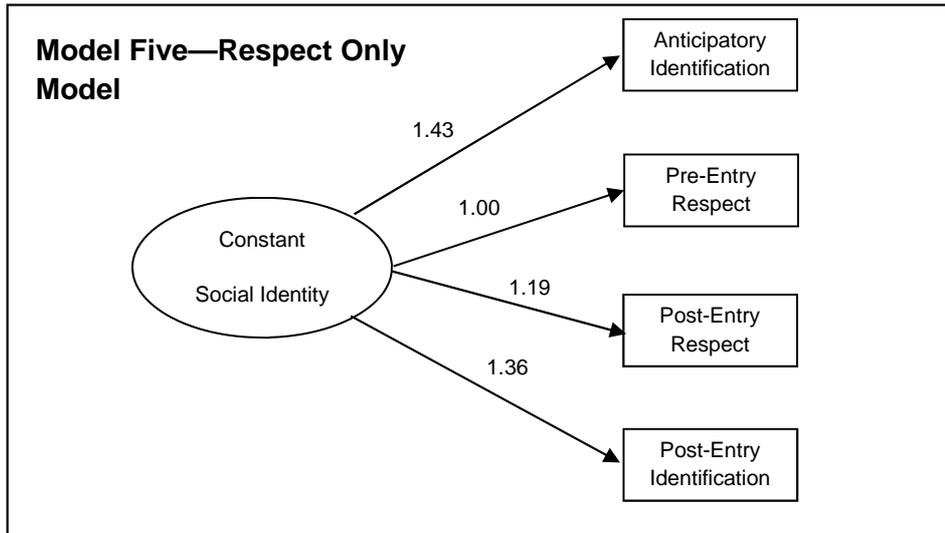


Figure 7.3 (Continued): Path Diagrams for Alternative Models Study One



Note: Ovals represent latent constructs and rectangles represent manifest constructs; Control variables and covariances included within analysis but excluded from diagrams for ease of interpretation; Model rotated to facilitate presentation.

6.4. Study One Discussion

Study One adopted a retrospective self-reporting survey design to provide a preliminary test of the relationships between anticipatory identification and its antecedents and consequences. Although support was not found for all of the hypotheses set out in Chapter Three, there was partial confirmation of a number of key aspects of the conceptual model. The results of Study One therefore provided an initial insight into anticipatory identification, indicating that further exploration of the construct would be both justified and useful.

6.4.1. Antecedents of Anticipatory Identification

As a preliminary exploration of the antecedents of anticipatory identification, Study One investigated whether new students' perception that their university was a source of positive social identity during the pre-entry period was a significant predictor of their anticipatory identification. A broad body of research has previously shown that an individual is more likely to identify with an organisation when they believe it contributes to the formation and maintenance of a positive social identity, for example by providing them with a sense of status both in relation to other organisations and within their own organisation (e.g. Fuller et al., 2006; Lipponen et al., 2005; Mael and Ashforth, 1992; Riketta, 2005; Smidts et al., 2001). Hypothesis One proposed that this drive to establish a positive social identity would also mean that the judgements a newcomer formed prior to entry into an organisation would similarly influence their identification before joining. New

students' evaluations of the status and prestige of the university, as well as the extent to which they were respected and valued by current university members, were indeed found to be significantly related to their anticipatory identification. Even when current social identity judgements were held constant, participants' retrospectively reported pre-entry social identity judgements were found to significantly predict anticipatory identification. To date, research concerning the antecedents of anticipatory identification has been very limited in scope. The only study, to the author's knowledge, to specifically explore the determinants of newcomers' pre-entry identification with an organisation has shown that exposure to an organisation prior to entry is associated with heightened anticipatory identification (Stephens and Dailey, 2012). Study One's findings extended this proposition to highlight the importance of the content of this exposure. The present research thus showed for the first time that propositions taken from a Social Identity approach to post-entry organisational identification equally have relevance amongst future members of an organisation.

Studies that have explored the impact of social identity judgements on identification, and in particular the two forms of status evaluations set out by the Group Engagement Model, have tended to find that the status of an organisation explains a greater proportion of the variance in identification than an individual's status within the organisation (e.g. Tyler and Blader, 2002; Fuller et al., 2006). The perceived standing of the organisation in relation to other organisations has consequently been shown to be more closely linked to a positive social identity overall than an individual's standing within the group. The results of Study One corresponded with these earlier findings. Whilst new students' pride in the university and perceptions of respect from the university prior to entry both had a significant and unique impact upon anticipatory identification, pre-entry intergroup social identity judgements were found to be more closely associated with anticipatory identification than pre-entry intragroup social identity judgements. This provided a further contribution to our current understanding of anticipatory identification; indicating not only that the same antecedents can affect an individual's identification with an organisation before and after entry, but that the influence of these antecedents is seemingly comparable for both anticipatory identification and post-entry identification⁷.

It is important to note that, in light of the cross-sectional retrospective reporting design adopted, no clear assumptions regarding causality could be made within Study One. Retrospective reporting is particularly prone to bias and inaccuracy (Huber and Power,

⁷ It was however observed that when pre-entry social identity judgements were included within the regression model the strength of the relationship between post-entry social identity judgements and post-entry identification was more limited; a factor not taken into account within earlier published studies.

1995) and participants' retrospective memory is thought to be strongly influenced by their current attitudes and values (Stone and Shiffman, 2002). It was therefore plausible that current evaluations of the university were able to bias students' recollection of their evaluations prior to joining. Despite this, structural modelling indicated that the proposed conceptual model was a superior fit to the data than models which postulated either a post-hoc influence of post-entry variables on pre-entry variables or common method variance. Accordingly, whilst the potential limitations of the methodological design were acknowledged, structural modelling allowed increased confidence in the validity of Study One's findings. This study therefore provided a valuable initial insight into the factors that impact upon an individual's identification with an organisation prior to entry. It furthermore indicated that a more detailed and thorough exploration of the antecedents of anticipatory identification may indeed prove a fruitful avenue for further research.

6.4.2. Consequences of Anticipatory Identification

A key assumption underpinning the research described in this thesis was that exploration of anticipatory identification would only have true practical benefit if pre-entry identification had post-entry consequences. It was hypothesised, however, that there were a number of ways through which anticipatory identification may have an important impact after joining. First, Hypothesis Three proposed that anticipatory identification would be a significant direct predictor of post-entry identification. Organisational identification is thought to fulfil self-consistency needs within an individual (e.g. Dutton et al., 1994; Scott and Lane, 2000). It was therefore suggested that preserving a stable sense of identification with an organisation from pre- to post-entry would be desirable and beneficial for the individual, contributing to a constant self-concept over time. Study One found no support for this hypothesis when control variables and pre- and post-entry social identity judgements were held constant. Thus in the current research context, anticipatory identification did not have a significant direct impact upon new students' identification with their university after entry.

In addition to a proposed direct impact of anticipatory identification on post-entry identification, the possibility of an indirect relationship between the two variables was also explored within Study One. Researchers have previously argued that organisational identification can operate within a feedback loop; with identification both resulting from, and leading to, more favourable perceptions of, and engagement with, an organisation (e.g. DiSanza and Bullis, 1999; Haslam, 2004; Rousseau, 1998). Maintaining a positive impression of an organisation with which we identify contributes to a positive self-view by extension (Pettit and Lount, 2011; Sherman and Kim, 2005); this in turn, as discussed above, serves to reinforce our initial identification with the organisation. Chapter Three advanced the suggestion that such a feedback loop might cross the boundary between

pre- and post-entry. Anticipatory identification would thus impact upon newcomers' post-entry perceptions of the organisation and through this sustain or even increase their post-entry identification. This proposal was operationalised in Hypothesis Eight, which stated that the relationship between anticipatory identification and post-entry identification would be mediated by post-entry social identity judgements.

Despite this, no evidence was found to suggest that post-entry social identity judgements did indeed mediate the relationship between anticipatory identification and post-entry identification. Furthermore there was no indication of a weaker indirect relationship, whereby post-entry social identity judgements acted as intervening variables between pre- and post-entry identification. Therefore Study One ultimately did not demonstrate that an individual's identification with their new organisation prior to entry either directly or indirectly influenced their identification with the organisation after joining. This belied the proposition that a drive for self-consistency would motivate an individual to preserve a stable level of identification with an organisation from pre- to post-entry. It was also contrary to the notion that anticipatory identification may encourage the preservation of a positive impression of that organisation after entry, to satisfy a desire for self-enhancement through one's affiliation with the organisation.

In keeping with earlier published research into organisational identification highlighted above, participants' evaluations of pride and respect after joining did significantly predict post-entry identification. Together with the previously discussed findings concerning the antecedents of anticipatory identification, this indicated that students' immediate impressions of their university may have been more influential in determining their identification than their preceding attachment to, or evaluation of, the university. This observation was consistent with Rousseau's (1998) concept of "situated identification". Situated identification denotes a more temporary state of organisation identification, which is cued by an individual's immediate environmental stimuli but quickly dissipates once these cues are removed. Situated identification consequently does not require on-going interaction with the organisation over time, and thus Rousseau argues is more prevalent in organisations which undergo regular changes or within particular forms of work such as temporary employment or short-lived project teams. Drawing of this conceptualisation, the identification experienced by participants in Study One could arguably be described as situated identification. Students had not yet developed a more deep-rooted sense that the university was self-definitive and so were influenced by their immediate impressions, rather than their longstanding involvement with the university. From this perspective the extent to which students identified with the university prior to entry would understandably have limited impact upon their relationship with the university soon after joining.

However it was noted that anticipatory identification was a significant predictor of post-entry identification when pre-entry social identity judgements were allowed to vary within the regression model. Pre-entry pride appeared to suppress the impact of anticipatory identification on post-entry identification. This observation could be taken to suggest that pre-entry social identity judgements were more relevant determinants of post-entry identification than the extent to which new students identified with the university prior to entry. Adopting this standpoint, anticipatory identification would have limited independent influence on social identity processes after joining; further exploration of anticipatory identification as a construct in its own right would therefore be questionable. Yet, the use of a single measurement instrument and potential multicollinearity within the data set did raise concerns regarding the validity of findings obtained within the study. These concerns prevented any clear conclusions being drawn and are discussed further within the limitations section of this discussion.

Furthermore, other findings within Study One did point to a more important role for anticipatory identification in students' identification with the university after entry. Although the research did not suggest a direct or indirect effect of anticipatory identification on post-entry identification, there was indication that students' identification with the university prior to entry did interact with certain post-entry social identity judgements to predict post-entry identification. Hypothesis Seven stated that anticipatory identification would moderate the relationship between post-entry social identity judgements and post-entry identification. As predicted, post-entry respect was found to be a significant predictor of post-entry identification when anticipatory identification was low, however did not significantly predict post-entry identification when anticipatory identification was high. This was taken to suggest that anticipatory identification acted as a buffer against the subsequent impact of students' perceptions of low post-entry respect on their identification with the university after entry.

It was again argued that, when newcomers closely identified with an organisation prior to entry, a drive for self-consistency would influence the relationship between post-entry impressions of the organisation and post-entry identification. When anticipatory identification is high, the organisation will become integrated within the newcomer's self-concept prior to entry. Continuing to identify with an organisation after entry, even if it is no longer seen as source of positive social identity, would therefore allow the preservation of a sense of stability within the newcomer's self-view (e.g. Van Knippenberg et al., 2007). It was also suggested that this continuing post-entry identification could also have a group-serving purpose, as high identifiers would look to reassert the positive standing of the group, for example through increased loyalty and group-affirmation (e.g. Ellemers et al., 2002). The finding that anticipatory identification moderated the relationship between post-

entry respect and post-entry identification gave weight to these propositions. It furthermore suggested that anticipatory identification can have broader (and importantly post-entry) implications, beyond simply being an additional aspect of applicant attraction, as implied by previous researchers (e.g. Boezeman and Ellemers, 2008; Lievens et al., 2007). This is therefore a further important contribution made by Study One to expand our knowledge of anticipatory identification.

However only partial support was obtained for the hypothesised buffering mechanism; whilst there was a significant interaction between post-entry respect and anticipatory identification, no equivalent interaction was observed between post-entry pride and anticipatory identification. In looking to make sense of this observation, it is possible to consider what these different social identity judgements might signal to the individual regarding their membership of the organisation. The respect one receives from other group members is thought to signal belongingness and is closely aligned to relational aspects of the self (e.g. De Cremer and Tyler, 2005). On the other hand, the judgements an individual makes regarding the distinctiveness or perceived external prestige of the group do not indicate the validity of their group membership, but instead promote self-esteem by allowing that individual to “bask in the reflected glory” of the organisation (Cialdini et al., 1976, p.366; Smidts et al., 2001). Accordingly, whilst these different social identity judgements ultimately contribute to a positive self-concept, they do so in quite different ways.

Lipponen et al. (2011) have proposed that individuals with initially low levels of organisational identification typically have lower confidence in their group membership and so are more sensitive to information that indicates whether or not they are valued members of the group. In contrast, individuals who already closely identify with the organisation are suggested to feel secure in their group membership and to be less active in seeking or responding to cues regarding their membership. As a consequence, anticipatory identification might prompt a sense of membership security amongst newcomers, such that they do not respond as readily to post-entry information concerning their intragroup status. Yet, this membership security would not necessarily prevent the newcomer from reacting to information regarding the status of the group itself. Accordingly such information could still have the capacity to impact upon their post-entry identification. In sum, the different ways through which evaluations of pride and respect impact upon identification could potentially account for the pattern of relationships between anticipatory identification, post-entry social identity judgements and post-entry identification observed in Study One.

6.4.3. Limitations

We can however consider methodological reasons for the findings of Study One, which presents a potential limitation for this study. Although structural equation modelling did not point to clear common method variance within the data (for example, structural models with a single exogenous variable showed a poorer fit to the data), and there was similarly no definite multicollinearity diagnosed within the dataset, common method variance and collinearity can lead to spurious standard errors and thus mask true effects within a sample (Siemsen, Roth and Oliviera, 2010). The consequences of using a single measurement instrument may therefore have meant that the impact of anticipatory identification on post-entry identification or on the relationship between post-entry pride and post-entry identification was not accurately recognised. Hence to assume that anticipatory identification did not predict post-entry identification, or interacted only with post-entry intragroup social identity judgements, was considered premature at this stage in the research programme. Further investigation, where participants' reporting of anticipatory identification and post-entry identification are collected separately, could be required to accurately test the conceptual model set out in Chapter Three.

Similarly, whilst structural modelling did not give a strong indication of retrospective reporting bias, it is important to recognise the limitations of the study brought about by the current research design. Structural modelling cannot conclusively demonstrate causality (Byrne, 2001). It is therefore still plausible that participants' recollections of anticipatory identification were informed by their current level of identification, rather than accurately reflecting their identification with the organisation prior to entry (e.g. Huber and Power, 1985). If so, this could potentially challenge the validity of the conclusions drawn regarding the consequences of anticipatory identification. On the other hand, nostalgic recollection of events, whether accurate or not, has been found to positively impact upon participants' present time reporting of factors including positive affect, self-regard and social bonds (e.g. Bryant, Smart and King 2005; Wildschut, Sedikides, Arndt and Routledge, 2006). Thus the belief that one identified with an organisation prior to entry, even if this recollection is inaccurate, may still provoke a drive for self-consistency and thus prompt the effects observed in the current study. Nonetheless, additional investigation, and in particular where the reporting of anticipatory identification preceded the reporting of post-entry identification, is necessary to fully assess the conceptual model set out in Chapter Three.

A further limitation of the Study One was the use of a student, rather than a work-based, sample. Ashforth and Mael (1989) have argued that organisational identification is simply another, more specific form of social identification. It was therefore assumed that the

findings of Study One could be extended to also inform an understanding of newcomers' entry into a new work organisation. Nonetheless, it is conceivable that the process of starting university and the process of starting a new job, or indeed joining any other social group, are qualitatively different in nature. For example, entering university is typically seen as a major life transition, which often not only involves joining a new social group, but also moving away from one's home environment and existing social support networks (e.g. Berzonsky and Kuk, 2000; Wintre and Yaffe, 2000). As such, this entry process might involve greater divestment of previous identities or higher levels of stress than one might expect to experience when joining a new work organisation. Additional research is therefore also required to determine that the observations of the current study would also be replicated outside of a university context, both within social groups more generally as well as specifically within work organisations.

6.4.4. Next Steps

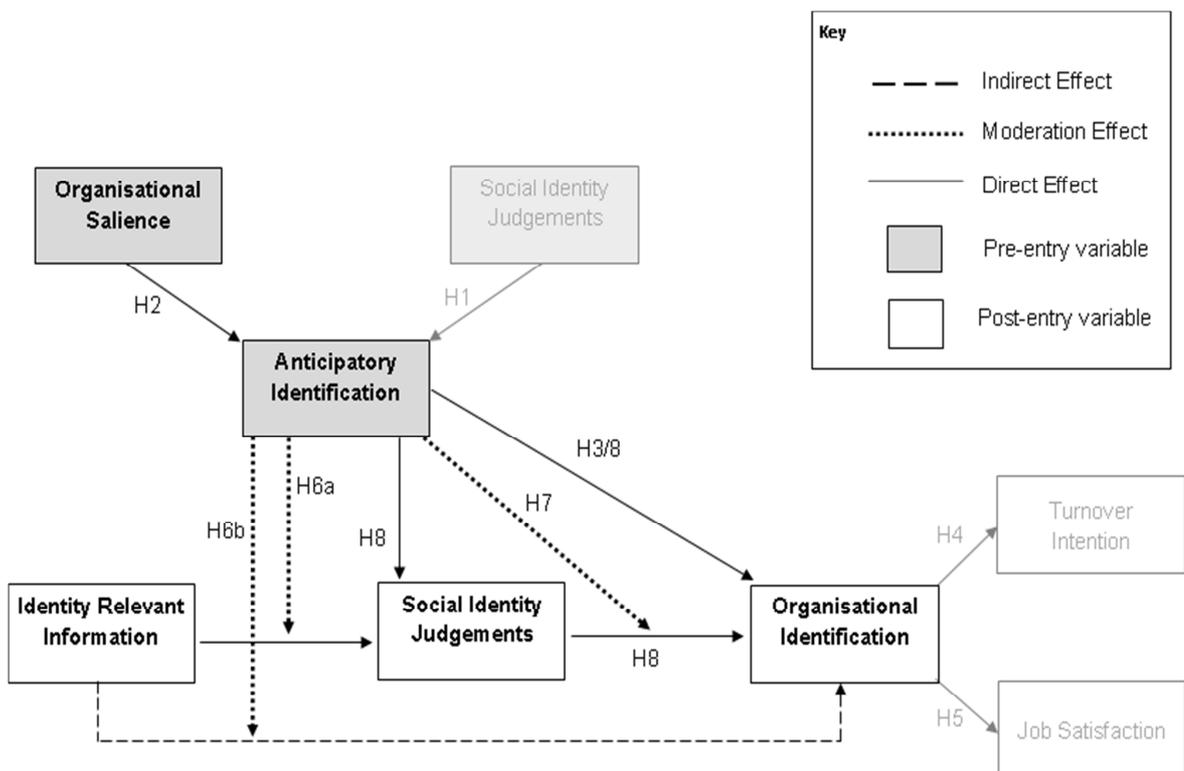
Study One provided some support for the hypothesised antecedents and consequences of anticipatory identification. Despite this, full support was not forthcoming for all of the hypotheses tested. Of particular note was a failure to find evidence of either a direct or indirect relationship between anticipatory identification and post-entry identification. Moreover, anticipatory identification was found to buffer the relationship between post-entry identification and post-entry respect but not post-entry pride. Challenges presented by the research design, specifically in relation to common method variance and retrospective reporting, gave rise to reduced confidence in the conclusions drawn within the study, and were felt plausible explanations for the non-significant results obtained. A vital next step is therefore to gather data on anticipatory identification prior to, and independently from, participants' reporting of post-entry variables. Study One additionally did not allow the opportunity to test two key hypotheses set out in Chapter Three, namely that anticipatory identification would be influenced by the salience of the organisation prior to entry, and that anticipatory identification would moderate the relationship between post-entry identity relevant information and post-entry social identity judgements. A further important extension to Study One is to test these thus far unexplored hypotheses.

CHAPTER SEVEN: STUDY TWO RESULTS AND DISCUSSION

7.1. Chapter Summary

This chapter describes and discusses the results of Study Two. This study adopted an experimental design to explore the antecedents and consequences of anticipatory identification drawing on a sample of 72 staff and students from Aston University. In contrast to the preceding study, the role of pre-entry salience as an antecedent of anticipatory identification was explored and both buffering mechanisms set out within the conceptual model were assessed. Consequently Study Two looked to test Hypotheses Two, Three, Six, Seven and Eight (see Figure 7.1). This chapter first discusses the construct validity of the scales used within Study Two, before describing the results of the hypothesis testing for the hypotheses highlighted above. Finally, the findings of Study Two are discussed. The theoretical implications are considered both in line with the conceptual model and with reference to the three other studies within this thesis.

Figure 7.1: Conceptual Model Study Two



7.2. Study Two Results

7.2.1. Scale Validation

Confirmatory Factor Analysis (CFA) was conducted prior to analysis to determine the construct validity of the scales adopted within Study Two. The rationale for this approach

and the fit criteria adopted were discussed in Chapter Six. Increased caution however was employed in the decision to reject a model on the basis of poor fit, as a consequence of the limited sample size within this study. Loehlin (2004) argues that sample sizes in the thousands are necessary to achieve a power of 0.8 or above when the model has less than 20 degrees of freedom; whilst sample sizes between 100 and 200 can have acceptable power for models with 20 or more degrees of freedom. Bentler and Chou (1987) recommend a less conservative ratio of 5:1 between sample size and the number of free parameters. However even adopting this criterion, the current analysis may have had insufficient power to accurately determine model fit (e.g. Fan, Thompson and Wang, 1999). Nonetheless, the approach was felt to provide at least some indication of the construct validity of the measurement scales used within the research. It was therefore considered useful to conduct this analysis prior to further testing of the hypotheses and conceptual model.

7.2.1.1. Anticipatory Identification

Four items were used to measure participants' anticipatory identification before joining the group using Doosje et al.'s (1995) Social Identification scale (see Table 7.1). CFA was conducted to determine the construct validity of this four-item scale. This four-item one-factor model was not found to be a good fit to the data ($\chi^2 (2) = 43.52, p < 0.001$; RMSEA = 0.54; GFI = 0.82; NFI = 0.65; CFI = 0.64). Examination of the modification indices indicated covariance between error terms for items AOID1 and AOID2. The modification index indicated that if the model was respecified with the error covariance between these two items specified as a free parameter, the value of χ^2 may be reduced by at least 26.30.

However error covariance can often indicate item redundancy or systematic measurement error, and thus if a correlation between error terms is to be included within a model such determinants should first be explored (Byrne, 2001). Visual examination suggested that these two items might be closely related yet did not indicate redundancy of either item. There was also no reason to suggest that these two items would be any more susceptible to systematic measurement error than any other items within the measurement instrument. Furthermore, concerns regarding the small sample size for factor analysis meant that this finding may have been the consequence of low statistical power rather than poor construct validity of the model. Accordingly it was felt to be more appropriate to respecify the model with the error covariance specified as a free parameter than to remove items from the measure. This respecified model was found to be an adequate fit to the data ($\chi^2 (1) = 10.53, p = 0.001$; RMSEA = 0.37; GFI = 0.94; NFI = 0.91; CFI = 0.92). Furthermore, the reliability of this scale was found to be 0.77, above the 0.70 threshold

recommended by Nunnally (1978). Therefore the four-item anticipatory identification scale was cautiously adopted.

Table 7.1: Anticipatory Identification Scale Items

Item Label	Item
AOID1	I see myself as a member of this group
AOID2	I am pleased to be a member of this group
AOID3	I feel strong ties with this group
AOID4	I identify with other members of this group

7.2.1.2. Post-Entry Identification

Four items were also used to measure participants' post-entry identification after joining the group (see Table 7.2). CFA confirmed that this four-item one-factor model generally had a good fit to the data. Although the root mean square error estimate of approximation (RMSEA) exceeded the recommended cut-off of 0.10 (MacCallum et al., 1996; RMSEA = 0.14), a range of other fit indices indicated a good fit ($\chi^2 (2) = 4.94$, $p < 0.09$; GFI = 0.97; NFI = 0.97; CFI = 0.98). A Cronbach's alpha coefficient of 0.89 was also obtained for the four-item scale, indicating a good internal consistency between scale items. The four-item post-entry identification scale was therefore adopted in Study Two.

Table 7.2: Post-Entry Identification Scale Items

Item Label	Item
OID1	I see myself as a member of this group
OID2	I am pleased to be a member of this group
OID3	I feel strong ties with this group
OID4	I identify with other members of this group

7.2.1.3. Post-Entry Pride

Five items, taken from Blader and Tyler's (2009) Pride scale, were used to measure participants' post-entry pride in the group (see Table 7.3). Whilst chi-square and RMSEA indicated a poor fit to the data ($\chi^2 (5) = 12.13$, $p < 0.03$; RMSEA = 0.14), more robust

indices indicated an adequate or good fit (GFI = 0.94; NFI = 0.96; CFI = 0.98). In light of the relatively small sample size adopted within this study, the use of these more robust indices was considered to be most appropriate (e.g. Tabachnick and Fidell, 2007). Cronbach's alpha also indicated very good internal consistency between items ($\alpha = 0.94$). Accordingly the five-item post-entry pride scale was adopted.

Table 7.3: Post-Entry Pride Scale Items

Item Label	Item
PRI1	This is one of the best groups to belong to
PRI2	People would be impressed if I told them I was a member of this group
PRI3	This group would be well respected by other groups
PRI4	I think that being a member of this group reflects well on me
PRI5	I would be proud to tell others I was a member of this group

7.2.1.4. Personality Traits

The "Big Five" personality traits (John et al., 1991) were measured used a 44-item, five-factor scale (see Table 7.4). Fit indices generally indicated a poor fit to the data ($\chi^2 (892) = 1476.93$; $p < 0.001$; GFI = 0.55; NFI = 0.30; CFI = 0.50). However the complexity of this model together with the small sample size limited the overall power to reject the model. Moreover, RMSEA indicated an adequate fit to the data (RMSEA = 0.096), and the CMIN/DF ratio of 1.656 was below the ratio of 2:1 recommended by Carmines and McIver (1981). Cronbach alpha values for the individual subscales (presented in Table 7.4) were all found to exceed the minimum value of 0.70 recommended by Nunnally (1978). In light of these findings, the 44-item, five-factor scale was cautiously adopted within Study Two.

Table 7.4: Personality Factors Scale Items

Subscale	Item Label	Item
Agreeableness	bfi2	I am someone who tends to find fault with others (r)
	bfi7	I am someone who is helpful and unselfish with others
	bfi12	I am someone who starts quarrels with others (r)

- bfi17 I am someone who has a forgiving nature
- bfi22 I am someone who is generally trusting
- bfi27 I am someone who can be cold and aloof (r)
- bfi32 I am someone who is considerate and kind to almost everyone
- bfi37 I am someone who is sometimes rude to others (r)
- bfi42 I am someone who likes to cooperate with others

Conscientiousness

- bfi3 I am someone who does a thorough job
- bfi8 I am someone who can be somewhat careless (r)
- bfi13 I am someone who is a reliable worker
- bfi18 I am someone who tends to be disorganized (r)
- bfi23 I am someone who tends to be lazy (r)
- bfi28 I am someone who perseveres until the task is finished
- bfi33 I am someone who does things efficiently
- bfi38 I am someone who makes plans and follows through with them
- bfi43 I am someone who is easily distracted (r)

Extraversion

- bfi1 I am someone who is talkative
- bfi6 I am someone who is reserved (r)
- bfi11 I am someone who is full of energy
- bfi16 I am someone who generates a lot of enthusiasm
- bfi21 I am someone who tends to be quiet (r)
- bfi26 I am someone who has an assertive personality

bfi31 I am someone who is sometimes shy, inhibited (r)

bfi36 I am someone who is outgoing, sociable

Neuroticism

bfi4 I am someone who is depressed, blue

bfi9 I am someone who is relaxed, handles stress well. (r)

bfi14 I am someone who can be tense

bfi19 I am someone who worries a lot

bfi24 I am someone who is emotionally stable, not easily upset (r)

bfi29 I am someone who can be moody

bfi34 I am someone who remains calm in tense situations (r)

bfi39 I am someone who gets nervous easily

Openness

bfi5 I am someone who is original, comes up with new ideas

bfi10 I am someone who is curious about many different things

bfi15 I am someone who is ingenious, a deep thinker

bfi20 I am someone who has an active imagination

bfi25 I am someone who is inventive

bfi30 I am someone who values artistic, aesthetic experiences

bfi35 I am someone who prefers work that is routine (r)

bfi40 I am someone who likes to reflect, play with ideas

bfi41 I am someone who has few artistic interests (r)

bfi44 I am someone is sophisticated in art, music, or literature

7.2.2. Data Screening

Statistical techniques based on the general linear model were adopted within Study Two. The generalisability of the results obtained from these techniques rests on a number of assumptions being met. These assumptions are normality, linearity, independence of residual terms, homoscedasticity and multicollinearity (e.g. Giles, 2002; Yan, 2009). Normal probability plots of the residuals terms indicated that the errors for all predictor variables were reasonably normally distributed around a mean of zero both when anticipatory identification was treated as an outcome variable (in respect of the first part of the conceptual model) and when post-entry identification was treated as an outcome variable (in respect of the second part of the conceptual model). Accordingly, the assumption of normality was considered to have been met. Furthermore, analysis of the residual plots for both models as well partial plots for each predictor indicated linearity within the data and did not highlight any obvious outliers or heteroscedasticity which could impact upon the validity of the analysis. These two assumptions were therefore also deemed to have been satisfied.

To test the independence of errors terms within the analysis, the Durbin-Watson test was first conducted with anticipatory identification as an outcome variable and the pre-entry predictor and control variables as predictor variables. A value of $d = 1.75$ was obtained; this was higher than the upper confidence limit of 1.61 (99% CI) specified by Durbin and Watson (1951) for a model with 72 observations and more than 5 predictors, indicating that there was no significant autocorrelation of residual terms. The analysis was repeated with organisational identification entered as an outcome variable and all other variables included as predictors within the regression model. Here a value of $d = 2.34$ of obtained, again higher than the upper confidence limit of 1.61. Consequently, in both instances the assumption that residual terms were independent was considered to have been met. Finally, analysis of collinearity statistics within the full regression model found variance inflation factors (VIF) of between 1.14 and 1.77, well below the critical value of 10 recommended by Yan (2009). This suggested that correlations between predictor variables were not large enough for multicollinearity to present a cause for concern within the analysis. In conclusion, the principal assumptions which justify the use of statistical techniques based on the general linear model were all found to have been met within the current data set. It was therefore considered appropriate to proceed with specific hypothesis testing using these statistical techniques.

7.2.3. Control Variables

Participants' gender, age and personality factors were included as controls within Study Two. An independent-samples t-test was conducted to determine whether gender had a significant impact upon independent and dependent variables. Correlation analysis was conducted to determine whether age or personality influenced the variables under investigation. As seen in Tables 7.5 and 7.6, age and gender were not significantly related to any of the variables under investigation. As a result these variables were not explored further within the analysis.

Personality factors on the whole did not correlate with either independent or dependent variables. However a notable exception to this was participants' reporting of the pre-entry salience of the group within the manipulation check. Reported pre-entry salience was positively related to participants' openness to experience, conscientiousness and agreeableness and negatively related to participants' neuroticism. Neuroticism was also negatively related to participants' post-entry organisational identification; although no other personality factors appeared to influence post-entry outcomes. Independent samples t-tests however indicated that there was no significant difference between the personality factors reported by the high and low pre-entry salience groups and the high and low post-entry performance groups (see Tables 7.7 and 7.8).

Table 7.5: Independent Samples T-Test Gender

	t	df	Sig. (2-tailed)
Pre-Entry Salience	1.53	70	.13
Anticipatory Identification	-.50	70	.62
Post-Entry Pride	-.13	70	.90
Post-Entry Identification	-.61	70	.55

Table 7.6: Zero Order Correlations Age

	R	Sig. (2-tailed)
Pre-Entry Salience	-.03	.79
Anticipatory Identification	.02	.85

Post-Entry Pride	.04	.71
Post-Entry Identification	.07	.55

Table 7.7: Independent Samples T-Test Pre-Entry Salience Manipulation

	t	df	Sig. (2-tailed)
Openness to Experience	-1.49	70	.14
Conscientiousness	-.50	70	.63
Agreeableness	-.88	70	.38
Extraversion	1.99	70	.05
Neuroticism	.82	70	.42

Table 7.8: Independent Samples T-Test Post-Entry Performance Manipulation

	t	df	Sig. (2-tailed)
Openness to Experience	-.25	70	.80
Conscientiousness	-.33	70	.75
Agreeableness	.06	70	.95
Extraversion	.97	70	.33
Neuroticism	.25	70	.80

7.2.4. Descriptive Statistics

Descriptive statistics and zero-order correlations are presented in Table 7.9. These statistics indicated a significant correlation between participants' evaluation of pre-entry salience and anticipatory identification ($r = 0.41, p < 0.001$). Anticipatory identification was also significantly and positively related to both post-entry pride ($r = 0.35, p = 0.002$) and post-entry identification ($r = 0.55, p < 0.001$). There was a strong correlation between post-entry pride and post-entry identification ($r = 0.71, p < 0.001$), however the magnitude

of this relationship was not considered sufficient to suggest redundancy of either variable. Therefore, on the whole, examination of the zero order correlation coefficients provided an initial indication that the nature and direction of the relationships between anticipatory identification and its hypothesised antecedents and consequences corresponded with the pattern of relationships set out in the conceptual model.

Table 7.9: Descriptive Statistics: Means, Standard Deviations, Zero Order Correlations and Reliability Coefficients

		Mean	SD	1	2	3	4	5	6	7	8	9
1	Pre-Entry Salience	3.17	.90	-								
2	Anticipatory Identification	3.35	.64	.41**	(.77)							
3	Post-Entry Pride	2.83	1.01	.30*	.35**	(.94)						
4	Post-Entry Identification	3.30	.91	.42**	.55**	.71***	(.89)					
5	Openness	3.58	.53	0.21*	0.04	-0.06	0.00	(.78)				
6	Conscientiousness	3.56	.50	0.39*	0.05	0.05	0.22	0.02	(.70)			
7	Extraversion	3.49	.68	0.11	-0.03	-0.13	-0.07	0.19	0.29*	(.85)		
8	Agreeableness	3.83	.49	0.30**	0.14	0.21	0.28*	0.07	0.40***	0.24	(.71)	
9	Neuroticism	2.93	.69	-0.29*	-0.16	-0.15	-0.27*	0.21	-0.19	-0.19	-0.42**	(.76)

* p < 0.05; ** p < 0.01; *** p < 0.001

7.2.5. Manipulation Check

Although significant differences were not found in participants' personality factors between the high and low pre-entry salience conditions, this result was only marginally non-significant for extraversion ($p = 0.051$). In addition, significant correlations were found between participants' reporting of pre-entry salience and their level of conscientiousness, openness to experience, neuroticism and agreeableness. To take account of these personality factors, analysis of covariance was used to test the experimental manipulation of pre-entry salience. Participants in the high pre-entry salience condition reported that the group was significantly more important to them ($M = 3.44$, $SD = 0.77$) than participants in the low pre-entry salience condition ($M = 2.89$, $SD = 0.95$; $f(1,66) = 5.08$, $p = 0.02$), when controlling for personality factors.

An independent samples t-test was used to test the manipulation of post-entry performance information. ANCOVA controlling for personality factors was considered inappropriate in this instance as there were no relationships found between participants' evaluation of their group's performance and personality factors. Participants in the positive performance information condition felt that their group had performed significantly better on a scale of one to ten ($M = 8.11$, $SD = 1.35$) than participants in the negative performance information condition ($M = 4.39$, $SD = 1.73$), $t(70) = -10.19$, $p < 0.001$), confirming the success of this manipulation.

7.2.6. Antecedents of Anticipatory Identification

Hypothesis 2: The salience of an organisation prior to entry will be positively related to anticipatory identification.

Despite the manipulation of pre-entry salience being found to be successful, subsequent analysis did not indicate that this was also directly associated with anticipatory identification; there was no significant difference in the level of anticipatory identification reported by participants in the high pre-entry salience ($M = 3.44$, $SD = 0.63$) and low pre-entry salience ($M = 3.26$, $SD = 0.65$) conditions ($f(1,70) = -1.42$, $p = 0.24$). Nonetheless a significant and positive relationship was found between anticipatory identification and participants' reporting of the pre-entry salience using the pre-entry manipulation check ($R^2 = 0.15$, $p < 0.001$).

Analysis of bootstrap confidence intervals furthermore provided some evidence of a significant indirect relationship between the manipulation of pre-entry salience and anticipatory identification through participants' reporting of the pre-entry salience ($B = 0.14$; 95% CI, 0.02, 0.35). Accordingly, participants' perceptions of group salience

appeared to act as an intervening variable between the manipulation of pre-entry salience and anticipatory identification even though there was no evidence of a direct link between these two variables. It must be noted that the Sobel test indicated a non-significant direct relationship ($z = 1.89, p = 0.07$). Preacher and Hayes (2004; 2008) however note that this test is less able to accommodate even minor deviations from a normal sampling distribution, and thus recommend the more robust bootstrapping technique. As a result, there was some support for an indirect relationship between the manipulation of pre-entry salience and anticipatory identification through participants' perceptions of group salience.

Table 7.10: Multiple Regression Analysis of Relationship between Pre-Entry Salience and Anticipatory Identification

Variable	B	SE B	β	t	R ²	Adj. R ²	ΔR^2	f
Step One					.04	-.02	.04	.63
Agreeableness	.11	.19	.08	.58				
Conscientiousness	-.02	.177	-.01	-.10				
Openness	.08	.15	.06	.50				
Neuroticism	-.13	.13	-.14	-1.02				
Step Two					.17	.12	.15	12.12
Agreeableness	.08	.18	.06	.46				
Conscientiousness	-.20	.17	-.15	-1.21				
Openness	-.07	.15	-.06	-.46				
Neuroticism	-.03	.12	-.02	-.15				
Reported Salience	.32	.09	.45	3.48***				

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Further analysis was conducted to determine why the pre-entry manipulation of salience may have directly led to significant differences in participants' perceptions of group

salience but not anticipatory identification. In light of the significant relationship previously observed between personality factors and participants' reporting of pre-entry salience, differences between participants on the basis of the Big Five personality factors were explored. Moderated regression analysis was first conducted to determine whether individual differences may moderate the relationship between the pre-entry salience manipulation (dummy coded 0 = low pre-entry salience condition; 1 = high pre-entry salience condition) and anticipatory identification⁸. No significant interaction effects were found for the pre-entry salience manipulation and any of the individual difference variables measured (β s $\leq \pm 0.15$), $p \geq 0.23$).

A next step in the investigation was to test whether personality factors may instead moderate the relationship between participants' reporting of the pre-entry salience of the group and anticipatory identification. Although the interaction effects were non-significant for most personality factors (β s $\leq \pm 0.12$, $p \geq 0.28$), a significant interactive effect of participants' openness to experience and reporting of pre-entry salience on anticipatory identification was observed ($\beta = 0.21$, $p = 0.009$). Moderated mediation analysis, conducted using the SPSS Macro "Process v.2.03" (Hayes, 2013) subsequently showed that the indirect relationship between the manipulation of salience and anticipatory identification was moderated by openness to experience. There was a significant indirect relationship between manipulated salience and anticipatory identification through participants' reporting of pre-entry salience when openness to experience was high (+1 SD; $B = 0.28$, $SE = 0.12$; $z = 2.33$, $p = 0.002$; 95% CI, 0.80, 0.59), however the indirect effect was non-significant when openness to experience was low (-1SD; $B = 0.05$, $SE = 0.10$; $z = 0.5$, $p = 0.62$; 95% CI, -0.10, 0.29). The impact of the interaction between openness and reported salience on the indirect relationship between manipulated salience and anticipatory identification is presented in Figure 7.2 with mean-centred variables and using procedures set out by Preacher, Rucker and Hayes (2007).

Table 7.11: Multiple Regression Analysis of the Interactive Effects of Pre-Entry Reported Salience and Openness to Experience on Anticipatory Identification

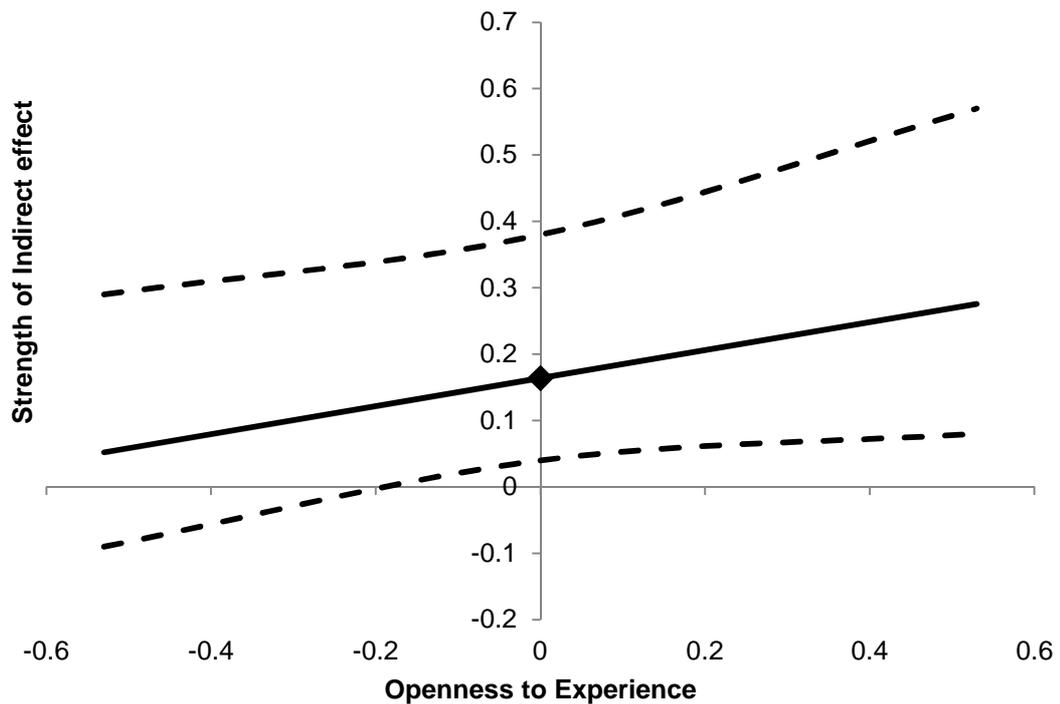
Variable	B	SE B	β	t	R ²	Adj. R ²	ΔR^2	f
Step One					.03	-.01	.03	.76

⁸ ANCOVA was deemed to be inappropriate because significant linear relationships were not found between anticipatory identification and personality variables (R s $\leq \pm 0.17$, p s ≥ 0.16). It was nonetheless plausible that individual differences between participants may moderate the relationship between salience and anticipatory identification, as a linear relationship between moderator variables and outcome variables is not a necessary precondition for a significant moderation effect to be present (Aiken and West, 1991).

Agreeableness	.13	.19	.10	.68				
Neuroticism	-.11	.12	-.12	-.93				
Conscientiousness	-.02	.17	-.01	-.10				
Step Two					.27	.20	.24	6.91***
Agreeableness	-.01	.17	-.01	-.05				
Neuroticism	-.01	.12	-.01	-.10				
Conscientiousness	-.18	.16	-.14	-1.13				
Reported Salience	.33	.09	.46	3.69***				
Openness to Experience	-.08	.14	-.07	-.60				
Reported Salience x Openness to Experience	.40	.15	.22	2.66**				

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Figure 7.2: Plot of the Indirect Effect of Manipulated Salience on Anticipatory Identification through Reported Salience at Values of Openness to Experience



NB. dashed lines represent upper and lower confidence bands

In summary, despite the non-significant relationship between the experimental manipulation of salience and anticipatory identification there was a significant indirect relationship between the manipulation of salience and anticipatory identification through participants' reported perceptions of group salience. This observation provided some limited support for the prediction set out in Hypothesis Two that pre-entry salience would significantly predict anticipatory identification. Moreover, participants' openness to experience appeared to moderate this indirect relationship, meaning that salience had a stronger impact upon anticipatory identification when openness to experience was high, yet no impact upon anticipatory identification when openness was low. It might therefore be contended that low openness to experience could have to some extent suppressed the relationship between group salience and anticipatory identification amongst some individuals, masking the full extent of the relationship between these two variables.

7.2.7. Consequences of Anticipatory Identification

Hypothesis 3: Anticipatory identification will be a significant predictor of post-entry organisational identification.

Hierarchical linear regression analysis was conducted to investigate whether anticipatory identification significantly and directly predicted post-entry identification. At Step One,

agreeableness, neuroticism, pre-entry salience and post-entry pride were entered ($R^2 = 0.56$, $p < 0.001$). Anticipatory identification was included within the regression model at Step Two and was also found to be a significant unique predictor of post-entry identification ($R^2\Delta = 0.07$, $p < 0.001$). Consequently support was found for Hypothesis Three.

Table 7.12: Multiple Regression Analysis of the Relationship between Anticipatory Identification and Post-Entry Identification

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.56	.54	.56	21.44***
Agreeableness	.09	.17	.05	.50				
Neuroticism	-.13	.12	-.10	-1.10				
Pre-entry Salience	.19	.09	.19	2.01*				
Post-Entry Pride	.56	.08	.63	7.33***				
Step Two					.63	.60	.07	11.98***
Agreeableness	.10	.16	.05	.63				
Neuroticism	-.12	.11	-.09	-1.06				
Pre-entry Salience	.09	.09	.09	1.05				
Post-Entry Pride	.50	.07	.55	6.70***				
Anticipatory Identification	.42	.12	.30	3.46***				

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

7.2.8. Buffering Effect of Anticipatory Identification

To test whether the manipulation of post-entry performance information was also associated with post-entry pride and post-entry identification a multivariate analysis of covariance (MANCOVA) was conducted. MANCOVA allows two dependent variables to

be assessed simultaneously and therefore minimises the likelihood of Type I errors associated with conducting a series of independent samples t-tests. In the present context, it also allowed personality factors previously shown to correlate with post-entry identification to be controlled for within the model⁹. The manipulation of post-entry performance information was found to be associated with post-entry pride, with participants in the positive performance information condition reporting significantly higher pride in the group ($M = 3.41$, $SD = 0.82$) than participants in the negative performance information condition ($M = 2.25$, $SD = 0.84$); $f(1,68) = 36.35$, $p < 0.001$). Participants in the positive performance information condition also experienced significantly higher post-entry identification ($M = 3.76$, $SD = 0.66$) than participants in the negative performance information condition ($M = 2.84$, $SD = 0.89$); $f(1,68) = 26.45$, $p < 0.001$). As a consequence, this analysis did not indicate that anticipatory identification fully mitigated the impact of negative performance information on post-entry pride or of low post-entry pride on post-entry identification. Further exploration was undertaken using moderated linear regression analysis to determine whether anticipatory identification may act as a partial buffer either on the relationship between performance information and social identity judgements or between social identity judgements and identification.

Prior to conducting this analysis however, the relationship between post-entry performance information, post-entry pride and post-entry identification was probed further using hierarchical linear regression analysis. This was intended to determine whether this relationship mirrored that set out within the conceptual model; in effect a mediated relationship whereby post-entry performance information would predict post-entry pride which in turn would predict post-entry identification (see Figure 7.1). Pre-entry salience, anticipatory identification, agreeableness and neuroticism were entered as control variables at Step One ($R^2 = 0.38$, $p < 0.001$). Post-entry performance information was entered at Step Two and was found to account for an additional 21% of the variance in post-entry identification ($R^2\Delta = 0.21$, $p < 0.001$). At Step Three post-entry pride was included within the regression model and was also found to be a significant unique predictor of post-entry identification ($R^2\Delta = 0.08$, $p < 0.001$). Post-entry performance information remained a significant predictor of post-entry identification when post-entry pride was held constant within the regression model ($\beta = 0.25$, $p = 0.008$); accordingly there was no evidence to suggest that post-entry pride fully mediated the relationship between post-entry performance information and post-entry identification. However subsequent analysis indicated a significant indirect relationship between post-entry performance information and post-entry identification, mediated by post-entry pride ($B =$

⁹ Agreeableness (Post-Entry Pride: $f(1,68) = 2.89$; $p = 0.94$; Post-Entry identification: $f(1,68) = 3.51$, $p = 0.06$); Neuroticism (Post-Entry Pride: $f(1,68) = 0.30$, $p = 0.59$; Post-Entry Identification ($f(1,68) = 2.49$, $p = 0.12$).

0.39, SE = 0.14; $z = 3.31$, $p < 0.001$; 95% CI, 0.17, 0.73). Post-entry pride therefore appeared to partially mediate the relationship between the information participants received about their group's performance and the extent to which they identified with the group. This reflected the relationship set out within the conceptual model.

Table 7.13: Multiple Regression Analysis of the Indirect Relationship between Post-Entry Performance Information and Post-Entry Identification

Variable	B	SE B	β	t	R ²	Adj. R ²	ΔR^2	F
Step One					.38	.34	.38	10.11***
Agreeableness	.22	.20	.12	1.09				
Neuroticism	-.13	.14	-.10	-.89				
Pre-entry Salience	.17	.11	.17	1.56				
Anticipatory Identification	.63	.15	.45	4.23***				
Step Two					.59	.55	.21	33.15***
Agreeableness	.25	.17	.13	1.47				
Neuroticism	-.12	.12	-.09	-1.03				
Pre-entry Salience	.14	.09	.14	1.52				
Anticipatory Identification	.59	.12	.42	4.82***				
Post-Entry Performance Information	.83	.14	.46	5.76***				
Step Three					.67	.64	.08	16.05***
Agreeableness	.15	.15	.08	.97				
Neuroticism	-.13	.11	-.09	-1.10				

Pre-entry Salience	.10	.08	.10	1.16
Anticipatory Identification	.46	.12	.32	3.96***
Post-Entry Performance Information	.44	.16	.25	2.74**
Post-Entry Pride	.35	.09	.39	4.01***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Hypothesis 6a: Anticipatory identification will moderate the relationship between post-entry identity relevant information and post-entry social identity judgements.

Moderated linear regression analysis was conducted to determine whether anticipatory identification moderated the relationship between post-entry performance information and post-entry pride. Pre-entry salience was controlled at Step One of the regression model ($R^2 = 0.09$, $p = 0.01$) Main effects were subsequently found for both post-entry performance information ($\beta = 0.54$, $p < 0.001$) and anticipatory identification ($\beta = 0.25$, $p = 0.02$), however the interaction effect was non-significant ($\beta = -0.03$, $p = 0.73$). This analysis was repeated to explore whether anticipatory identification may instead moderate the relationship between participants' rating of their group's performance (i.e. the manipulation check) and post-entry status judgements. Again, whilst there were significant main effects for performance evaluation ($\beta = 0.49$, $p < 0.001$) and anticipatory identification ($\beta = 0.25$, $p = 0.02$), there was no significant interaction effect ($\beta = 0.04$, $p = 0.68$). Accordingly there was no support for Hypothesis 6a.

Table 7.14: Multiple Regression Analysis of the Interactive Effects of Anticipatory Identification and Post-Entry Performance Information on Post-Entry Pride

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.09	.08	.09	6.92**
Pre-entry Salience	.34	.13	.30	2.63**				
Step Two					.45	.41	.36	14.43***
Pre-entry Salience	.17	.12	.15	1.46				

Post-Entry Performance Information (Dummy Coded)	1.09	.18	.54	5.94***
Anticipatory Identification	.39	.16	.25	2.47*
Post-Entry Performance Information x Anticipatory Identification	.02	.31	.01	.06

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Hypothesis 6b: Anticipatory identification will moderate the relationship between post-entry identity relevant information and post-entry identification.

Moderated linear regression analysis was next conducted to determine whether anticipatory identification moderated the relationship between post-entry performance information and post-entry identification. Relevant personality factors and pre-entry salience were entered as control variables at Step One ($R^2 = 0.21$, $p = 0.001$). At Step Two, main effects were found for post-entry performance information ($\beta = 0.46$, $p < 0.001$) and anticipatory identification ($\beta = 0.43$, $p < 0.001$) however the interaction between these two variables was non-significant ($\beta = 0.07$, $p = 0.41$). Again, there was also no significant interaction when pre-entry performance information was substituted by the manipulation check ($\beta = 0.02$, $p = 0.79$). Hypothesis 6b was therefore not supported.

Table 7.15: Multiple Regression Analysis of the Interactive Effects of Anticipatory Identification and Post-Entry Performance Information on Post-Entry Organisational Identification

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.21	.18	.21	6.03***
Pre-Entry Salience	.35	.12	.35	3.02**				
Neuroticism	-.15	.16	-.12	-.96				
Agreeableness	.22	.23	.12	.99				
Step Two					.59	.55	.38	20.00***

Pre-Entry Saliency	.16	.10	.16	1.66
Neuroticism	-.13	.12	-.10	-1.13
Agreeableness	.25	.17	.13	1.48
Post-Entry Performance Information (Dummy Coded)	.82	.14	.46	5.70***
Anticipatory Identification	.60	.12	.43	4.88***
Post-Entry Performance Information x Anticipatory Identification	.20	.24	.07	.82

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Hypothesis 6c: Post-entry social identity judgements will mediate the interactive effect of post-entry identity relevant information and post-entry identification; i.e. a mediated moderation effect will be observed with the moderation predicted in Hypothesis 6a explaining the moderation predicted in Hypothesis 6b.

There was a failure to observe an interactive effect of anticipatory identification and post-entry performance information on either post-entry pride (Hypothesis 6a) or post-entry identification (Hypothesis 6b). As a consequence, Hypothesis 6c became redundant and was not tested within the analysis.

Hypothesis 7: Anticipatory identification will moderate the relationship between post-entry social identity judgements and post-entry identification, so that the relationship between post-entry social identity judgements and post-entry identification is weaker when anticipatory identification is high.

Moderated linear regression analysis was conducted to investigate whether anticipatory identification moderated the relationship between post-entry pride and post-entry identification. Relevant personality factors and pre-entry saliency were entered at Step One ($R^2 = 0.21$, $p = 0.001$). Significant main effects were subsequently found for anticipatory identification ($\beta = 0.29$, $p < 0.001$) and post-entry pride ($\beta = 0.56$, $p < 0.001$) on post-entry identification. On this occasion, the interaction term between anticipatory identification and post-entry pride was also significant ($\beta = -0.16$, $p = 0.04$). Simple slopes analysis indicated that the relationship between post-entry pride and post-entry identification was significant and positive when anticipatory identification was both high

(+1SD, $B = 0.38$, $p < 0.001$) and low (-1SD, $B = 0.62$, $p < 0.001$). However comparison of the regression coefficients for these two slopes indicated that the strength of the relationship between post-entry pride and post-entry identification became weaker as participants' anticipatory identification increased.

The Johnson-Neyman technique was subsequently used to identify the range of moderator values at which post-entry pride had a significant impact upon post-entry identification. This analysis indicated that there was a significant and positive relationship between post-entry pride and post-entry identification for values of anticipatory identification up to and including 1.91 standard deviations above the mean. However above this value, post-entry pride was no longer a significant predictor of post-entry identification ($Bs \leq 0.24$, $p \geq 0.09$). This observation provided some support for Hypothesis Seven.

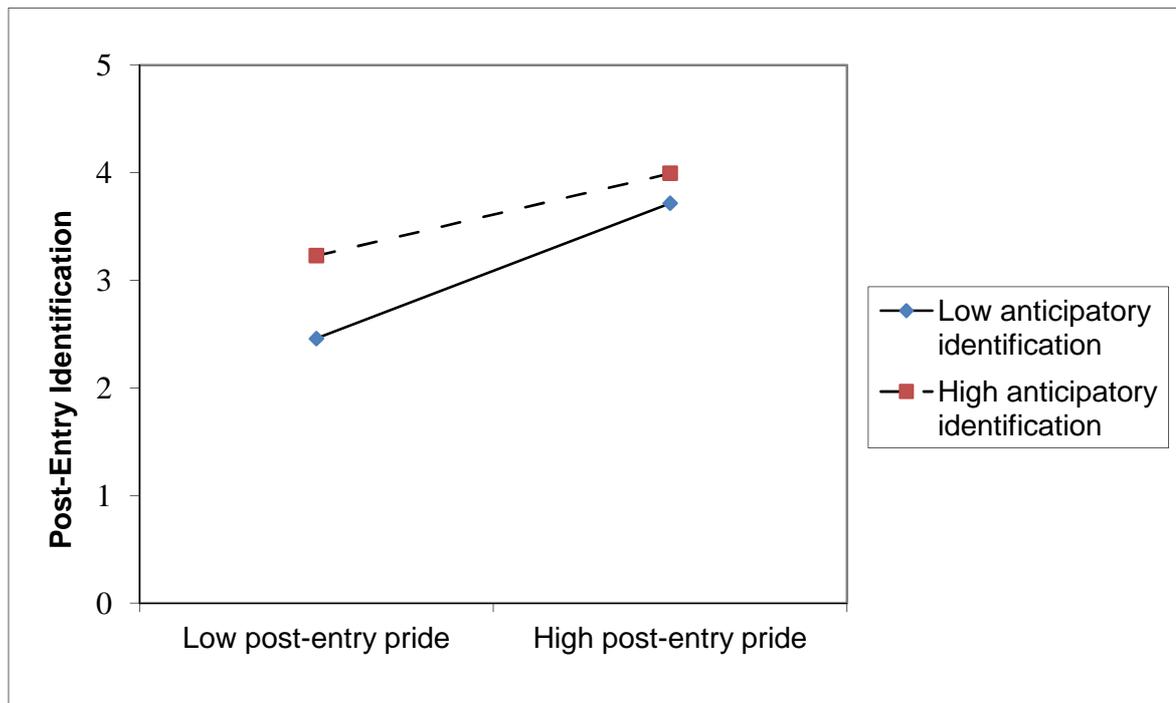
Table 7.16: Multiple Regression Analysis of the Interactive Effects of Anticipatory Identification and Post-Entry Pride on Post-Entry Identification

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.21	.18	.21	6.03
Pre-Entry Salience	.35	.12	.35	3.02**				
Neuroticism	-.15	.16	-.12	-.96				
Agreeableness	.22	.23	.12	.99				
Step Two					.65	.62	.44	27.51
Pre-Entry Salience	.05	.09	.05	.58				
Neuroticism	-.11	.11	-.08	-.99				
Agreeableness	.12	.16	.06	.75				
Post-Entry Pride	.41	.12	.29	3.51***				
Anticipatory Identification	.50	.07	.56	6.96***				

Post-Entry Pride x Anticipatory Identification	-0.19	.09	-0.16	-2.08*
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* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Figure 7.3: Two-Way Interaction Plot of the Moderating Effect of Anticipatory Identification on the Relationship between Post-Entry Pride and Post-Entry Identification



7.2.9. Feedback Loop of Anticipatory Identification

Hypothesis 8: The relationship between anticipatory identification and post-entry identification will be mediated by post-entry social identity judgements.

Hierarchical multiple linear regression analysis was conducted to determine whether post-entry pride mediated the relationship between anticipatory identification and post-entry identification. Personality factors and pre-entry salience were entered into the regression model at Step One ($R^2 = 0.21$, $p = 0.001$). This was followed at Step Two by anticipatory identification, which was found to make a significant contribution to the regression model ($R^2\Delta = 0.17$, $p < 0.001$). The inclusion of post-entry pride at Step Three accounted for an additional 25% of the variance in post-entry identification ($R^2\Delta = 0.25$, $p < 0.001$). When post-entry pride was held constant anticipatory identification was found to still be a significant predictor of post-entry identification ($\beta = 0.30$, $p = 0.01$); accordingly there was no evidence to suggest that post-entry pride fully mediated the relationship between anticipatory identification and post-entry identification. However both the Sobel test and

bootstrap confidence intervals indicated a significant indirect effect ($B = 0.21$, $SE = 0.10$; $Z = 2.12$, $p = 0.03$; 95% CI, 0.03, 0.46). Post-entry pride therefore appeared to partially mediate the relationship between anticipatory identification and post-entry identification. This observation provided some support for Hypothesis Eight

Table 7.17: Multiple Linear Regression Analysis of the Indirect Relationship between Anticipatory Identification and Post-Entry Identification

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.21	.18	.21	6.03***
Pre-Entry Salience	.35	.12	.35	3.02				
Neuroticism	-.15	.16	-.12	-.96				
Agreeableness	.22	.23	.12	.99				
Step Two					.38	.34	.17	17.88
Pre-Entry Salience	.17	.11	.17	1.56				
Neuroticism	-.13	.14	-.10	-.89				
Agreeableness	.22	.20	.12	1.09				
Anticipatory Identification	.63	.15	.45	4.23***				
Step Three					.63	.60	.25	44.88***
Pre-Entry Salience	.09	.09	.09	1.05				
Neuroticism	-.12	.11	-.09	-1.06				
Agreeableness	.10	.16	.05	.63				
Anticipatory Identification	.42	.12	.30	3.46***				

Post-Entry Pride	.50	.07	.55	6.70***
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** $P \leq 0.01$; *** $P \leq 0.001$

Moderated mediation analysis was next conducted to examine the significant indirect effect of anticipatory identification on post-entry identification through post-entry pride in conjunction with the significant moderating effect of anticipatory identification on the relationship between post-entry pride and post-entry identification outlined above. The path diagram for this moderated mediation model is presented in Figure 7.4 below. Whilst the interaction term made a significant contribution to the regression model ($R^2\Delta = 0.02$, $p = 0.04$), its inclusion did not impact upon the indirect relationship between anticipatory identification and post-entry identification ($B = 0.22$, $SE = 0.10$; $z = 2.12$, $p = 0.03$; 95% CI, 0.02, 0.47). Examination of conditional values for the indirect effects of anticipatory identification on post-entry identification in Table 7.18 moreover indicated that post-entry pride significantly mediated the relationship between anticipatory identification and post-entry identification at all values of anticipatory identification.

Figure 7.4: Moderated Mediation Model when Independent Variable is also a Moderator



(From Preacher, Rucker and Hayes, 2007)

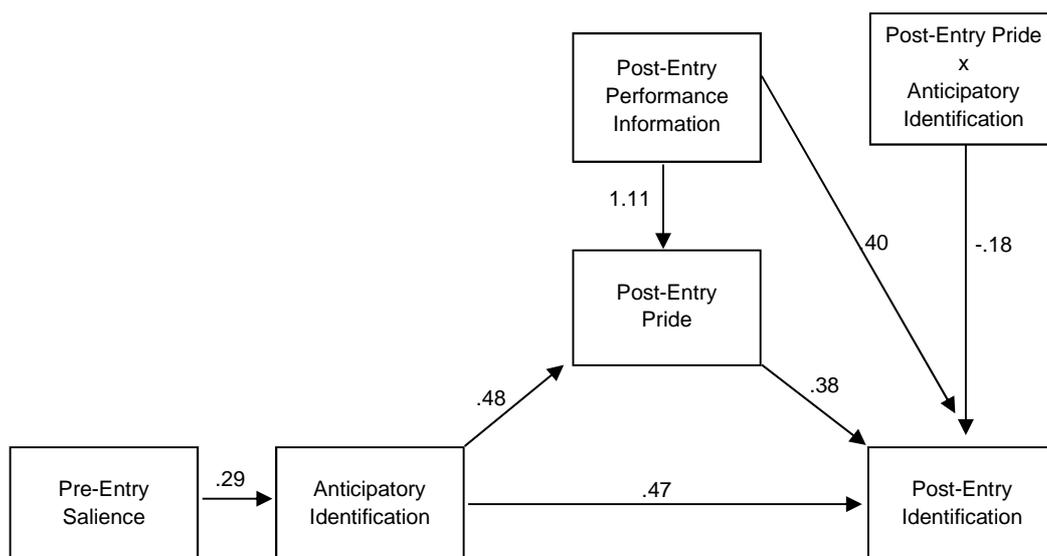
Table 7.18: Conditional Indirect Effect of Anticipatory Identification on Post-Entry Identification through Post-Entry Pride at Values of Anticipatory Identification (10th, 25th, 50th, 75th, and 90th Percentiles).

Anticipatory Identification	B	SE B	Lower Limit 95% CI	Upper Limit 95% CI
2.5	.29	.15	.03	.65
3	.25	.12	.02	.52
3.25	.23	.11	.02	.47
3.75	.18	.10	.02	.42
4	.16	.09	.03	.41

7.2.10. Assessment of the Conceptual Model

To further examine the impact of pre-entry salience and anticipatory identification on post-entry outcomes, and to test the hypothesised relationships between variables in the context of the full conceptual model outlined in Chapter Three, Structural Equation Modelling was undertaken using AMOS (Version 20). The conceptual model (presented in Figure 7.5) was found to have a good fit to the data ($\chi^2(16) = 14.67$, $p = 0.55$, RMSEA = 0.00, GFI = 0.95, NFI = 0.91; CFI = 1.00).

Figure 7.5: Path Diagram for Conceptual Model Study Two



However to corroborate this conclusion, the goodness-of-fit of the full conceptual model was compared with alternative models to determine whether the specified model did indeed have the best fit to the data. In particular the conceptual model was compared with models which would indicate a different pattern or direction of causal relationships between variables. These alternative models were:

Model Two (*direct post-entry impact of pre-entry salience*): To consider whether pre-entry salience rather than anticipatory identification was the core pre-entry variable which impacted upon post-entry outcomes, Model Two specified that pre-entry salience would predict anticipatory identification, post-entry pride and post-entry identification; and post-entry performance information would independently predict post-entry pride and post-entry identification.

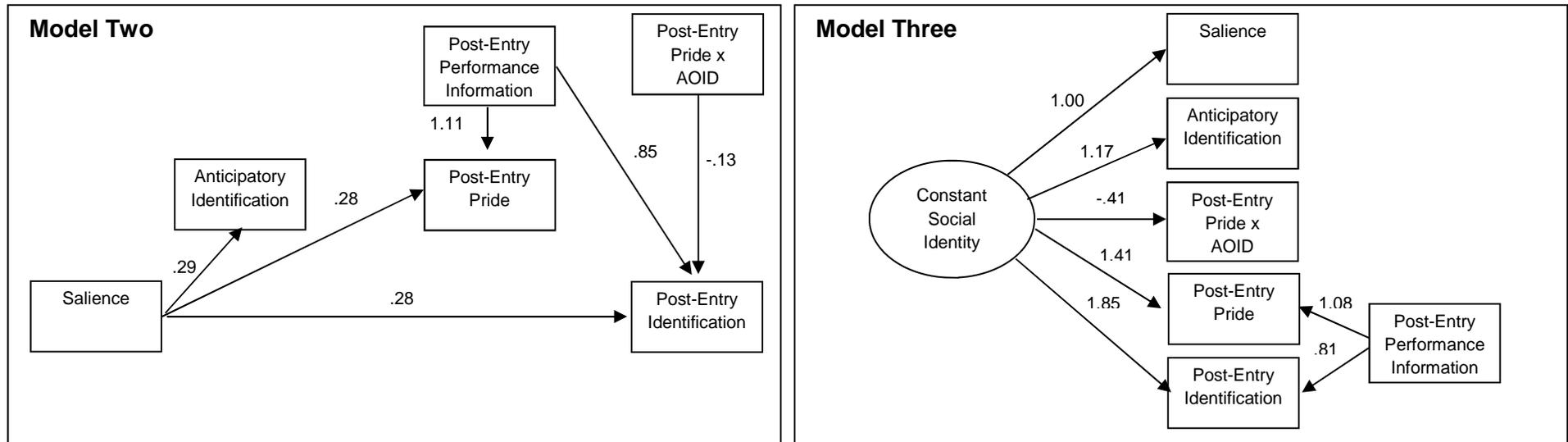
Model Three (*constant social identity model*): To consider whether participants' pre- and post-entry responses were governed by an overarching social identity, Model Three specified that one latent "Constant Social Identity" variable would account for covariance in anticipatory identification, salience, post-entry pride and post-entry identification, and that post-entry performance would independently predict post-entry pride and post-entry identification.

Path diagrams for these alternative models can be found in Figure 7.6. As models were non-nested, Akaike's Information Criterion (AIC) was used to compare the models. Lower AIC values represent a better fit to the data and differences of 2.0 or more suggest a meaningful difference between the contrasting models (Burnham and Anderson, 2002; Hu and Bentler, 1999). Examination of the fit indices and model comparisons in Table 7.19 indicated that, of the three competing models tested, the conceptual model showed the best fit to the data. This observation provided further support for the conceptual model and the direction of the relationships between variables set out by the research hypotheses.

Table 7.19: Fit Indices and Model Comparison

Model	AIC	χ^2	df	p	RMSEA	GFI	NFI	CFI
Model One	50.02	8.02	15	0.92	0.00	0.97	0.95	1.00
(Conceptual Model)								
Model Two	90.90	50.90	16	0.00	0.18	0.85	0.70	0.73
Model Three	55.32	13.32	15	0.58	0.00	0.96	0.92	1.00

Figure 7.6: Path Diagrams for Alternative Models Study Two



Note: Ovals represent latent constructs and rectangles represent manifest constructs; Control variables and covariances included within analysis but excluded from diagrams for ease of interpretation; Model rotated to facilitate presentation.

7.3. Study Two Discussion

Study Two adopted an experimental design with the intention of reproducing and extending the findings of the initial pilot study discussed in Chapter Six. This analysis was conducted within the context of a minimal social group, thus moved away from a specific organisational focus. However following Ashforth and Mael's (1989) proposition that organisational identification can be considered simply a specific form of social identification, it was deemed appropriate to interpret these findings in light of their implications for our understanding of organisational identification. The current study introduced group salience as an alternative antecedent of anticipatory identification and also tested both versions of the hypothesised buffering effect of anticipatory identification set out within the conceptual model. Although there was no clear backing for these additional hypotheses, by and large Study Two did shed more light on a number of the hypotheses initially tested within Study One. This study therefore provided a further valuable insight into the key consequences of anticipatory identification using an alternative research methodology.

7.3.1. Antecedents of Anticipatory Identification

Hypothesis One stated that the pre-entry salience of an organisation prior to entry would be a significant antecedent of anticipatory identification. The salience of a social group has previously been shown to be an important predictor of an individual's identification with that group (e.g. Randolph-Seng et al., 2012; van Dick et al., 2005; van Dick et al., 2009). In extending this proposition to additionally consider anticipatory identification, it was reasoned that when an organisation is subjectively meaningful and important to a newcomer prior to entry they would begin to define themselves in terms of that organisation before formally taking up membership. Pre-entry group salience was manipulated in Study Two by informing participants prior to joining a group that they were more or less likely to feel a sense of involvement with their group in comparison to the average person. The manipulation check indicated that this manipulation was successful, with participants in the "high involvement" condition reporting that the group was significantly more important to them than participants in the "low involvement" condition. This however did not directly impact upon participants' anticipatory identification. There was some evidence to suggest that the manipulation had an indirect effect upon anticipatory identification, with participants' perceptions of group salience (measured through the manipulation check item "*being a member of this group is important to me*", taken from Haslam et al., 1999) serving as an intervening variable. Thus whilst not conclusive, some support was obtained for the view that anticipatory identification would be linked to the salience of an organisation prior to entry.

It was also noted in Study Two that participants' openness to experience moderated the indirect relationship between pre-entry salience and anticipatory identification. This finding indicated that low levels of openness to experience may have suppressed the relationship between salience and anticipatory identification, with an indirect relationship only found to be significant when openness to experience was either average or high. In accounting for this finding it is useful to reflect on how individuals with low levels of openness to experience may approach and experience the process of joining a new group. Such individuals are thought to be uncomfortable with unfamiliar environments and new experiences (McCrae 1987). High openness to experience in contrast has been associated with greater receptivity to change, more active sense-making and positive framing during the process of joining a new organisation (Griffin and Hesketh, 2003; LePine, Colquitt, and Erez, 2000; Wanberg and Kammeyer-Mueller, 2000). An aversion to change, and more limited proactive engagement in the process of joining a new organisation, could be one possible explanation for the non-significant indirect relationship between pre-entry salience and anticipatory identification when openness to experience was low. In these circumstances even a particularly meaningful and situationally relevant organisation might be less readily integrated into the self-concept and so would not be seen as self-definitive prior to entry.

On the other hand, a failure to observe a direct relationship between manipulated pre-entry salience and anticipatory identification raised considerable doubts concerning the hypothesised causal relationship between these two variables. The findings of Study Two were taken to indicate that perceptions of pre-entry salience acted as an intervening variable in the relationship between the manipulation of pre-entry salience and anticipatory identification. However it was also feasible that both of these variables independently accounted for participants' salience perceptions prior to joining the social group. This concern is particularly pertinent given the two-way relationship between organisational identification and organisational salience highlighted by Haslam and colleagues (e.g. Haslam, 2004; Haslam et al., 2003). From this viewpoint, an individual is more likely to identify with a salient organisation. However identification can also make a particular organisation chronically accessible to the individual, meaning that it is more likely to be salient to an individual at any given point in time. Accordingly when an individual identifies with an organisation prior to entry, this could prompt them to see the organisation as more significant and relevant. If so, it becomes necessary to look further to understand what evokes anticipatory identification before newcomers join an organisation.

Alternatively, in looking to understand the non-significant impact of manipulated pre-entry salience on anticipatory identification we might return to the definition of the construct

originally set out by Self-Categorisation theorists (e.g. Oakes et al., 1991; Turner et al., 1994) As discussed in Chapter Two, salience has two main elements: accessibility and fit. It has been suggested that the form of salience manipulation used in Study Two most closely aligns to the former of these two elements (Haslam, 2004). However Millward and Haslam (2013) have recently found accessibility and fit to be weak predictors of identification in isolation, only when both were seen in combination was this influence particularly strong. The authors therefore argued that the extent to which an individual identifies with a given social group relies on both the prior meaning of that group and its current contextual relevance; independently these factors were insufficient to reliably predict identification. In the present research it might be proposed that, whilst newcomers found the group to be subjectively important prior to entry as a consequence of the manipulation employed, they did not conceive the group to be particularly relevant and thus did not define themselves in terms of the group prior to entry. However further research would be needed to test this proposition, and to determine whether this, rather than individual differences between participants, could account for the lack of robust support obtained for Hypothesis Two.

7.3.2. Consequences of Anticipatory Identification

It was hypothesised that an important outcome of anticipatory identification would be the extent to which a newcomer identified with the organisation after entry. A stable level of identification from pre- to post-entry was argued to contribute to self-consistency (e.g. Dutton et al., 1994): a desirable state that an individual would look to preserve during the process of joining their new group. Study One previously found no support for a direct relationship between anticipatory identification and post-entry identification when pre-entry and post-entry antecedents of identification were held constant. In contrast, anticipatory identification was found to be a significant predictor of post-entry identification under the same conditions in Study Two. This finding aligns to the pattern of relationships outlined in Hypothesis Three. Yet it is important to recognise that, because no direct relationship was observed between the manipulation of pre-entry salience and anticipatory identification, we cannot be certain of exactly why some participants identified with the group more than others prior to entry. As such, there may have been an additional variable or variables, consistent across the entirety of the study, which could have been a predictor of identification both before and after entry.

Although individual differences between participants were controlled through the measurement of personality factors as well as demographic variables such as age and gender, one potentially important variable, participants' need for identification, was not included as a control within Study Two. Glynn (1998, p.238) has argued that individuals

can differ in the extent to which they “need to maintain a social identity derived from membership in a larger, more impersonal general social category”. This need motivates some people more than others to consistently see and define themselves in terms of social groups in order to preserve a positive sense of self-esteem (Mignonac, Herrbach and Guerrero, 2006). A stable need for identification might have accounted for stability in participants’ identification with the group before and after entry. Indeed Study One had previously found that a need for identification was positively associated with both anticipatory identification and post-entry identification; in that study no significant relationship had been observed between anticipatory identification and post-entry identification. Concerns were raised regarding the construct validity of the need for identification variable within Study One, and a decision was made to exclude the variable from the analysis in Study Two. On reflection, this proved a key limitation of Study Two, and to address this, the inclusion of this control variable in subsequent studies was essential.

In addition to exploring the direct impact of anticipatory identification on post-entry identification, Study Two also looked to determine whether the extent to which participants identified with the group prior to entry acted as a buffer on post-entry identification. Two different hypothesised buffering mechanisms were tested within Study Two. Hypothesis Six first proposed that anticipatory identification would moderate the relationship between post-entry identity relevant information and post-entry social identity judgements. Drawing on a range of studies that have demonstrated that highly identified individuals can engage in social creativity strategies to preserve a positive impression of their social group (e.g. Costarelli, 2012; Sherman et al., 2007; Van Vugt and Hart, 2004), individuals with higher levels of anticipatory identification were predicted to attend less readily to, or to play down, information which brought into question the status of the group. As a consequence this information would ultimately not impact on their identification with the group. No evidence was obtained to support this hypothesis. Information concerning the status of the group after entry had a similar impact upon participants’ pride in the group, and also on their post-entry identification, regardless of their level of identification with the group prior to entry. Thus, rather than adopting the social creativity strategies observed amongst current members of a group to preserve a positive impression of the group, highly identified newcomers continued to attend to information regarding the status of the group and moreover used this information to inform post-entry social identity judgements.

Greater support was obtained for the second hypothesised buffering mechanism set out within the conceptual model. Hypothesis Seven suggested that anticipatory identification may instead moderate the relationship between post-entry social identity judgements and post-entry identification, with participants’ pride in the group having a more limited impact

upon post-entry identification when anticipatory identification was high. In line with the partial support for the same hypothesis obtained in Study One, Study Two found a non-significant relationship between post-entry pride and post-entry identification when anticipatory identification was very high, a weak but significant effect was found at moderately high and average levels of anticipatory identification and a stronger significant relationship was observed when anticipatory identification was low. These findings provided further indication that when newcomers closely defined themselves in terms of a social group prior to entry they tended to continue identifying with the group after joining, even if they no longer perceived the group to be a source of positive social identity. During the process of joining a new social group, it again seemed that a desire for self-consistency was capable of overriding self-esteem motives (e.g. Hogg and Abrams, 1990) and consequently had a notable impact upon an individual's identification with their new social group.

As well as appearing to moderate the relationship between post-entry pride and post-entry identification, Study Two also suggested that anticipatory identification might indirectly impact upon post-entry identification through post-entry pride. Drawing on the notion of an identification feedback loop, observed by researchers within the context of post-entry identification (e.g. Dukerich et al., 2002), Hypothesis Eight proposed that this mechanism might also appear during the course of entering a new social group. It was argued that anticipatory identification would consequently be capable of influencing newcomers' post-entry social identity judgements. When anticipatory identification was high, an individual was thought to look to preserve a consistent and positive view of the social group, as this would contribute to a positive self-view by extension (e.g. Pettit and Lount, 2011).

Similarly, when anticipatory identification was low, it was reasoned that individuals would strive to maintain a consistent, yet negative, impression of the group, and thus be able derive a positive self-view by seeing oneself as different, and separate, from the group (Elsbach and Bhattacharya, 2001). These post-entry social identity judgements would in turn be predictive of the extent to which newcomers identified with the organisation after entry. Some support was found for this hypothesis. Participants' post-entry pride in the group did mediate the relationship between anticipatory identification and post-entry identification. This however was only a partial mediation effect; anticipatory identification was also shown to be directly related to post-entry identification. Nonetheless, we might still take such an observation to indicate that an identification feedback loop did cross the boundary from pre- to post-entry. Anticipatory identification significantly predicted the extent to which an individual believed the group to be a source of positive social identity after joining; these perceptions in turn predicted post-entry identification.

Hence Study Two found evidence to support both buffering and feedback loop mechanisms, so suggesting that anticipatory identification might operate both indirectly via, and interactively with, post-entry pride to impact upon post-entry identification. However there was no indication that the indirect effect of anticipatory identification on post-entry identification was contingent on experiencing a particular level of anticipatory identification. This finding appeared consistent with di Sanza and Bullis's (1999) assertion that identification might operate within either a positive or a negative feedback loop. Thus whilst high levels of anticipatory identification predicted high levels of post-entry pride, and in turn, high levels of post-entry identification, low levels of anticipatory identification similarly predicted low levels of post-entry pride and, through this, low levels of post-entry identification. Study Two therefore indicated that a self-consistency motive may be equally relevant for both high and low anticipatory identifiers, rather than only those individuals who do define themselves in terms of the organisation prior to entry.

7.3.3. Limitations

As well as a failure to establish a causal relationship between pre-entry salience and anticipatory identification, several additional limitations were noted within Study Two. Firstly, an important shortcoming of the current research was the post-entry consequences explored. Whilst Study One looked to establish the impact of anticipatory identification on post-entry intergroup and intragroup social identity judgements, this study focussed on only the former of these two judgements. Evidence was found in Study Two to suggest that anticipatory identification did impact upon post-entry pride as hypothesised. However it remained to be seen whether post-entry respect would similarly have been influenced within this context. In combination Studies One and Two demonstrated that anticipatory identification can moderate the relationship between post-entry identification and both intragroup and intergroup social identity judgements. Further research is however needed to explore whether anticipatory identification can impact upon both judgements simultaneously.

The minimal group approach adopted in this study has also previously been questioned, with alternative explanations presented for the apparent ease with which individuals come to see themselves as a member of an arbitrarily assigned group (e.g. Cadinu and Rothbart, 1996; Rabbie, Schot and Visser, 1989). Hertel and Kerr (2001) in particular have suggested that assigning participants to a minimal group does not prompt self-categorisation as assumed by a Social Identity approach. Rather, the absence of thorough and meaningful information about the group encourages participants to adhere to normative scripts, which in different experimental contexts may prescribe different social behaviours including loyalty, favouritism or interdependence. It could feasibly have been a

desire to comply with such normative scripts, rather than a propensity to see and define themselves in terms of their social group, which encouraged participants to report identification with their group within the current research. This presents some concerns regarding the validity of the conclusions drawn within Study Two.

Yet it must be remembered that Study Two observed a similar pattern of results to those obtained within Study One. In contrast to the minimal group environment of the present study, the participants sampled in Study One (students within a university context) were likely to have access to relatively extensive information about their university both before and after entry. As such, we would expect there to be less need for Study One's participants to align to normative social scripts to inform their understanding of the group and what the expected response to that social group should be. As the findings of Study Two on the whole replicated those found within a "real-life" social group, this served to increase confidence that the findings of Study Two might credibly be attributed to social identity processes, rather than to alternative explanations put forward by critics of the minimal group approach.

A limitation of Study One was the use of specific organisational context to make inferences regarding organisational identification more generally. A similar criticism may also be levelled at the current research; potentially to an even greater extent in light of the minimal group approach discussed above. Furthermore, whilst post-entry identification in the current study was indeed measured after joining, it also corresponded with the termination of participants' involvement with the group. Consequently, it demonstrated more limited correspondence with the form of ongoing post-entry identification that would typically be observed within an organisational context. Despite this, there are several reasons to believe that these findings can make an important contribution to our understanding of anticipatory *organisational* identification. First, as Haslam and colleagues have asserted (e.g. Haslam and Reicher, 2006; Haslam et al., 2006), a key contribution of this form of study is not its direct generalisability. Instead it is the testing of specific, theoretically- informed hypotheses, and thus make generalisation on the basis of theory, rather than the data obtained within the current study. In addition, the correspondence between Studies One and Two highlighted above demonstrates replication of the research findings across different research designs and different samples. This provided some assurance that these findings illustrate core social identity processes that can be readily observed within a range of social contexts. Nonetheless, a specific focus on work organisations is needed to fully verify these propositions.

7.3.4. Next Steps

Study Two found support for anticipatory identification as a predictor of post-entry identification and for both buffering and feedback loop consequences of anticipatory identification. However there was little clear evidence to suggest that the manipulation of pre-entry salience directly influenced anticipatory identification. Pre-entry salience was nonetheless one of two antecedents of anticipatory identification set out within the conceptual model. The additional antecedent, a positive social identity motive, had been found to predict anticipatory identification in Study One, but was not explicitly addressed within Study Two. An important next step is to determine whether a causal (rather than correlational) relationship existed between a positive social identity motive and anticipatory identification. Replication of the research design adopted in Study Two, albeit with an alternative antecedent of anticipatory identification, would also provide a valuable opportunity to once more test the first, so far non-significant buffering mechanism, and again look to see whether anticipatory identification might moderate the relationship between post-entry identity relevant information and post-entry social identity judgements. Study Three will address these issues.

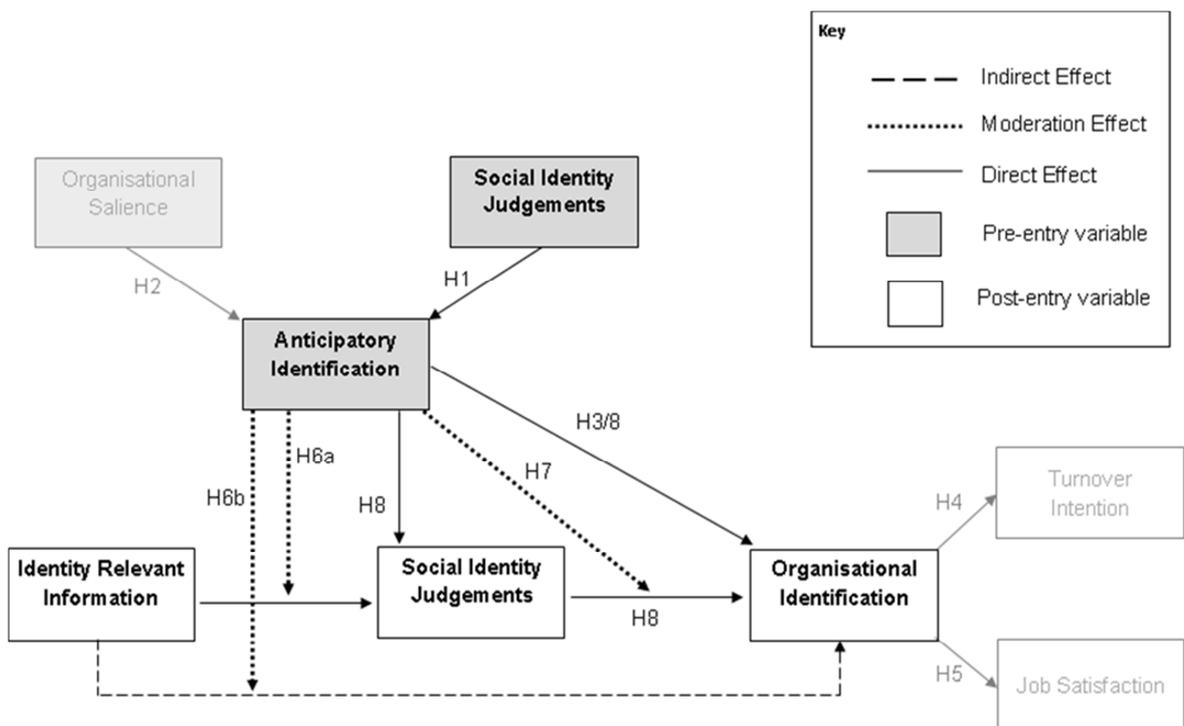
As discussed above, several additional shortcomings of Study Two were also identified. These included the use of a minimal group context to make inferences concerning organisational identification and the omission of intragroup post-entry social identity judgements within the analysis. It is important to overcome these limitations in order to achieve a more thorough comprehension of anticipatory identification; this therefore necessitates further research attention. However, attending to the hypothesised causal relationship between a positive social identity motive and anticipatory identification is thought to be a more beneficial focus for the next study in the programme of research, in light of the current understanding of the construct acquired through Studies One and Two. The additional shortcomings will instead be addressed by the final study within this thesis.

CHAPTER EIGHT: STUDY THREE RESULTS AND DISCUSSION

8.1. Chapter Summary

This chapter describes and discusses the results of Study Three. This study adopted an experimental design to explore the hypothesised antecedents and consequences of anticipatory identification drawing on a sample of 72 staff and students from Aston University. In contrast to Study Two which had also adopted this design to explore pre-entry salience as an antecedent of anticipatory identification, a positive social identity motive antecedent of anticipatory identification was investigated in Study Three. Accordingly, Hypotheses One, Three, Six, Seven and Eight were tested (See Figure 8.1). Chapter Eight begins with a description of the construct validation process undertaken for the scales used in Study Three. From here the findings of the study are presented and subsequently discussed, both within the context of the conceptual model and research hypotheses and also with reference to the other studies within the thesis.

Figure 8.1: Conceptual Model Study Three



8.2. Study Three Results

8.2.1. Scale Validation

Confirmatory Factor Analysis (CFA) was conducted to determine the construct validity of the scales used within Study Three. The rationale for this approach and the fit criteria adopted were discussed in Chapter Six. In Chapter Seven, it was recognised that the

small sample used in Study Two reduced the power of CFA, thus limiting the overall power to accurately reject a poorly fitting model (e.g. Loehlin, 2004; MacCallum et al., 1996). Despite using a unique sample, the sample size in Study Three was identical to Study Two and consequently the same challenges regarding statistical power remained pertinent. The findings of the scale validation process again were therefore interpreted with caution.

8.2.1.1. *Anticipatory Identification*

Four items, taken from Doosje et al.'s (1995) Social Identification scale, were used to measure participants' anticipatory identification prior to joining the group (see Table 7.1, Chapter Seven), the construct validity of which were assessed using CFA. The four-item one-factor model overall was found not to be a good fit to the data ($\chi^2 (2) = 15.06$, $p = 0.001$; RMSEA = 0.30; NFI = 0.86; CFI = 0.87); however the goodness-of-fit index and root mean square residual suggested an adequate fit (GFI = 0.91; RMR = 0.04). In light of these observations and given the limited sample size within Study Three it was felt more appropriate to cautiously adopt the four-item anticipatory identification measure than to look to respecify the model without a clear theoretical grounding. The four-item scale was also found to have adequate internal consistency ($\alpha = 0.77$). As a result, this scale was adopted within Study Three. The reader is however referred to Chapter Ten for a further appraisal of the implications of the potentially sub-optimal fit of the four-item anticipatory identification scale in Studies Two and Three.

8.2.1.2. *Post-Entry Identification*

Four items were also used to measure participants' identification with the group after entry (see Table 7.2, Chapter Seven). CFA indicate that this four-item one-factor model was on the whole an acceptable fit to the data ($\chi^2 (2) = 4.98$, $p < 0.08$; RMSEA = 0.15; GFI = 0.97; NFI = 0.94; CFI = 0.96). This scale was found to have a Cronbach's alpha of 0.78, in excess of the 0.70 cut-off recommended by Nunnally (1978). As a result the four-item post-entry identification scale was duly adopted within Study Three.

8.2.1.3. *Post-Entry Pride*

Five items, taken from Blader and Tyler's (2009) Pride scale, were used to measure participants' post-entry pride in the group (see Table 7.3, Chapter Seven). Although chi-square and root mean square error of approximation indices did not indicate a good fit ($\chi^2 (5) = 16.00$, $p < 0.007$; RMSEA = 0.18), more robust fit indices suggested an adequate fit to the data (GFI = 0.92; NFI = 0.93; CFI = 0.95). Furthermore this scale was found to

possess very good internal consistency ($\alpha = 0.90$). The use of the five-item post-entry pride scale within Study Three was therefore considered appropriate.

8.2.1.3. Need for Identification

Six items, taken from Mayhew et al.'s (2010) Need for Identification – Self-Definition scale, were used to measure participants' need for identification (see Table 6.7, Chapter Six). Overall, this six-item model did not show a good fit to the data ($\chi^2 (9) = 63.50$, $p < 0.001$; RMSEA = 0.29; GFI = 0.76; NFI = 0.69; CFI = 0.71). Examination of the modification indices suggested cross-loading between the items NOID5 and NOID6 (MI = 30.51; Par Change = 0.84). This replicated the findings of Study One however, as with this earlier study, there was no clear indication of item redundancy. Concerns regarding the sample sizes within this analysis similarly suggested that model respecification may be an inappropriate response to the fit indices obtained. A Cronbach's alpha value of 0.82 was obtained for this scale, indicating good internal consistency between items. The six-item need for identification scale was therefore adopted cautiously within Study Three.

8.2.1.3. Personality Traits

Personality traits were measured using a 44-item, five-factor scale (see Table 7.4, Chapter Seven). The majority of fit indices showed a poor fit to the data ($\chi^2 (892) = 1649.68$, $p < 0.001$; GFI = 0.54; NFI = 0.33; CFI = 0.50). However, as discussed in Chapter Seven, the small sample size and complex factor structure may have severely limited the overall power to reject the model. Moreover, RMSEA was only marginally above the cut off of 0.10 recommended by MacCallum et al. (1996; RMSEA = 0.11), and the CMIN/DF ratio of 1.85 was below the recommended ratio of 2:1 (Carmines and McIver, 1981). Cronbach alpha values for the five subscales (presented in Table 8.5) were found to exceed the minimum value of 0.70 recommended by Nunnally (1978). Accordingly, the 44-item, five-factor scale was cautiously adopted within Study Three.

8.2.2. Data Screening

Inferential statistical techniques based on the general linear model were used to explore the data obtained within Study Three. Prior to analysis the assumptions of normality, linearity, independence of residual terms, homoscedasticity and absence of multicollinearity were tested. Normal probability plots of the residuals terms indicated that all predictor variables within the regression model were normally distributed around zero when post-entry identification was treated as an outcome variable. The normal distribution of error terms was also observed when anticipatory identification was treated as an

outcome variable (in respect of the first part of the conceptual model). Accordingly, the assumption of normality was felt to have been met.

Graphical analysis of the residual plots suggested that the assumption of homogeneity of variance was not violated within the dataset. In addition, the partial plots for each predictor indicated that there were no non-linear relationships between variables or extreme outliers which may affect the validity of the regression analysis. The Durbin-Watson test found that there was no significant autocorrelation between the error terms when post-entry identification ($d = 2.01$) was treated as an outcome variable. When anticipatory identification was treated as an outcome variable a value of $d = 1.73$ was obtained. This value again fell outside upper 95% confidence limits ($k = 7$; 95% CI, 1.25, 1.68). Therefore the Durbin Watson test indicated that acceptance of the null hypothesis of no autocorrelation was appropriate. Finally, analysis of collinearity statistics within the regression model found variance inflation factors (VIF) of between 1.26 and 1.73. These were below the critical value of 10 recommended by Yan (2009). The assumption of limited multicollinearity within the regression model was consequently also met.

8.2.3. Control Variables

Participants' age, gender, personality factors and need for identification were treated as control variables within Study Three. An independent samples t-test indicated that there were no significant differences between participants on the basis of gender (all $t_s(70) \leq \pm 1.44$, $p_s \geq 0.16$). Significant correlations were found between age and conscientiousness ($r = 0.28$, $p = 0.02$), neuroticism ($r = -0.27$, $p = 0.02$) and openness to experience ($r = 0.28$, $p = 0.02$); however there were no significant correlations found between age and any of the core outcome and predictor variables under exploration (all $r_s \leq \pm 0.22$, $p_s \geq 0.07$). As a result, age and gender were not included as predictors within the subsequent regression analysis.

A significant correlation was found between participants' need for identification and the level of post-entry identification reported ($r = 0.24$, $p = 0.04$), yet not participants' anticipatory identification ($r = 0.14$, $p = 0.23$). Finally, whilst personality factors on the whole did not correlate with independent and dependent variables (all $r_s \leq \pm 0.21$, $p_s \geq 0.08$), a just significant correlation was found between extraversion and organisational identification ($r = 0.23$, $p = 0.05$). Accordingly, need for identification and extraversion were included as control variables within the regression model. No significant differences in personality or need for identification were found between participants in the positive and negative pre-entry status conditions (all $t_s \leq \pm 1.55$, $p_s \geq 0.13$) or in the positive and negative post-entry performance information conditions (all $t_s \leq \pm 0.67$, $p_s \geq 0.51$).

Participants' employment status was also found not to have a significant effect upon any of the outcome or and control variables investigated within this study (all $t_s \leq \pm 1.40$, $p_s \geq 0.17$). Staff were found to be significantly more conscientious than students ($t(69) = 4.69$, $p < 0.001$). However as conscientiousness was not found to be significantly related to any of the outcome or predictor variables, employment status was not controlled within the analysis.

8.2.4. Descriptive Statistics

Descriptive statistics and zero-order correlations are presented in Table 8.5. A significant correlation was found between anticipatory identification and post-entry pride ($r = 0.42$, $p < 0.001$). Anticipatory identification was also found to be a significant predictor of post-entry identification ($r = 0.36$, $p = 0.002$). These zero order correlations provided an initial indication that anticipatory identification may impact upon post-entry variables, and corresponded with the hypothesised pattern of relationships.

Table 8.5: Descriptive Statistics: Means, Standard Deviations, Zero Order Correlations and Reliability Coefficients

		Mean	SD	1	2	3	4	5	6	7	8	9
1	Anticipatory Identification	3.16	.59	(.77)								
2	Post-Entry Pride	2.86	.77	.42***	(.90)							
3	Post-Entry Identification	3.23	.66	.36**	.68***	(.78)						
4	Openness	3.50	.58	-.10	-.05	-.063	(.81)					
5	Conscientiousness	3.75	.64	-.09	-.21	-.12	.34**	(.84)				
6	Extraversion	3.34	.62	-.04	.06	.23*	.35**	.23*	(.80)			
7	Agreeableness	3.81	.49	.08	.00	.02	.33**	.47***	.22	(.72)		
8	Neuroticism	2.84	.63	-.11	-.11	.02	-.17	-.26*	-.27*	-.32**	(.81)	
9	Need for Identification	3.07	.72	.05	.05	.24*	-.09	-.16	.14	.02	-.02	(.82)

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

8.2.5. Manipulation Check

Participants in the positive pre-entry status information condition reported that their group had significantly more status on a scale of one to ten ($M = 6.39$, $SD = 1.64$) compared to participants in the negative pre-entry status information condition ($M = 4.31$, $SD = 1.95$); $f(1,70) = 23.97$, $p < 0.001$)¹⁰. The pre-entry manipulation was therefore considered to have been successful.

Analysis of zero order correlations in Table 8.5 indicated that organisational identification was positively correlated with extraversion and need for identification. To control for these variables when testing the manipulation of post-entry performance information, Analysis of Covariance (ANCOVA) was conducted. Participants in the positive post-entry performance information condition reported that their group had performed significantly better on the activity ($M = 7.28$, $SD = 1.58$) than participants in the negative post-entry performance information condition ($M = 4.92$, $SD = 2.10$); $f(1,68) = 28.10$, $p < 0.001$). The manipulation was also deemed to be successful.

8.2.6. Antecedents of Anticipatory Identification

Hypothesis 1: The perception that the group is a source of positive social identity prior to entry will be positively related to anticipatory identification.

Participants in the positive pre-entry status information condition, in addition to believing their group to have significantly more status, also experienced significantly higher anticipatory identification ($M = 3.33$, $SD = 0.58$) than participants in the negative pre-entry status information condition ($M = 2.99$, $SD = 0.58$), $f(1,70) = 6.15$, $p = 0.02$). This observation provided support for Hypothesis One.

8.2.7. Consequences of Anticipatory Identification

Hypothesis 3: Anticipatory identification will be a significant predictor of post-entry organisational identification.

The role of anticipatory identification as a direct predictor of post-entry identification was explored using hierarchical multiple linear regression analysis (Table 8.6). Extraversion, need for identification, pre-entry status (dummy coded: 0 = low pre-entry status condition; 1 = high pre-entry status condition), post-entry performance information (dummy-coded: 0 = negative performance information; 1 = positive performance information) and post-entry

¹⁰ Multivariate analysis of variance conducted to also include anticipatory identification, details provided below.

pride were entered at Step One and were found to make a significant contribution to the regression model ($R^2 = 0.54$, $p < 0.001$). However, when entered at Step Two, anticipatory identification did not appear to account for a significant amount of unique variance in post-entry identification ($R^2\Delta = 0.01$, $p = 0.16$). Hypothesis Three was therefore not supported.

Table 8.6: Multiple Linear Regression Analysis of the Direct Relationship between Anticipatory Identification and Post-Entry Identification

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.54	.51	.54	15.67***
Pre-Entry Information (Dummy Coded)	-.11	.11	-.09	-1.02				
Extraversion	.17	.09	.16	1.89				
Need for Identification	.18	.08	.19	2.28*				
Post-Entry Performance Information (Dummy Coded)	.16	.14	.12	1.16				
Post-Entry Pride	.51	.09	.59	5.77***				
Step Two					.56	.52	.01	2.00
Pre-Entry Information (Dummy Coded)	-.16	.11	-.12	-1.39				
Extraversion	.18	.09	.17	1.99				
Need for Identification	.18	.08	.19	2.26				
Post-Entry Performance Information (Dummy Coded)	.17	.13	.13	1.24				
Post-Entry Pride	.46	.10	.53	4.82***				

Anticipatory Identification	.15	.11	.14	1.42
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* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

In Chapter Seven, concerns were raised regarding the role that need for identification played as an antecedent of both anticipatory identification and post-entry identification. As no significant relationship was found between these two variables in the present study when need for identification was held constant this appeared to reinforce these concerns. To test this, the analysis was repeated, this time allowing need for identification to vary, as in Study Two. This analysis however still found that anticipatory identification was not a significant predictor of post-entry identification ($\beta = 0.14$, $p = 0.16$).

8.2.8. Buffering Effect of Anticipatory Identification

Multivariate analysis of covariance (MANCOVA) was conducted to determine whether manipulation of post-entry performance information was associated with post-entry pride and post-entry identification, controlling for participants' level of extraversion and need for identification¹¹. Participants in the positive performance information condition reported significant higher pride in the group ($M = 3.30$, $SD = 0.62$) than participants in the negative performance information condition, ($M = 2.42$, $SD = 0.65$); $f(1,68) = 33.83$, $p < 0.001$). There was also a significant difference between the two conditions for post-entry identification; participants in the positive performance information condition reported significantly higher post-entry identification ($M = 3.54$, $SD = 0.63$) than participants in the negative performance information condition ($M = 2.92$, $SD = 0.54$); $f(1,68) = 20.57$, $p < 0.001$). The receipt of positive or negative performance information therefore did appear to impact upon participants pride in, and identification with, the group. This challenged the suggestion that anticipatory identification would completely mitigate the impact of negative post-entry performance information on post-entry pride or post-entry identification.

Hierarchical linear regression analysis was conducted to further probe the relationship between post-entry performance information, post-entry pride and post-entry identification (Table 8.7), to confirm that this relationship reflected the one set out within the conceptual model (see Figure 8.1). At Step One of the analysis, pre-entry status information, extraversion and need for identification were entered as control variables ($R^2 = 0.10$, $p = 0.058$). Post-entry performance information was entered into the model at Step Two and explained a further 21% of the variance ($R^2\Delta = 0.21$, $p < 0.001$). At Step Three post-entry

¹¹ Extraversion (Post Entry Pride: $f(1,68) = 0.026$, $p = 0.87$; Post-Entry Identification: $f(1,68) = 2.89$, $p = 0.09$); Need for identification (Post-Entry Pride: $f(1,68) = 0.16$, $p = 0.69$; Post-Entry Identification $f(1,68) = 4.28$, $p = 0.04$)

pride was also found to make a significant unique contribution to the regression model ($R^2\Delta = 0.23$, $p < 0.001$). Analysis of individual regression coefficients indicated that post-entry performance information became a non-significant predictor of post-entry identification when post-entry pride was held constant ($\beta = 0.12$, $p = 0.25$). Post-entry pride therefore appeared to mediate the relationship between post-entry performance information and post-entry identification. Analysis of bootstrap confidence intervals and the Sobel test further supported this observation ($B = 0.45$, $SE = 0.11$; $z = 4.05$, $p < 0.001$; 95% CI, 0.26, 0.72). This confirmed the expected pattern of relationships between variables.

Table 8.7: Multiple Linear Regression Analysis of the Indirect Relationship between Post-Entry Performance Information and Post-Entry Identification

Variable		B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One						.10	.06	.10	2.62
Pre-Entry Information	Status	-.08	.15	-.06	-.49				
Extraversion		.22	.13	.202	1.74				
Need Identification	for	.20	.11	.22	1.88				
Step Two						.31	.27	.21	20.38***
Pre-Entry Information	Status	-.08	.13	-.06	-.57				
Extraversion		.18	.11	.17	1.66				
Need Identification	for	.20	.09	.21	2.09*				
Post-Entry Performance Information		.60	.13	.46	4.52***				

Step Three				.54	.51	.23	33.24***
Pre-Entry Information	Status	-.11	.11	-.09	-1.02		
Extraversion		.17	.09	.16	1.89		
Need for Identification	for	.18	.08	.19	2.28		
Post-Entry Performance Information		.16	.14	.12	1.16		
Post-Entry Pride		.51	.09	.59	5.77***		

** p ≤ 0.01; *** p ≤ 0.001

As a final test of the relationship between pre- and post-entry variables on post-entry identification before proceeding to explore the hypothesised buffering effect of anticipatory identification, a 2x2 factorial MANCOVA was conducted. This looked to determine whether a significant interaction would be observed between pre-entry status and post-entry performance information conditions on post-entry pride and post-entry identification, controlling for need for identification and extraversion. This was felt to be important to determine that any subsequently observed moderation effect was the consequence of anticipatory identification and not the interaction between the experimental conditions. This analysis did indeed show that the interaction between pre-entry status and post-entry performance was non-significant for both post-entry pride ($f(1,66) = 1.88, p = 0.17$) and post-entry identification ($f(1,66) = 0.19, p = 0.67$), allowing us to discount this relationship as an alternative explanation for the results discussed below.

Hypothesis 6a: Anticipatory identification will moderate the relationship between post-entry identity relevant information and post-entry social identity judgements, so that the relationship between post-entry identity relevant information and post-entry social identity judgements is weaker when anticipatory identification is high.

Moderated multiple linear regression analysis was conducted to investigate whether anticipatory identification moderated the relationship between post-entry performance information and post-entry pride (Table 8.8). Pre-entry status information was controlled at Step One ($R^2 = 0.002; p = 0.63$). At Step Two, significant main effects were found for post-entry performance information ($\beta = 0.51, p < 0.001$) and anticipatory identification ($\beta =$

0.34, $p = 0.001$). The interaction term was however found to be non-significant ($\beta = -0.07$, $p = 0.46$). Hypothesis 6a was therefore not supported.

Table 8.8: Multiple Regression Analysis of the Interactive Effects of Anticipatory Identification and Post-Entry Performance Information on Post-Entry Pride

		B	SE B	β	t	R ²	Adj. R ²	ΔR^2	f
Step One						.002	-.01	.002	.16
Pre-Entry Information	Status	.07	.18	.05	.40				
Step Two						.44	.41	.44	17.40***
Pre-Entry Information	Status	-.09	.15	-.06	-.59				
Performance Information		.78	.14	.51	5.44***				
Anticipatory Identification		.45	.13	.34	3.49***				
Performance Information	x	.18	.25	.07	.74				

** $p \leq 0.01$; *** $p \leq 0.001$

Hypothesis 6b: Anticipatory identification will moderate the relationship between post-entry identity relevant information and post-entry identification so that the relationship between post-entry identity relevant information and post-entry identification is weaker when anticipatory identification is high.

Moderated multiple linear regression analysis was also conducted to determine whether anticipatory identification moderated the relationship between post-entry performance information and post-entry identification (Table 8.9). Need for identification, extraversion and pre-entry status information were controlled at Step One ($R^2 = 0.10$, $p = 0.06$). Main effects were found for post-entry performance information ($\beta = 0.40$, $p < 0.001$) and anticipatory identification ($\beta = 0.37$, $p = 0.001$) at Step Two. At this step the interaction term was also found to be significant ($\beta = 0.20$, $p = 0.04$).

To probe the interaction further, simple slopes analysis was conducted following procedures recommended by Aiken and West (1991) and using conditional values of one standard deviation above and below the mean. This analysis indicated that post-entry performance information was a significant predictor of post-entry identification when anticipatory identification was high ($B = 0.78, p < 0.001$), however there was a non-significant relationship between post-entry performance information and post-entry identification when anticipatory identification was low ($B = 0.25, p = 0.19$). Further exploration of this interaction using the Johnson-Neyman technique indicated that post-entry performance information had a significant positive effect on post-entry identification at values of the moderator greater than or equal to 0.73 standard deviations below the mean ($Bs \geq 0.32, p \leq 0.05$). This observation did not however reflect the pattern of relationships set out in Hypothesis 6b; Hypothesis 6b therefore was not supported.

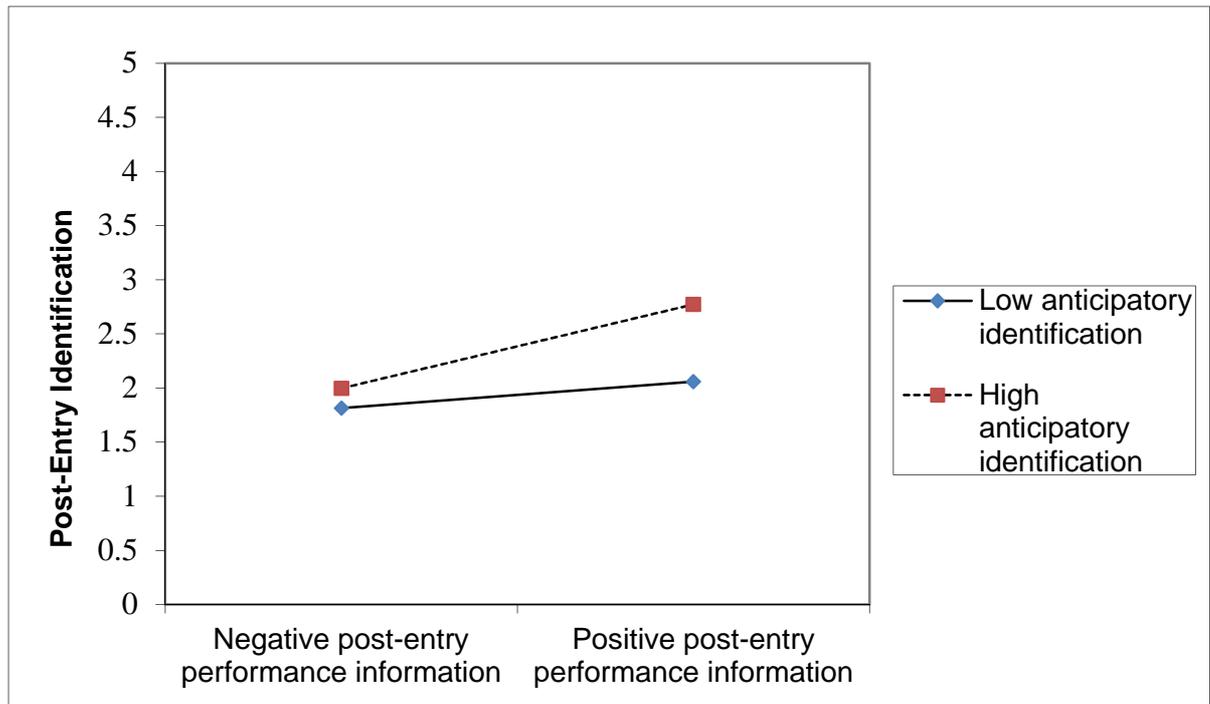
Table 8.9: Multiple Regression Analysis of the Interactive Effects of Anticipatory Identification and Post-Entry Performance Information on Post-Entry Identification

		B	SE B	β	t	R ²	Adj. R ²	ΔR^2	f
Step One						.10	.06	.10	2.62
Pre-Entry Information	Status	.22	.13	.20	1.74				
	Need for Identification	-.08	.15	-.06	-.49				
	Extraversion	.20	.11	.22	1.88				
Step Two						.44	.38	.33	12.77***
Pre-Entry Information	Status	-.22	.13	-.17	-1.73				
	Need for Identification	.17	.09	.18	1.90				
	Extraversion	.19	.10	.18	1.92				
Post-Entry Information	Performance	.51	.13	.39	4.09***				
	Anticipatory Identification	.38	.11	.34	3.36***				

Performance Information x .45 .22 .20 2.08*
 Anticipatory Identification

* $p \leq 0.05$; *** $p \leq 0.001$

Figure 8.2: Two-Way Interaction Plot of the Moderating Effect of Anticipatory Identification on the Relationship between Post-Entry Performance Information and Post-Entry Identification



Hypothesis 6c: Post-entry social identity judgements will mediate the interactive effect of post-entry identity relevant information and post-entry identification; i.e. a mediated moderation effect will be observed with the moderation predicted in Hypothesis 6a explaining the moderation predicted in Hypothesis 6b.

As no significant moderation effect was observed in respect of Hypothesis 6a, the mediated moderation effect predicted in Hypothesis 6c was no longer feasible and therefore no further analysis was conducted to test this hypothesis.

Hypothesis 7: Anticipatory identification will moderate the relationship between post-entry social identity judgements and post-entry identification, so that the relationship between post-entry social identity judgements and post-entry identification is weaker when anticipatory identification is high.

To determine whether anticipatory identification moderated the relationship between post-entry pride and post-entry identification a further linear regression analysis was conducted (Table 8.10). Need for identification, extraversion and pre-entry status information were

controlled at Step One ($R^2 = 0.10$, $p = 0.06$). At Step Two, a significant main effect was found for post-entry pride ($\beta = 0.60$, $p < 0.001$) but not for anticipatory identification ($\beta = 0.18$, $p < 0.07$). However the two variables had a significant interactive effect upon post-entry identification ($\beta = 0.22$, $p = 0.009$).

Simple slopes analysis and the Johnson-Neyman technique were used to probe the nature of this interaction. The Johnson-Neyman technique indicated that when anticipatory identification was very low ($< -1.93SD$; $B \leq 0.25$, $p \geq 0.058$) the relationship between post-entry pride and post-entry identification was non-significant. However at all other values of the moderator a significant and positive relationship was observed between post-entry pride and post-entry identification. Nonetheless as the level of anticipatory identification increased the strength of this relationship was found to also increase. For example, simple slopes analysis indicated a stronger relationship between post-entry pride and post-entry identification when anticipatory identification was high ($+1SD$, $B = 0.66$, $p < 0.001$) compared to when anticipatory identification was low ($-1SD$, $B = 0.38$, $p < 0.001$). This observation was contrary to the hypothesised pattern of relationships set out in Hypothesis Seven and provided no support for the proposition that anticipatory identification would buffer the relationship between post-entry pride and post-entry identification.

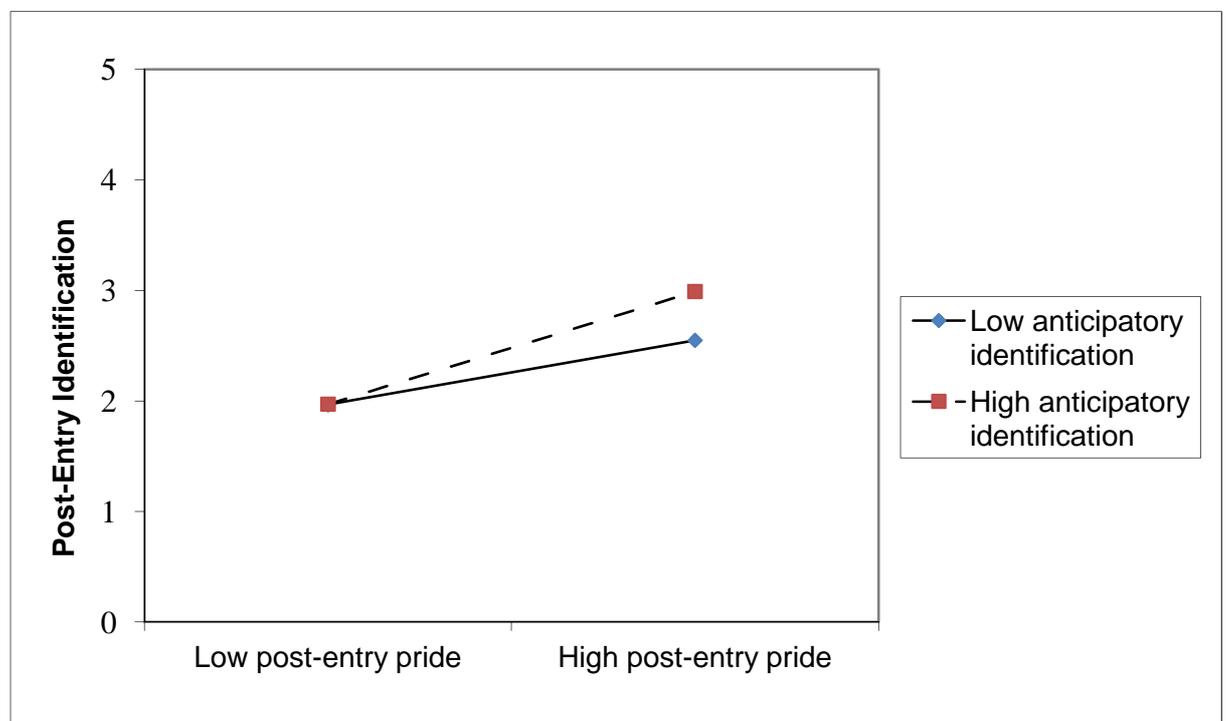
Table 8.10: Multiple Regression Analysis of the Interactive Effects of Anticipatory Identification and Post-Entry Pride on Post-Entry Identification

	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.10	.06	.10	2.62
Pre-Entry Status Information	-.08	.15	-.06	-.49				
Need for Identification	.20	.11	.22	1.88				
Extraversion	.22	.13	.20	1.74				
Step Two					.59	.55	.49	25.87***
Pre-Entry Status Information	-.16	.11	-.12	-1.49				
Need for Identification	.15	.08	.16	1.93				

Extraversion	.14	.09	.13	1.53
Post-Entry Pride	.52	.08	.60	6.79***
Anticipatory Identification	.19	.10	.17	1.85
Post-Entry Pride x Anticipatory Identification	.24	.09	.22	2.69**

** $p \leq 0.01$; *** $p \leq 0.001$

Figure 8.3: Two-Way Interaction Plot of the Moderating Effect of Anticipatory Identification on the Relationship between Post-Entry Pride and Post-Entry Identification



The interaction between post-entry pride and anticipatory identification observed in this study did not corroborate the moderating effect observed in Study Two. However in Study Two, need for identification had not been included as a control variable within the analysis. Accordingly, the moderated regression analysis was repeated, this time allowing need for identification to vary within the regression model and thus testing whether this variable may have impacted upon the different pattern of relationships observed between the two studies. The findings of this repeated analysis however were equivalent to those reported above: a main effect was observed for post-entry pride ($\beta = 0.61$, $p < 0.001$), anticipatory identification was a non-significant predictor of post-entry identification ($\beta =$

0.14, $p = 0.12$) and there was a significant interaction between these two variables ($\beta = 0.25$, $p = 0.005$). There was therefore no evidence to suggest that the contrasting findings between Studies Two and Three may have been attributable to participants' need for identification.

It was noted above that post-entry pride mediated the relationship between post-entry identity relevant information and post-entry identification. Anticipatory identification was also found to moderate the relationship between post-entry identity relevant information and post-entry identification. In light of the additional significant interactive effect of post-entry pride and anticipatory identification on post-entry identification, the relationship between these variables was probed further using mediated moderation analysis. Following procedures set out by Langfred (2004) and Walumbwa, Avolio and Zhu (2008), this analysis looked to determine whether the interactive effect of post-entry performance information and anticipatory identification on post-entry identification was eliminated or reduced when the interaction between post-entry pride and anticipatory identification was included within the same regression equation (Table 8.11). This analysis indeed suggested that the effect of the post-entry performance information by anticipatory identification interaction term on post-entry identification was non-significant when the post-entry pride by anticipatory identification interaction term was held constant ($\beta = 0.04$, $p = 0.73$). The former interaction term therefore did not make a unique contribution to the regression model when the effect of the later interaction term was taken into account. However it must be noted that, although the regression weight for this interaction term was relatively similar to that previously observed in Table 8.10, the post-entry pride by anticipatory identification interaction term was also non-significant within this analysis ($\beta = 0.19$, $p = 0.09$). Thus a mediated moderation effect could not be conclusively ascertained within the current analysis.

Table 8.11: Multiple Regression Analysis of the Relationship between Post-Entry Performance Information, Post-Entry Pride and Post-Entry identification Moderated by Anticipatory Identification

Variable		B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One						.10	.06	.10	2.62
Pre-Entry Information	Status	-.08	.15	-.057	-.49				
Extraversion		.20	.11	.219	1.88				

Need for Identification		.22	.13	.202	1.74				
Step Two						.56	.52	.45	22.13***
Pre-Entry Information	Status	-.16	.11	-.12	-1.39				
Extraversion		.175	.077	.189	2.264				
Need for Identification		.18	.09	.17	1.99				
Post-Entry Information	Performance	.17	.13	.13	1.24				
Anticipatory Identification		.15	.11	.14	1.42				
Post-Entry Pride		.46	.10	.53	4.82***				
Step Three						.58	.54	.03	3.96
Pre-Entry Information	Status	-.19	.11	-.14	-1.66				
Extraversion		.16	.08	.17	2.08*				
Need for Identification		.18	.09	.17	2.01*				
Post-Entry Information	Performance	.17	.13	.13	1.33				
Anticipatory Identification		.18	.11	.16	1.71				
Post-Entry Pride		.44	.09	.51	4.74***				
Post-Entry Information	Performance x Anticipatory Identification	.38	.19	.16	1.99				

Step Four		.60	.55	.02	2.91
Pre-Entry Information	Status	-.17	.11	-.13	-1.50
Extraversion		.15	.08	.16	1.95
Need for Identification		.14	.09	.13	1.53
Post-Entry Information	Performance	.15	.13	.12	1.19
Anticipatory Identification		.20	.11	.18	1.90
Post-Entry Pride		.45	.09	.53	4.93***
Post-Entry Information x Anticipatory Identification	Performance	.09	.25	.04	.34
Post-Entry Anticipatory Identification	Pride x	.21	.12	.19	1.71

** p ≤ 0.01; *** p ≤ 0.001

8.2.9. Feedback Loop of Anticipatory Identification

Hypothesis 8: The relationship between anticipatory identification and post-entry identification will be mediated by post-entry social identity judgements.

Hierarchical multiple linear regression analysis was undertaken to establish whether the relationship between anticipatory identification and post-entry identification was mediated by post-entry pride (Table 8.12). Need for identification, extraversion and pre-entry status information were entered as control variables at Step One ($R^2 = 0.10$, $p = 0.06$). Anticipatory identification accounted for an additional 15% of the variance in organisational identification when entered into the regression model at Step Two ($R^2\Delta = 0.15$, $p = 0.001$). At Step Three post-entry pride was entered and again was found to account for a significant amount of unique variance in post-entry identification ($R^2\Delta = 0.30$, $p < 0.001$). Subsequent analysis of individual regression coefficients indicated that when post-entry pride was entered into the regression model at Step Three, anticipatory identification became a non-significant predictor of post-entry identification ($\beta = 0.13$, $p = 0.18$). Bootstrap confidence intervals and the Sobel test similarly confirmed the presence of a significant indirect relationship between anticipatory identification and post-entry

identification ($B = 0.30$, $SE = 0.09$; $z = 3.32$, $p < 0.001$; 95% CI, 0.11, 0.58). This analysis indicated that post-entry pride mediated the relationship between anticipatory identification and post-entry identification, providing support for Hypothesis Eight.

Table 8.12: Multiple Linear Regression Analysis of the Indirect Relationship between Anticipatory Identification and Post-Entry Identification

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.31	.27	.31	7.62***
Pre-Entry Status Information	-.08	.13	-.06	-.57				
Extraversion	.18	.11	.17	1.66				
Need for Identification	.20	.09	.21	2.09*				
Post-Entry Information	Performance	.60	.13	.46	4.52***			
Step Two					.40	.35	.09	9.40**
Pre-Entry Status Information	-.19	.13	-.15	-1.46				
Extraversion	.20	.10	.18	1.90				
Need for Identification	.19	.09	.20	2.09*				
Post-Entry Information	Performance	.52	.13	.40	4.03***			
Anticipatory Identification	.35	.11	.31	3.07**				
Step Three					.57	.52	.16	23.18
Pre-Entry Status Information	-.16	.11	-.12	-1.39				
Extraversion	.18	.09	.17	1.99*				

Need for Identification		.18	.08	.19	2.26
Post-Entry Information	Performance	.17	.13	.13	1.24*
Anticipatory Identification		.15	.11	.14	1.42
Post-Entry Pride		.46	.10	.53	4.82***

** $p \leq 0.01$; *** $p \leq 0.001$

To expand on this regression analysis, the mediating effect of post-entry pride was subsequently explored in combination with the significant interaction between post-entry pride and anticipatory identification observed in the preceding analysis. Anticipatory identification was a significant predictor of post-entry identification when post-entry pride and the interaction term were allowed to vary ($\beta = 0.35$, $p = 0.002$) but was non-significant when both post-entry pride and the interaction term was held constant ($\beta = 0.13$, $p = 0.13$). There continued to be a significant indirect relationship between anticipatory identification and post-entry identification mediated by post-entry pride when the interaction term was included within the regression model ($B = 0.30$, $SE = 0.09$; $z = 3.32$, $p < 0.001$). Bootstrap confidence intervals for the conditional mediating effects of post-entry pride at the 10th, 25th, 50th, 75th, and 90th percentiles of anticipatory identification were subsequently examined (Table 8.13). This analysis indicated that when anticipatory identification increased the strength of its indirect effect on post-entry identification through post-entry pride also increased. However the indirect effect remained significant at all values of the moderator. Taken together, this suggested that participants' post-entry pride mediated the relationship between anticipatory identification and post-entry identification regardless of the extent to which an individual initially identified with the group.

Table 8.13: Conditional Indirect Effect of Anticipatory Identification on Post-Entry Identification through Post-Entry Pride at Values of Anticipatory Identification (10th, 25th, 50th, 75th, and 90th Percentiles).

Anticipatory Identification	B	SE B	Lower Limit 95% CI	Upper Limit 95% CI
2.25	.17	.10	.03	.43
2.75	.24	.10	.09	.49

3.25	.31	.11	.12	.57
3.50	.35	.12	.14	.63
3.75	.38	.13	.16	.69

8.2.10. Assessment of the Conceptual Model

As an extension to the individual hypothesis testing outlined above, Structural Equation Modelling was conducted using AMOS (Version 20) to determine whether the conceptual model was a good fit to the data. Goodness-of-fit indices did indeed suggest a good fit to the data ($\chi^2(20) = 17.46$, $p = 0.62$; RMSEA = 0.00; GFI = 0.94; NFI = 0.86; CFI = 1.00). However these indices were subsequently compared to two alternative models to determine whether the specified conceptual model represented the best fit to the data. The alternative models were:

Model Two (*direct post-entry impact of pre-entry status information*): To consider whether pre-entry status rather than anticipatory identification was the key pre-entry variable which impacted upon post-entry outcomes, Model Two specified that pre-entry status information would predict anticipatory identification, post-entry pride and post-entry identification. In this model, post-entry performance information was also predicted to directly impact upon post-entry pride and post-entry identification.

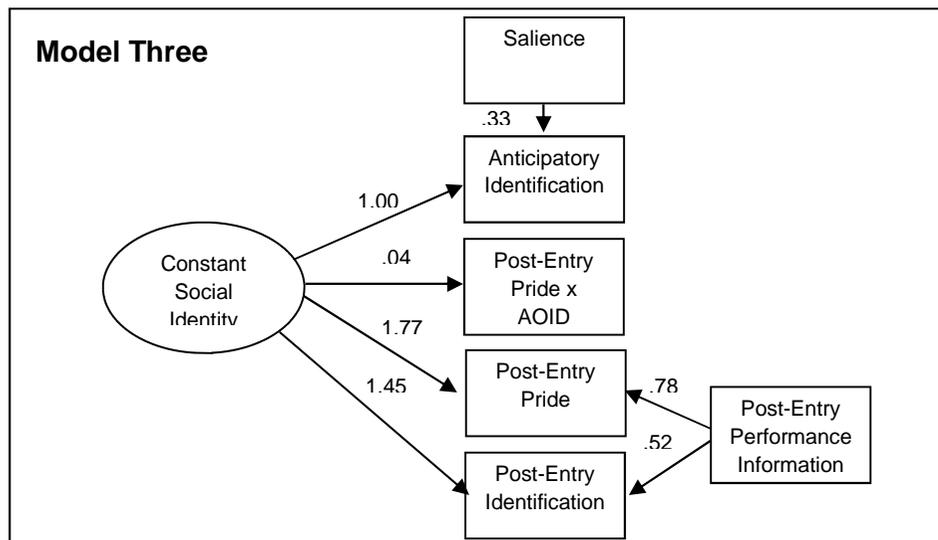
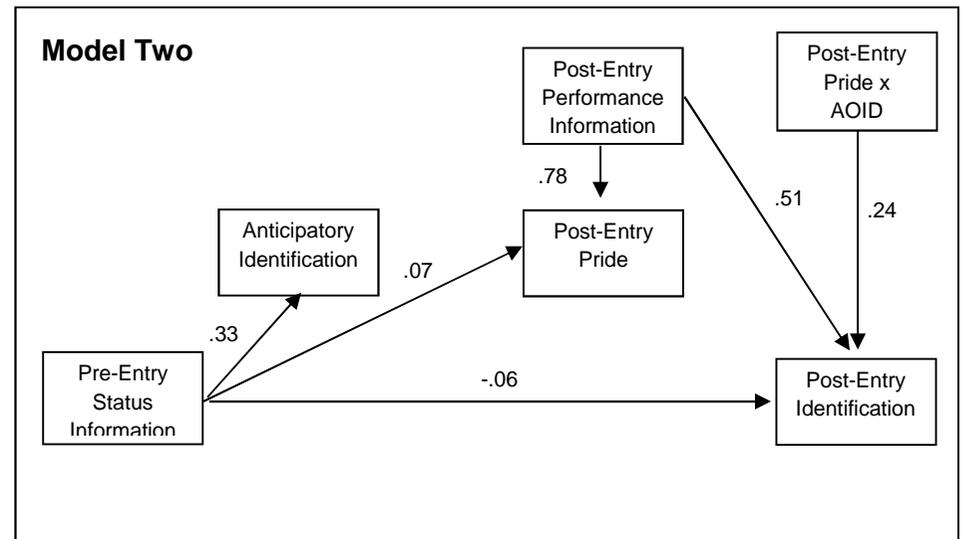
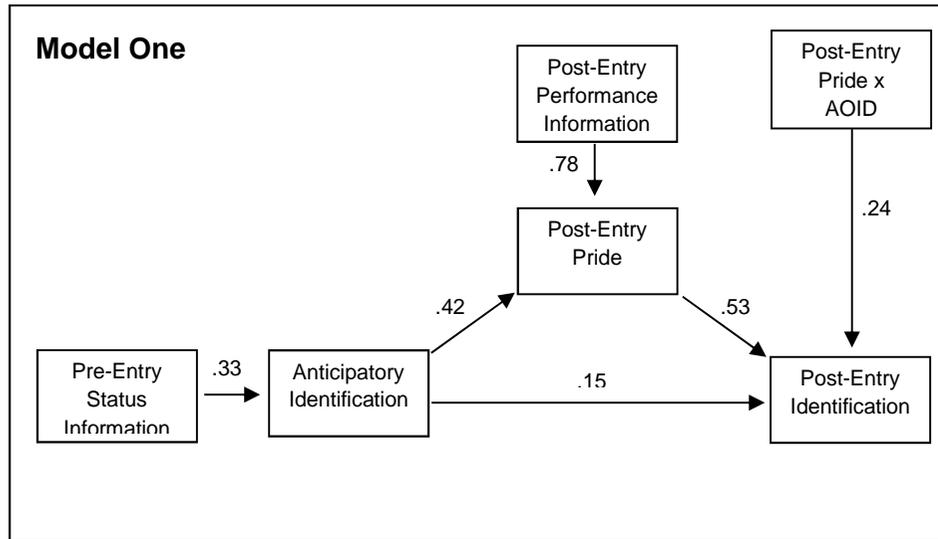
Model Three (*constant social identity model*): To consider whether participants' pre- and post-entry responses were governed by an overarching social identity, Model Three specified that one latent "Constant Social Identity" variable would account for covariance in anticipatory identification, post-entry pride and post-entry identification, whilst post-entry performance would independently predict post-entry pride and post-entry identification.

The analysis introduced additional latent variables therefore the competing models were compared using Akaike's Information Criterion, to allow the comparison of non-nested models (Hu and Bentler, 1999). Analysis of the AIC values for these models in Table 8.14 however did not provide conclusive support for the conceptual model. Differences in AIC values of two or more are representative of a poorer fit to the data (Burnham and Anderson, 2002); however an AIC Δ of 1.66 between Models One and Two was observed in Study Three. This suggested that whilst the conceptual model was a good fit to the data, alternative models had similar goodness-of-fit. Model Two therefore could not be rejected outright and the primacy of the conceptual model over competing models could not be convincingly established. Path diagrams for the two best fitting models, as well as Model Three, are presented in Figure 8.4.

Table 8.14: Fit Indices and Model Comparison

Model	AIC	χ^2	df	p	RMSEA	GFI	NFI	CFI
Model One (Conceptual Model)	49.63	17.46	20	0.62	0.00	0.94	0.86	1.00
Model Two	51.29	13.29	17	0.72	0.00	0.96	0.89	1.00
Model Three	55.94	21.94	19	0.29	0.05	0.93	0.82	0.97

Figure 8.4: Path Diagrams for Alternative Models Study Three



Note: Ovals represent latent constructs and rectangles represent manifest constructs; Control variables and covariances included within analysis but excluded from diagrams for ease of interpretation; Model rotated to facilitate presentation.

8.3. Study Three Discussion

Study Three looked to explore the antecedents of anticipatory identification by returning to investigate the positive social identity motive first addressed in Study One. The present study also investigated the direct effect of anticipatory identification on post-entry identification, and the hypothesised buffering and feedback loop mechanisms of anticipatory identification set out in Chapter Three. Corroboration was found for a positive social identity motive antecedent of anticipatory identification as well as the feedback loop mechanism first observed in Study Two. However the findings of this study did not support a number of key hypotheses and in particular pointed to an alternative interactive effect of anticipatory identification and post-entry social identity judgements on post-entry identification to that set out in the proposed conceptual model.

8.3.1. *Antecedents of Anticipatory Identification*

Participants' perceptions that their group was a source of positive social identity prior to entry were manipulated by informing them that their group's "decision-making capacity" was above or below average compared to other groups completing the same decision-making activity. This manipulation thus aligned to intergroup status, argued by the Group Engagement Model to be associated with a positive social identity (e.g. Blader and Tyler, 2009; Tyler and Blader, 2003). Information concerning the status of the group was found to have a significant impact upon participants' anticipatory identification, with participants in the low pre-entry status condition reporting significantly lower anticipatory identification than participants in the high pre-entry status condition. This observation supported Hypothesis One and provided further evidence of a positive relationship between social identity judgements and anticipatory identification, first observed in Study One.

The extent to which an organisation is seen to be a source of positive social identity has been consistently associated with organisational identification amongst current members of an organisation (e.g. Fuller et al., 2006; Lipponen et al., 2005; Mael and Ashforth, 1992; Smidts et al., 2001). Similarly pre-entry social identity judgements have previously been found to impact upon the attractiveness of an organisation to future members (e.g. Boezeman and Ellemers, 2008). The findings of Study Three provided a valuable extension to these earlier studies, suggesting that when an individual believed that the group contributed positively to their social identity prior to joining, they were more likely to define themselves in terms of that group before formally taking up membership. Moreover in this instance, participants were randomly assigned to conditions and social identity judgements were deliberately manipulated. As such, this design provided greater certainty that there was indeed a causal relationship between pre-entry social identity judgements

and anticipatory identification (Field and Hole, 2003). This observation contributed even further to our understanding of the antecedents of anticipatory identification, adding to the findings obtained using a correlational design in Study One.

8.3.2. Consequences of Anticipatory Identification

The preceding studies reported in this thesis had demonstrated conflicting support for the proposition, set out in Hypothesis Three, that anticipatory identification would predict post-entry identification. Study Two indicated that participants' anticipatory identification had a significant and positive effect upon their post-entry identification; Study One conversely had not observed this relationship. Study Three more closely resembled the findings of Study One, with no significant direct relationship found between anticipatory identification and post-entry identification when participants' post-entry social identity judgements were held constant. Concerns were raised in Chapter Seven that the direct relationship observed between anticipatory identification and post-entry identification may have been the consequence of a consistent difference in participants' need for identification from pre- to post-entry, with some individuals constantly possessing a greater desire to identify with social groups in order to satisfy self-related needs (e.g. Glynn, 1998; Mayhew et al., 2010). This had not been explicitly tested in Study Two but was included as an additional control variable in Study Three. When analysing the relationship between anticipatory identification and post-entry identification in this study, need for identification was first held constant and subsequently allowed to vary. In both instances the relationship between anticipatory identification and post-entry identification was equivalent. In view of this, although it still remained plausible that alternative unmeasured individual differences between participants may have accounted for the results obtained within the previous study, it was felt less likely that this was the consequence of participants' need for identification.

In Chapter Six it was suggested that the identification experienced by newcomers most closely reflected situated identification (Rousseau, 1998). This form of identification is prompted by the immediate social context, rather than a more enduring relationship with an organisation. From this standpoint, the non-significant relationship between anticipatory identification and post-entry identification is perhaps more understandable. Anticipatory identification would not be expected to directly relate to post-entry identification; pre-entry experiences alone would predict anticipatory identification, whilst only post-entry experiences would predict post-entry identification. Yet whilst the notion of situated identification may account for the non-significant relationship between anticipatory identification and post-entry identification, it was not appropriate to conclude that anticipatory identification did not have a post-entry impact. Although there was not a

direct relationship between anticipatory identification and post-entry identification, a significant indirect relationship, mediated by post-entry social identity judgements, was observed.

Thus an individual's identification with the group prior to entry did not itself predict post-entry identification, yet it was related to the extent to which the group was seen as a source of positive social identity after joining. These judgements, in turn, were found to positively impact upon post-entry identification. Support was therefore found for the anticipatory identification feedback loop mechanism set out in Hypothesis Eight. This observation extended to a pre-entry context the findings of prior published studies, which have shown that post-entry identification can predict subsequent evaluations of the group (e.g. Pettit and Lount, 2011). Researchers have suggested that when an individual identifies with a social group, they are motivated to perceive the group favourably, because through this they can preserve a positive self-concept by extension (e.g. Dutton et al., 1994). The results of Study Three indicate that this motivation to preserve a positive self-concept might cross the boundary from pre- to post-entry, insofar as newcomers' anticipatory identification with the group can encourage them to perceive the group more positively after joining.

Studies One and Two earlier demonstrated a relatively consistent endorsement of the buffering mechanism outlined within the conceptual model. In these studies the relationship between social identity judgements and post-entry identification became weaker as participants' anticipatory identification increased, and was non-significant when anticipatory identification was high. Study Three found that anticipatory identification moderated the relationship between post-entry social identity judgements and post-entry identification. However in contrast to the previous studies, this moderation effect did not correspond to the impact proposed in Hypothesis Seven. In the present study, the relationship between social identity judgements and post-entry identification became *stronger* as participants' anticipatory identification increased; and at very *low* levels of anticipatory identification (around two standard deviations below the mean) post-entry pride was no longer a significant predictor of post-entry identification. Thus rather than acting to buffer the relationship between post-entry social identity judgements and post-entry identification, in Study Three, anticipatory identification seemed to spark a closer relationship between participants' perception that the group was a source of positive social identity and their identification with that group.

It is important to consider why this relationship in Study Three might be different from that observed in Studies One and Two. Researchers have previously suggested that individuals use their past experiences as a framework for the construction and enactment

of identity within a new social environment (e.g. Beyer and Hannah, 2002; Ashforth et al., 2008). If prior experiences were used by newcomers to frame their subsequent post-entry identity processes, positive post-entry social identity judgements may have been incompatible with previous low levels of anticipatory identification. A drive for self-consistency in this situation could thus have meant that when a newcomer did not identify with the organisation prior to entry, subsequent social identity judgements were granted little weight after entry. This could account for Study Three's finding of a non-significant relationship between social identity judgements and post-entry identification when anticipatory identification was low. Equally however, when anticipatory identification was high and post-entry social identity judgements were positive, a closer relationship was observed between post-entry social identity judgements and post-entry identification. Under these conditions, the degree of pride in the organisation after entry could actually help to further reinforce a sense that the organisation is self-definitive, founded during the pre-entry period, thus resulting in a stronger association between post-entry pride and post-entry identification.

However whilst these propositions so far do not appear contradictory to the proposed conceptual model, it is important to reflect on the level of post-entry identification reported by newcomers when anticipatory identification was high but post-entry pride was low. Under these conditions, and divergent to a hypothesised drive for self-consistency, post-entry identification was also low. Thus despite identifying with the group prior to entry, participants' post-entry identification diminished if the group was not seen as a source of positive social identity after joining. To account for this observation, we might turn to the suggestion that enduring identification is predicated on the stability of the perceived identity of the organisation over time. An individual will therefore only continue to identify with an organisation as long as they experience it as subjectively the same organisation (e.g. Ullrich et al., 2005; van Knippenberg et al., 2002; van Dick, Ullrich et al., 2006). Adopting this position, if the identity of the group is perceived to be notably different after joining to the assumed identity of the group prior to entry, a newcomer may no longer be expected to identify with that organisation, or might at least report lower levels of identification to those reported prior to entry.

Nonetheless this does not in itself explain why this effect was observed in Study Three, but absent in both of the previous studies. In looking to understand why the findings in the present study should differ from the preceding two studies, it may be appropriate to consider the specific antecedent of anticipatory identification manipulated in this study. In Study Three, the only information participants had about the group prior to entry was feedback concerning the "decision-making capacity" of the group. As a result, rather than simply providing participants with a means to evaluate whether the group was a source of

positive social identity, this feedback conceivably provided the context through which the group's identity was deduced (Postmes, Spears, Lee and Novak, 2005). If so, the capacity for decision-making relative to other groups could have become the key defining characteristic of the group's identity. Were this characteristic to disappear after entry, not only would this diminish perceptions of the group's status, but the group might also be felt to have an entirely different identity. A newcomer would not maintain self-consistency by maintaining their identification with the group; post-entry identification would thus be expected to decline.

In contrast, within the previous two studies the identity of the group was not predicated on status-defining feedback alone; either because the research was conducted within a "real" organisation (Study One) or because this variable was not manipulated prior to entry (Study Two). In these settings, it may therefore be argued that subsequent information about the group served only an evaluative, and not an identity-defining, function, and thus could be buffered by the extent to which the newcomer identified with the group prior to entry. An individual could preserve a consistent sense of self by continuing to identify with the group, even if the status of that group was perceived to have declined. However, whilst this proposition may suggest why a different pattern of results was observed, it would require further testing before it could be feasibly put forward as a definitive explanation for the results obtained in Study Three. As discussed below, it is plausible that the different findings observed in Study Three, in contrast to Studies One and Two, could also have been the consequence of the methodological limitations of the study.

8.3.3. *Limitations*

Many of the methodological limitations of Study Two can also be extended to Study Three, and the reader is referred to the preceding chapter for further elaboration of these limitations. In spite of this, the primary aim of Study Three was to adopt a similar research design to Study Two in order to explore an alternative antecedent of anticipatory identification, in the form of pre-entry social identity judgements. It was consequently believed acceptable that these limitations were not specifically addressed within the present study, and instead were attended to within Study Four. A number of potential limitations that were specific to Study Three were noted however and these are discussed below.

Unlike Study One, where both pre-entry pride and pre-entry respect were introduced as antecedents of anticipatory identification, Study Three concentrated on intergroup social identity judgements, exploring only the effect of participants' pride in the group prior to entry on anticipatory identification. This focus was felt most appropriate in terms of both

the research design and the large body of literature highlighted above that has established perceived external prestige as a key antecedent of organisational identification. Yet despite the considerable benefits of this approach, it nonetheless overlooked the potential influence of intragroup judgements on anticipatory identification. The extent to which individuals believe themselves to be respected by an organisation has also been highlighted as an important determinant of identification, both binding the individual more closely to the group and promoting a sense of positive self-esteem (e.g. Huo et al., 2010; Tyler and Blader, 2003). Indeed, Boezeman and Ellemers (2008) have shown that, at least under certain circumstances, perceptions of respect can actually have a greater impact upon attraction to an organisation amongst future members than perceptions of pride. As such, not attending to a potential causal relationship between pre-entry respect and anticipatory identification could be seen as a fundamental limitation within the current research.

A further limitation unique to Study Three was the sample used within the research. Unlike previous studies where a predominantly student-based sample was used, participants in Study Three were equally sourced from the student body and non-academic staff within the university. Participants were randomly allocated to experimental conditions and age and employment status were found not to significantly predict any of the variables examined within the study. Yet it remained conceivable that the different results obtained within Study Three in contrast to Studies One and Two may not have been the consequence of the way through which anticipatory identification was evoked, as posited above, but instead due to the characteristics of the sample. Accordingly methodological accounts of the findings obtained in Study Three could not be ruled out entirely.

Finally it must be noted that, in contrast to previous studies where structural modelling suggested that the proposed conceptual model was a better fit to the data than competing models, overall support for the conceptual model was not obtained in Study Three. Due to the lack of support for several key hypotheses in this study, this observation is perhaps understandable. However it still raised concerns that competing models could have accounted for the findings within Study Three. SEM, for instance, suggested that perceptions of the group's pre-entry status, rather than their anticipatory identification per se, could also have accounted for the pattern of relationships observed between post-entry variables. Yet given that the findings of Study Three had diverged considerably from the findings of Studies One and Two, it is important to engage in further testing, rather than look to abandon the conceptual model at this stage.

8.3.4. Next Steps

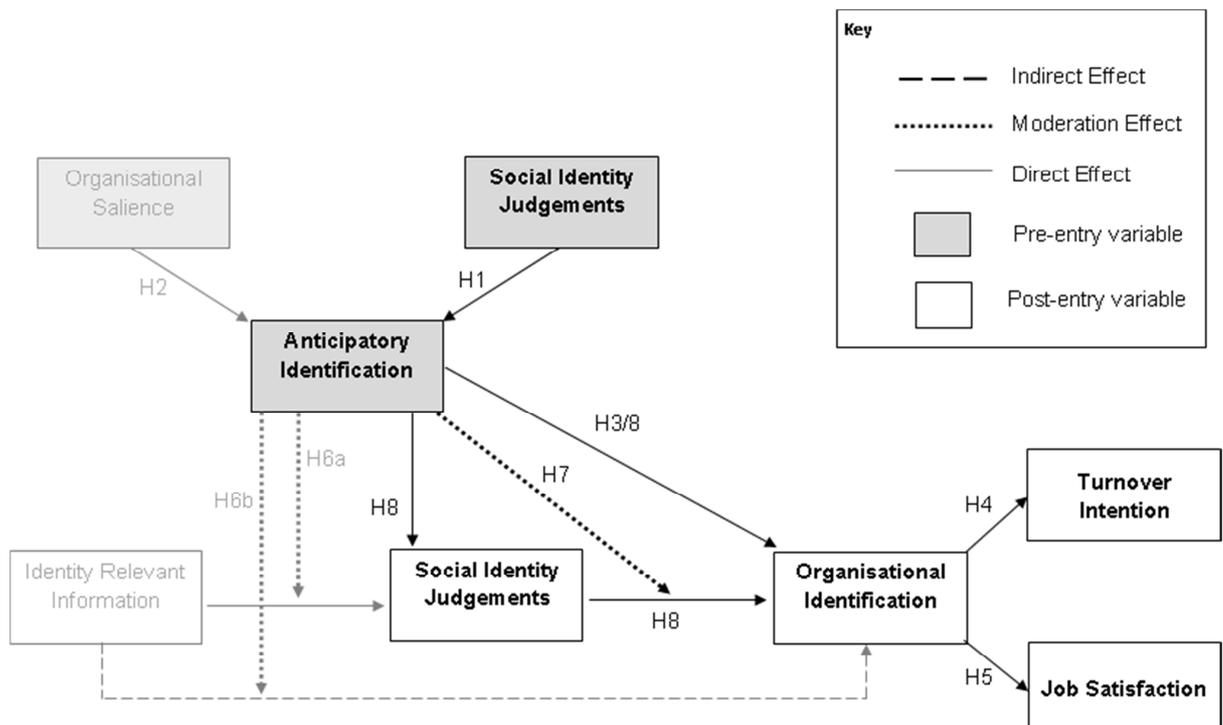
Study Three provided support for a positive social identity motive as an antecedent of anticipatory identification. This study additionally found evidence of a feedback loop consequence of anticipatory identification. However, whilst anticipatory identification was also shown to moderate the relationship between post-entry social identity judgements and post-entry identification, this relationship was not in keeping with the hypothesised buffering mechanisms set out within the conceptual model. It was contended above that these differing findings may have been linked to the artificial manipulation of pre-entry status adopted within this study. An important next step is therefore to explore an equivalent pattern of relationships between pre-entry and post-entry variables, yet with reference to naturally occurring, rather than manipulated, social identity judgements. Relatedly, and as discussed in Chapter Seven, an additional necessary extension to the research is to test the conceptual model within a work-based context, rather than the minimal group setting that was the focus of the previous two studies. Consideration of anticipatory identification with a work organisation furthermore will allow the inclusion of post-entry work outcomes, and thus further exploration of the post-entry relevance of anticipatory identification. Finally, Study Three had attended only to intergroup social identity judgements both before and after joining the group. As with Study Two, it had therefore ignored the relationship between anticipatory identification, intragroup social identity judgements and post-entry identification. Consequently another important step forward is to reintroduce this additional social identity judgement to again allow more rigorous testing of the conceptual model.

CHAPTER NINE: STUDY FOUR RESULTS AND DISCUSSION

9.1. Chapter Summary

This chapter describes and discusses the results of Study Four. This study looked to extend the findings of earlier studies by employing a two-wave longitudinal design within an organisational context. It sought to establish whether pre-entry social identity judgements could predict anticipatory identification when measured prior to entry into an organisation, and whether newcomers' anticipatory identification captured prior to entry could influence post-entry identification, directly, indirectly and through a buffering mechanism. The organisational context also enabled hypothesised post-entry work-related outcomes of anticipatory identification, namely job satisfaction and turnover intention, to be addressed for the first time. As a consequence, Hypotheses One, Three, Four, Five, Seven and Eight (see Figure 9.1) were tested in this study. Chapter Nine first describes the steps taken to validate the scales used in Study Four. From here, the chapter moves to present the findings of the study and concludes with a discussion of the theoretical implications of these findings and their alignment with the findings of the three preceding studies.

Figure 9.1: Conceptual Model Study Four



9.2. Study Four Results

9.2.1. Scale Validation

To determine the construct validity of the scales used within Study Four, Confirmatory Factor Analyses (CFA) were conducted. As recognised in previous studies reported within this thesis, the small sample size of Study Four ($n = 45$) increased the likelihood of Type II errors, and therefore increased the risk that a model with adequate fit to the data would be incorrectly rejected (e.g. Loehlin, 2004; MacCallum, et al.1996). The results of the CFA were therefore interpreted with caution and used primarily to inform judgements regarding the validity of subsequent findings of Study Four.

9.2.1.1. Anticipatory Identification

Four items taken from Doosje et al. (1995) were used to measure participants' anticipatory identification prior to joining their new organisation (see Table 7.1, Chapter Seven). Whilst chi-square and RMSEA fit indices suggested a poor fit to the data ($\chi^2 (2) = 8.58$, $p = 0.01$; $RMSEA = 0.27$), CFI, NFI and GFI indices all returned values of 0.90 or above (CFI = 0.93; NFI = 0.92; GFI = 0.90). Hair et al. (2006) have suggested that values above 0.90 can be taken to indicate an adequate fit to the data, and furthermore this less conservative value may be considered appropriate given the small sample size in Study Four. It was therefore decided to adopt the four-item anticipatory identification scale in this study. This four-item measure was subsequently found to have a reliability coefficient of 0.87, suggesting good internal consistency between scale items.

The construct validity of Doosje et al.'s scale had been questioned in Studies Two and Three. As a consequence, Mael and Ashforth's (1992) six-item Organisational Identification scale was also examined in relation to participants' anticipatory identification in Study Four (see Table 9.1). Although the CFI value was greater than 0.9 (CFI = 0.91), remaining goodness-of-fit indices suggested that this scale had a poorer fit to the data ($\chi^2 (9) = 18.64$, $p = 0.03$; $RMSEA = 0.16$; $GFI = 0.88$, $NFI = 0.84$; $AIC\Delta = 18.06$). There was good internal consistency for this scale, with a Cronbach's alpha of 0.83. However there was no evidence from the Akaike Information Criterion to suggest that items from Mael and Ashforth's (1992) scale showed a better fit to the data than the four items taken from Doosje et al. (1995).

Table 9.1: Anticipatory Identification (Mael and Ashforth, 1992) Scale Items

Item Label	Item
MAAOID1	When someone criticises the organisation, it feels like a personal insult.
MAAOID2	I am very interested in what others think about the organisation.
MAAOID3	When I talk about the organisation I usually say "we" rather than "they".
MAAOID4	The organisation's successes are my successes.
MAAOID5	When someone praises the organisation it feels like a personal compliment.
MAAOID6	If a story in the media criticised the organisation, I would feel embarrassed.

9.2.1.2. Post-Entry Identification

Four items from Doosje et al. (1995) were also used to measure participants' identification with the organisation after entry (see Table 7.2, Chapter Seven). This model was found to have a very good fit to the data ($\chi^2(2) = 0.06$, $p = 0.97$; RMSEA = 0.00; GFI = 0.99, NFI = 1.00 CFI = 1.00). There was also found to be very good internal consistency between items ($\alpha = 0.91$). This four-item scale was therefore adopted.

CFA however did not suggest a good fit to the data for the six items taken from Mael and Ashforth's (1992) Organisational Identification scale (see Table 9.2). Although the reliability of the scale was good ($\alpha = 0.87$), the values obtained for a range of goodness-of-fit indices were indicative of a poorer fit than the four-item measure ($\chi^2(9) = 23.14$, $p = 0.006$; RMSEA = 0.19; GFI = 0.87; NFI = 0.84; CFI = 0.89; AIC Δ = 31.08). This observation supported the criticisms previously raised concerning the construct validity of this scale (e.g. Bergami and Bagozzi, 2000; Ellemers et al., 1999) and provided further post-hoc justification for the adoption of Doosje et al.'s (1995) four-item measure within previous studies. On the basis of these findings it was decided that only the four-item measure and not Mael and Ashforth's (1992) scale would be adopted within Study Four.

Table 9.2: Post-Entry Identification (Mael and Ashforth, 1992) Scale Items

Item Label	Item
MAOID1	When someone criticises the organisation, it feels like a personal insult.

MAOID2	I am very interested in what others think about the organisation.
MAOID3	When I talk about the organisation I usually say "we" rather than "they".
MAOID4	The organisation's successes are my successes.
MAOID5	When someone praises the organisation it feels like a personal compliment.
MAOID6	If a story in the media criticised the organisation, I would feel embarrassed.

9.2.1.3. Pre-Entry Pride

Five items taken from Blader and Tyler (2009) were used to measure participants' pride in their new organisation prior to entry (see Table 9.3). CFA indicated that this five-item one-factor model overall had an adequate fit to the data ($\chi^2(5) = 7.94, p = 0.16$; RMSEA = 0.12; GFI = 0.94; NFI = 0.94; CFI = 0.98). This scale was also found to have good internal consistency ($\alpha = 0.87$). Accordingly, the five-item pre-entry pride scale was adopted within Study Four.

Table 9.3: Pre-Entry Pride Scale Items

Item Label	Item
PREPRI1	The organisation is one of the best in its field.
PREPRI2	People are impressed when I tell them I will be working at the organisation.
PREPRI3	The organisation is well respected in its field.
PREPRI4	I think that working at the organisation will reflect well on me.
PREPRI5	I am proud to tell others I will be working at the organisation.

9.2.1.4. Post-Entry Pride

Five items were also used to measure participants' post-entry pride in the organisation (See Table 9.4). This five-item model was generally not found to have a good fit to the data ($\chi^2(5) = 16.86, p = 0.005$; RMSEA = 0.23; GFI = 0.88, NFI = 0.89). However CFI was found to be acceptable (CFI = 0.92), and the standardised root mean square residual (RMR) was lower than 0.05, indicated a well-fitting model (Byrne, 2001; SRMR = 0.046).

The five-item model also had good internal consistency ($\alpha = 0.86$). Accordingly, it was decided to cautiously adopt the five-item post-entry pride scale within Study Four.

Table 9.4: Post-Entry Pride Scale Items

Item Label	Item
PRI1	The organisation is one of the best in its field.
PRI2	People are impressed when I tell them I work at the organisation.
PRI3	The organisation is well respected in its field.
PRI4	I think that working at the organisation reflects well on me.
PRI5	I am proud to tell others I work at the organisation.

9.2.1.5. Pre-Entry Respect

Six items taken from Blader and Tyler (2009) were used to measure the perceived respect participants received from the organisation prior to entry (See Table 9.5). This six-item one-factor model was overall found to have a good fit to the data ($\chi^2 (9) = 13.75$, $p = 0.13$; RMSEA = 0.11; GFI = 0.91; NFI = 0.95; CFI = 0.98). This scale also had a Cronbach's alpha of 0.94, exceeding the minimum threshold of 0.70 recommended by Nunnally (1978). The six-item pre-entry respect scale was therefore adopted within Study Four.

Table 9.5: Pre-Entry Respect Scale Items

Item Label	Item
PRERES1	The managers at the organisation will respect the work I do.
PRERES2	The managers at the organisation will respect my work-related ideas.
PRERES3	The managers at the organisation will think highly of the quality of my work.
PRERES4	The managers at the organisation will appreciate my unique contributions on the job.
PRERES5	The managers at the organisation will think that I have valuable insights and ideas.
PRERES6	The managers at the organisation will think it difficult to replace me.

9.2.1.6. Post-Entry Respect

Six items were also used to measure the respect participants received from the organisation after joining (see Table 9.6). Although RMSEA and GFI fit indices suggested a poor fit to the data (RMSEA = 0.14; GFI = 0.89), chi-squared was marginally non-significant ($\chi^2(9) = 16.83, p = 0.051$) and NFI and CFI indices indicated an adequate fit (NFI = 0.90; CFI = 0.95). There was also good internal consistency between the six items ($\alpha = 0.89$). Accordingly, the six-item post-entry respect scale was adopted within Study Four.

Table 9.6: Post-Entry Respect Scale Items

Item Label	Item
RES1	The managers at the organisation respect the work I do.
RES2	The managers at the organisation respect my work-related ideas.
RES3	The managers at the organisation think highly of the quality of my work.
RES4	The managers at the organisation appreciate my unique contributions on the job.
RES5	The managers at the organisation think that I have valuable insights and ideas.
RES6	The managers at the organisation think it difficult to replace me.

9.2.1.7. Turnover Intention

Four items taken from De Jong and Schalk (2010) were used to measure participants' turnover intentions after joining the organisation, One item (TURN3) was reverse coded (see Table 9.7). This four-item, one factor model was found to have a very good fit to the data ($\chi^2(2) = 0.47, p = 0.81$; RMSEA = 0.00; GFI = 1.00; NFI = 1.00; CFI = 1.00). Cronbach's alpha also suggested that this scale possessed very good reliability ($\alpha = 0.91$). As a consequence, the four-item turnover intention scale was adopted in Study Four.

Table 9.7: Turnover Intentions Scale Items

Item Label	Item
TURN1	I often feel like quitting this organisation.

TURN2	Despite the obligations I have made to this organisation, I want to quit my job as soon as possible.
TURN3	I would like to stay with this organisation as long as possible. (r)
TURN4	If I could, I would quit today.

9.2.1.8. Job satisfaction

Four items taken from Randsley de Moura et al. (2009) were used to measure participants' post-entry job satisfaction (see Table 9.8). Overall this scale was found to have a very good fit to the data ($\chi^2 (2) = 0.26$, $p = 0.88$; RMSEA = 0.00; GFI = 1.00; NFI = 1.00; CFI = 1.00) and very good internal consistency ($\alpha = 0.91$). The four-item one-factor scale was therefore adopted within Study Four.

Table 9.8: Job Satisfaction Scale Items

Item Label	Item
SAT1	All in all, I am satisfied with my current job.
SAT2	My job measures up to the sort of job I wanted when I took it.
SAT3	Knowing what I know now, if I had to decide all over again whether to take my job, I would.
SAT4	I enjoy the work that I do.

9.2.1.9. Need for Identification

Participants' need for identification was measured using six items taken from Mayhew et al.'s (2010) Need for Identification scale (see Table 6.7, Chapter Six). Initial analysis of the goodness-of-fit indices for this scale did not suggest that the six-item one factor model had a good fit to the data ($\chi^2 (9) = 36.01$, $p < 0.001$; RMSEA = 0.26; GFI = 0.81; NFI = 0.85; CFI = 0.88). Examination of the modification indices for this model suggested that there may be cross loading between the item NOID2 and NOID3 (MI =14.06). Visual exploration of these items did indicate redundancy, as the terms "who I am" and "identity" are frequently used synonymously both by researchers and in lay terminology. Therefore, unlike in Studies One and Three where there had been no evidence of redundancy and all six items were adopted within the research, in Study Four, it was felt appropriate to

respecify with the item NOID3 removed¹². This respecified five-item model was found to have a very good fit to the data ($\chi^2(5) = 4.39$, $p = 0.50$; RMSEA = 0.00; GFI = 0.96; NFI = 0.97; CFI = 1.00). Akaike Information Criterion indicated that this model was a better fit than the original six-item scale ($AIC\Delta = 35.62$), and the scale was also found to possess very good internal consistency ($\alpha = 0.91$). The five-item need for identification scale was therefore adopted in Study Four.

9.2.2. Missing Data

Missing data were identified prior to statistical analysis. No case had more than 5% of data missing, and examination of the data suggested that missing data could be classified as “missing completely at random”. Estimators of missing data were therefore obtained using the Expectation-Maximisation algorithm.

9.2.3. Data Screening

Statistical techniques based on the General Linear Model were used to test the hypotheses under consideration in Study Four. Prior to analysis the assumptions upon which this form of analysis is based (i.e. normality, linearity, independence of residual terms and homoscedasticity) were assessed.

The normality of the data was first assessed. Although the Kolmogorov-Smirnov test of normality indicated a deviation from normality within a number of variables, standardised skewness and kurtosis values suggested a normal distribution for all but two variables. These were the two work outcome variables measured at Time Two: turnover intention (skewness: $z = 4.83$, $p < 0.001$; kurtosis: $z = 4.21$, $p < 0.001$) and job satisfaction (skewness: $z = -2.88$, $p = 0.004$; kurtosis: $z = 2.26$, $p = 0.02$). However the error terms for these variables was reasonably normally distributed around zero. Therefore transformation of the scores was felt to be inappropriate in this instance as this was likely to impact negatively on the other normally-distributed variables.

Probability plots of the residuals terms were also found to be normally distributed around a mean of zero, both when anticipatory identification was treated as an outcome variable (in line with exploration of the antecedents of anticipatory identification) and when post-entry identification was treated as an outcome variable (in respect of the investigation of the consequences of anticipatory identification). Analysis of these residual plots, as well as partial plots for each predictor against the outcome variables, supported the assumption of linearity and homoscedasticity.

¹² NOID3 rather than NOID2 was removed because this item also showed covariance with the error term for NOID5 ($MI = 9.38$)

When anticipatory identification was treated as an outcome variable within the regression model, with the remaining pre-entry variables (including need for identification) treated as predictors, the Durbin-Watson test returned a value of 2.20. This value was above the upper confidence limit of 1.48 (99% CI) specified by Durbin and Watson (1951) for a model with 45 observations and three predictors. When post-entry identification was treated as an outcome variable and all other variables treated as predictors, a value of $D = 2.52$ was obtained. Again this value exceeded the upper confidence limit of 1.58 (99% CI) for a model with 45 observations and more than five predictors. There was therefore no evidence of autocorrelation within the data set and the assumption of independence of residual terms was met.

Analysis of collinearity statistics when post-entry identification was treated as an outcome variable and all remaining variables treated as predictors found variance inflation factors of between 1.55 and 3.83. Although these values are below the critical value of 10 recommended by Yan (2009) they nonetheless raised some cause for concern that there may be considerable shared variance between some of the variables measured within Study Four. Of most notable concern was potential collinearity between pre-entry pride and post-entry pride; as these variables had 68% and 67% of their variance loading onto a single eigenvalue. However this analysis did not conclusively indicate dependency between these two variables. Moreover, subsequent principal component analysis using oblique rotation indicated a two-factor solution, with the pattern matrix showing that items by and large loaded onto the expected factors¹³. It was therefore decided to proceed with both variables included within the analysis yet to exercise caution when making inferences on the basis of the results obtained.

9.2.4. Control Variables

Participants' age, gender and need for identification as well as the size of the organisation and the time between submission of the first survey and entry into the organisation were treated as control variables within Study Four. Prior to hypothesis testing, the impact of these control variables on the core variables under examination was investigated.

9.2.4.1. Demographic Variables

Participants' age was not found to significantly correlate with any of the predictor or outcome variables examined within Study Four ($r_s \leq \pm 0.17$, $p_s \geq 0.27$). Participants'

¹³ Only one exception was observed, PRI2, which was not found to load onto either factor at a coefficient higher than 0.5. However in light of the confirmatory factor analysis findings presented in Section 9.2.1.4, and again due to the small sample size of this study, it was decided to take no further action with regards to this item.

gender was also not found to be a significant predictor of any of the variables measured ($t_{s(43)} \leq 1.97$, $p_s \geq 0.056$). Age and gender were therefore not controlled during the subsequent analysis.

9.2.4.2. Duration between First Survey Completion and Organisational Entry

The number of days between participants' completion of the pre-entry survey and their entry into the organisation was also not found to correlate with any other variable within the study ($r_s \leq \pm 0.15$, $p_s \geq 0.30$). This variable was also not addressed further within the analysis.

9.2.4.3. Organisation Size

Organisation size was not found to correlate with the majority of variables under examination ($r_s \leq 0.26$, $p_s \geq 0.08$). Size was however found to be a significant predictor of participants' pride in the organisation, both before ($r = 0.44$, $p = 0.003$) and after entry ($r = 0.54$, $p < 0.001$). Organisation size was therefore controlled within Study Four.

9.2.4.4. Need for Identification

Examination of the zero order correlations in Table 9.9 indicated that participants' need for identification was a significant predictor of their identification with the organisation before ($r = 0.62$, $p < 0.001$) and after entry ($r = 0.40$, $p = 0.006$), as well as both the pre-entry respect ($r = 0.51$, $p < 0.001$) and post-entry respect ($r = 0.35$, $p = 0.02$) they experienced from the organisation. Need for identification was therefore also included as a control variable during the subsequent analysis.

9.2.5. Descriptive Statistics

Descriptive statistics and zero order correlations are presented in Table 9.9. Analysis of these results indicated a significant correlation between anticipatory identification and both pre-entry pride ($r = 0.55$, $p < 0.001$) and pre-entry respect ($r = 0.55$, $p < 0.001$). There was also a significant relationship between post-entry identification and post-entry pride ($r = 0.37$, $p = 0.01$) as well as post-entry respect ($r = 0.44$, $p = 0.002$). A significant correlation was additionally observed between anticipatory identification and post-entry identification ($r = 0.60$, $p < 0.001$) and anticipatory identification and both post-entry status judgements (post-entry pride: $r = 0.48$, $p = 0.001$; post-entry respect: $r = 0.30$, $p = 0.05$). Moreover anticipatory identification was significantly and positively related to participants' post-entry job satisfaction ($r = 0.50$, $p < 0.001$), and significantly and negatively related to participants' post-entry turnover intention ($r = -0.48$, $p = 0.001$). These correlations broadly supported the pattern of relationships set out within the conceptual model. Further

analysis was therefore conducted to explore the nature of the relationship between variables.

Table 9.9: Means, standard deviations, reliability coefficients and correlations of the measured variables

	Mean	SD	1	2	3	4	5	6	7	8	9
1 Anticipatory Identification	3.83	.73	(.87)								
2 Pre-Entry Pride	4.09	.77	.55***	(.87)							
3 Pre-Entry Respect	3.84	.69	.54***	.26	(.94)						
4 Post-Entry Identification	3.97	.78	.60***	.31*	.29	(.91)					
5 Post-Entry Pride	4.07	.68	.48***	.76***	.14	.37*	(.86)				
6 Post-Entry Respect	3.93	.56	.30*	.27	.44**	.39**	.29	(.89)			
7 Need for Identification	3.17	.92	.62***	.22	.51***	.40**	.20	.35*	(.91)		
8 Job Satisfaction	3.87	.91	.50***	.55***	.31*	.57***	.42*	.44***	.26	(.91)	
9 Turnover Intention	1.89	.95	-.48***	-.57***	-.24	-.75***	-.52***	-.49***	-.21	-.82***	(.91)

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

9.2.6. Antecedents of Anticipatory Identification

Hypothesis 1: Pre-entry social identity judgements will be positively related to anticipatory identification.

Hierarchical multiple linear regression analysis was conducted to determine whether participants' social identity judgements prior to joining the organisation significantly predicted their anticipatory identification. Need for identification and organisation size were entered at Step One as control variables ($R^2 = 0.39$, $p < 0.001$). Participants' pre-entry social identity judgements were subsequently entered into the regression model at Step Two and were found to make a significant contribution to the regression model ($R^2\Delta = 0.25$, $p < 0.001$). Support was therefore obtained for Hypothesis One. Examination of the individual β values for pre-entry pride and pre-entry respect highlighted that pre-entry pride ($\beta = 0.50$) was a stronger predictor of anticipatory identification than pre-entry respect ($\beta = 0.28$). These coefficients were equivalent in magnitude to the estimates obtained in Study One. Together convergent support was therefore obtained for the role of social identity judgements as significant antecedents of anticipatory identification.

Table 9.10: Multiple Regression Analysis of the Relationship between Pre-Entry Social Identity Judgements and Anticipatory Identification

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	F
Step One					.39	.36	.39	13.30***
Organisation Size	.16	.19	.10	.81				
Need for Identification	.51	.10	.64	5.15***				
Step Two					.64	.60	.25	13.54***
Organisation Size	-.34	.18	-.22	-1.87				
Need for Identification	.25	.10	.31	2.57*				
Pre-Entry Pride	.48	.11	.50	4.43***				
Pre-Entry Respect	.30	.12	.28	2.47*				

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

9.2.7. Consequences of Anticipatory Identification

Hypothesis 3: Anticipatory identification will be a significant predictor of post-entry organisational identification.

Hierarchical multiple linear regression analysis was also used to determine whether anticipatory identification was a significant direct predictor of post-entry identification. At Step One control variables were entered, along with participants' pre-entry and post-entry social identity judgements ($R^2 = 0.32$, $p = 0.02$). Anticipatory identification was entered at Step Two and was found to account for an additional 12% of the variance in post-entry identification when control variables and social identity judgements were held constant ($R^2\Delta = 0.12$, $p = 0.007$). This observation provided support for Hypothesis Three.

Table 9.11: Multiple Regression Analysis of the Relationship between Anticipatory Identification and Post-Entry Identification

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.32	.21	.32	2.94*
Organisation Size	-.38	.31	-.23	-1.23				
Need for Identification	.13	.16	.15	.82				
Pre-Entry Pride	.01	.22	.01	.06				
Pre-Entry Respect	.08	.20	.07	.38				
Post-Entry Pride	.42	.27	.37	1.58				
Post-Entry Respect	.36	.22	.26	1.63				
Step Two					.44	.33	.12	8.06**
Organisation Size	-.06	.30	-.03	-.19				
Need for Identification	.00	.15	.00	.00				
Pre-Entry Pride	-.18	.21	-.17	-.85				

Pre-Entry Respect	-.17	.20	-.15	-.83
Post-Entry Pride ¹⁴	.19	.26	.17	.75
Post-Entry Respect	.39	.20	.28	1.92
Anticipatory Identification	.65	.23	.61	2.84**

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Hypothesis 4: Anticipatory identification will be a significant predictor of post-entry turnover intentions.

Further hierarchical linear regression analysis was undertaken to determine whether anticipatory identification was a significant predictor of participants' turnover intentions. Control variables, pre- and post-entry social identity judgements and post-entry identification were entered into the regression model at Step One ($R^2 = 0.75$, $p < 0.001$). At Step Two however anticipatory identification was found to make a non-significant contribution to the regression model ($R^2\Delta = 0.01$, $p = 0.41$). The analysis was subsequently repeated to assess whether anticipatory identification may instead be an indirect predictor of turnover intentions, mediated by post-entry identification (see Table 9.13). However whilst post-entry identification predicted turnover intention at Step Three ($R^2\Delta = 0.26$, $p < 0.001$), the earlier inclusion of anticipatory identification at Step Two again did not make a significant contribution to the regression model ($R^2\Delta = 0.03$, $p = 0.17$).

Hayes (2009) argues that a specified predictor variable (X) can still have an indirect effect upon an outcome variable (Y), even in the absence of a detectable total effect of X on Y. It is therefore important to test an indirect relationship between variables when a "causal steps" approach does not reveal a significant relationship between X and Y. In this instance, subsequent analysis did suggest that there may be a significant indirect effect between anticipatory identification and post-entry turnover intentions through post-entry identification. Although the Sobel test returned a non-significant result ($B = -0.54$, $SE = 0.36$; $z = -1.50$, $p = 0.13$), bootstrap confidence intervals indicated a significant indirect effect (95% CI, -1.70, -.07). Use of bootstrap confidence intervals is considered to be a

¹⁴ As in Study One, the impact of post-entry social identity judgements on post-entry identification was more limited in this analysis compared to previous studies (e.g. Fuller et al. 2006), and to the relationship between pre-entry social identity judgements and anticipatory identification highlighted above, when controlling for pre-entry social identity judgements. The standardised regression coefficients for these predictors were again found to be closer in magnitude to these other studies (Post-Entry Pride $\beta = 0.37$, $p = 0.04$; Post-Entry Respect $\beta = 0.28$, $p = 0.07$) when pre-entry social identity judgements were allowed to vary.

more robust approach to assessment of indirect effects which does not make assumptions regarding the normality of the distribution (Preacher and Hayes 2004). Accordingly, this approach may be considered most appropriate within the current analysis, where concerns were raised regarding the normality of the distribution of participants' turnover intentions (see Section 9.2.3). As a consequence, some support was obtained for Hypothesis Four.

Table 9.12: Multiple Regression Analysis of the Relationship between Anticipatory identification and Turnover Intentions

Variable	B	SE B	β	t	R ²	Adj. R ²	ΔR^2	f
Step One					.75	.70	.75	15.58***
Organisation Size	-.002	.24	-.001	-.01				
Need for Identification	.18	.12	.18	1.54				
Pre-Entry Pride	-.49	.16	-.39	-2.99**				
Pre-Entry Respect	.07	.15	.05	.48				
Post-Entry Pride	.06	.21	.04	.28				
Post-Entry Respect	-.39	.17	-.23	-2.25*				
Post-Entry Identification	-.79	.12	-.64	-6.40***				
Step Two					.75	.70	.01	.69
Organisation Size	.07	.25	.03	.26				
Need for Identification	.15	.12	.15	1.25				
Pre-Entry Pride	-.54	.18	-.43	-3.07**				

Pre-Entry Respect	.01	.17	.01	.06
Post-Entry Pride	.02	.21	.01	.08
Post-Entry Respect	-.37	.18	-.22	-2.07*
Post-Entry Identification	-.83	.14	-.68	-6.13***
Anticipatory Identification	.17	.21	.13	.83

* $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$

Table 9.13: Multiple Regression Analysis of the Relationship between Anticipatory identification and Turnover Intentions through Post-Entry Identification

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.47	.38	.47	5.54***
Organisation Size	.29	.33	.14	.88				
Need for Identification	.08	.17	.08	.49				
Pre-Entry Pride	-.50	.23	-.40	-2.12*				
Pre-Entry Respect	.01	.21	.01	.06				
Post-Entry Pride	-.27	.29	-.19	-.94				
Post-Entry Respect	-.67	.24	-.40	-2.81**				
Step Two					.49	.40	.03	1.89
Organisation Size	.11	.35	.06	.32				
Need	.15	.17	.15	.89				

for Identification

Pre-Entry Pride	-.39	.24	-.31	-1.60
Pre-Entry Respect	.15	.23	.11	.64
Post-Entry Pride	-.14	.30	-.10	-.47
Post-Entry Respect	-.69	.24	-.41	-2.91**
Anticipatory Identification	-.37	.27	-.28	-1.38

Step Three **.75** **.70** **.26** **37.52*****

Organisation Size	.07	.25	.03	.26
Need	.15	.12	.15	1.25
for Identification				
Pre-Entry Pride	-.54	.18	-.43	-3.07**
Pre-Entry Respect	.01	.17	.01	.06
Post-Entry Pride	.02	.21	.01	.08
Post-Entry Respect	-.37	.18	-.22	-2.07*
Anticipatory Identification	.17	.21	.13	.83
Post-Entry Identification	-.83	.14	-.68	-6.13***

* $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$

Hypothesis 5: Anticipatory identification will be a significant predictor of post-entry job satisfaction.

To test whether anticipatory identification may also be implicated in participants' post-entry job satisfaction, the analysis described above was repeated. The same pattern of results was observed within this analysis. As demonstrated in Tables 9.14 and 9.15,

anticipatory identification did not make a significant contribution to the regression model either when treated as a direct predictor of job satisfaction ($R^2\Delta < 0.001$, $p = 0.96$) or when treated an indirect predictor of job satisfaction through post-entry identification ($R^2\Delta = 0.02$, $p = 0.25$). However as before, bootstrap confidence intervals indicated a significant indirect effect independent of the direct effects model ($B = 0.29$, $SE = 0.23$; 95% CI, 0.03, 1.17), although again the Sobel test of this indirect effect was non-significant ($z = 1.26$, $p = 0.21$). There was thus some support for an indirect relationship between anticipatory identification and post-entry job satisfaction, with post-entry identification operating as an intervening variable.

Table 9.14: Multiple Regression Analysis of the Relationship between Anticipatory Identification and Job Satisfaction

Variable	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.53	.44	.53	5.96***
Organisation Size	-.25	.31	-.13	-.80				
Need for Identification	-.13	.15	-.13	-.84				
Pre-Entry Pride	.58	.21	.50	2.76**				
Pre-Entry Respect	.08	.19	.06	.41				
Post-Entry Pride	-.11	.27	-.08	-.39				
Post-Entry Respect	.36	.22	.23	1.62				
Post-Entry Identification	.46	.16	.39	2.89**				
Step Two					.53	.43	.00	.00
Organisation Size	-.24	.33	-.12	-.74				
Need for Identification	-.13	.16	-.13	-.81				

Pre-Entry Pride	.58	.23	.49	2.54**
Pre-Entry Respect	.07	.22	.06	.34
Post-Entry Pride	-.11	.28	-.08	-.39
Post-Entry Respect	.37	.23	.23	1.59
Post-Entry Identification	.46	.18	.39	2.56**
Anticipatory Identification	.01	.27	.01	.05

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Table 9.15: Multiple Regression Analysis of the Relationship between Anticipatory Identification and Job Satisfaction through Post-Entry Identification

Variable	B	SE B	β	t	R ²	Adj. R ²	ΔR^2	f
Step One					.42	.33	.42	4.66***
Organisation Size	-.42	.33	-.22	-1.28				
Need for Identification	-.07	.17	-.07	-.42				
Pre-Entry Pride	.59	.23	.50	2.55*				
Pre-Entry Respect	.11	.21	.07	.54				
Post-Entry Pride	.09	.28	.07	.31				
Post-Entry Respect	.53	.24	.33	2.24*				
Step Two					.44	.34	.02	1.36
Organisation Size	-.27	.35	-.14	-.76				
Need for Identification	-.13	.17	-.13	-.75				

Pre-Entry Pride	.50	.24	.42	2.06*
Pre-Entry Respect	-.001	.23	-.001	-.01
Post-Entry Pride	-.02	.30	-.02	-.07
Post-Entry Respect	.54	.24	.34	2.30*
Anticipatory Identification	.31	.26	.25	1.17
Step Three				.53 .43 .09 6.56*
Organisation Size	-.24	.33	-.12	-.74
Need for Identification	-.13	.16	-.13	-.81
Pre-Entry Pride	.58	.23	.49	2.54
Pre-Entry Respect	.07	.22	.06	.34
Post-Entry Pride	-.11	.28	-.08	-.39*
Post-Entry Respect	.37	.23	.23	1.59
Anticipatory Identification	.01	.27	.01	.05
Post-Entry Identification	.455	.18	.39	2.56*

* $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$

9.2.8. Buffering Effect of Anticipatory Identification

Hypothesis 7: Anticipatory identification will moderate the relationship between post-entry social identity judgements and post-entry identification, so that the relationship between post-entry social identity judgements and post-entry identification is weaker when anticipatory identification is high.

Moderated linear regression analysis, using mean-centred independent variables, was undertaken to determine whether anticipatory identification moderated the relationship

between post-entry social identity judgements and post-entry identification. This analysis was first conducted for intergroup social identity judgements. Control variables, pre- and post-entry respect and pre-entry pride were entered at Step One ($R^2 = 0.27$, $p = 0.03$). At Step Two main effects were observed for anticipatory identification ($\beta = 0.47$, $p = 0.03$) but not for post-entry pride ($\beta = 0.21$, $p = 0.34$). The interaction between the two predictor variables however was significant ($\beta = -0.32$, $p = 0.02$). The plot of this interaction is presented in Figure 9.2.

Table 9.16: Multiple Regression Analysis of the Interactive Effects of Anticipatory Identification and Post-Entry Pride on Post-Entry Identification

	B	SE B	β	t	R^2	Adj. R^2	ΔR^2	f
Step One					.27	.18	.27	2.92*
Organisation Size	-.18	.29	-.11	-.63				
Need for Identification	.20	.15	.23	1.29				
Pre-Entry Pride	.24	.17	.24	1.44				
Pre-Entry Respect	.001	.19	.001	.01				
Post-Entry Respect	.38	.23	.28	1.70				
Step Two					.52	.41	.25	6.12**
Organisation Size	.04	.29	.02	.13				
Need for Identification	.07	.14	.09	.52				
Pre-Entry Pride	-.28	.20	-.27	-1.38				
Pre-Entry Respect	-.16	.19	-.14	-.87				
Post-Entry Respect	.41	.19	.30	2.13*				
Post-Entry Pride	.23	.24	.21	.97				
Anticipatory	.50	.22	.47	2.27*				

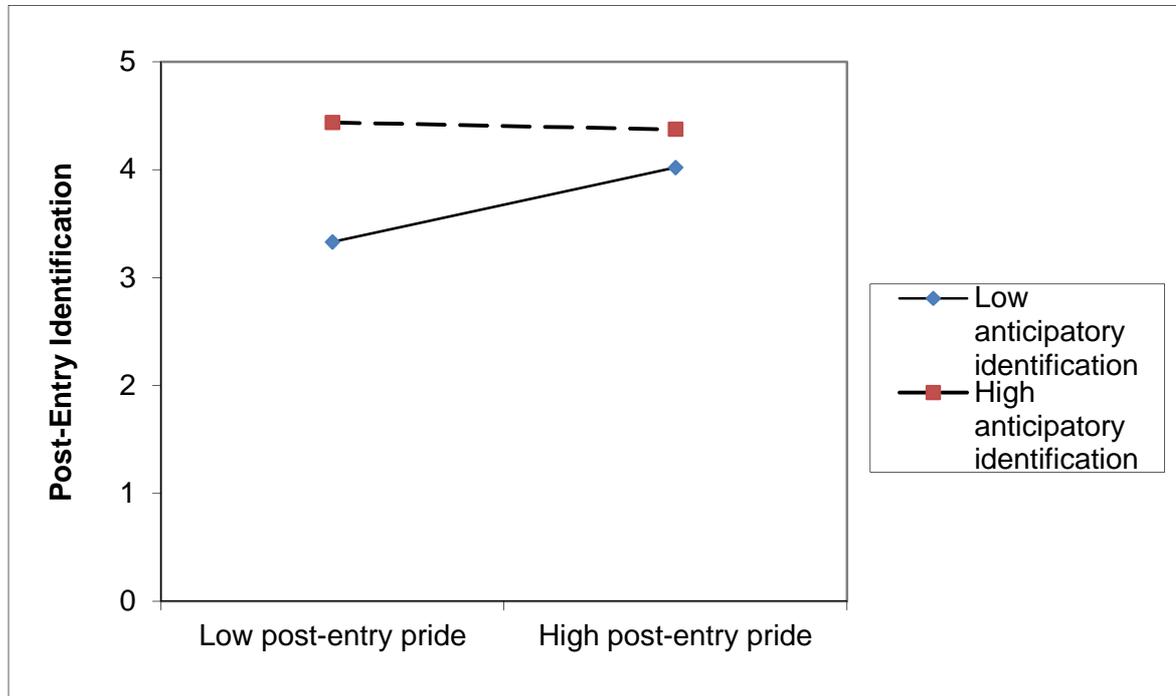
Identification

Post-entry Pride x Anticipatory Identification -0.31 .16 -0.32 -2.43*

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Simple slopes analysis was conducted to further investigate the nature of this interaction. Using conditional values of one standard deviation above and below the mean (Aiken and West, 1991), the gradient of the slope was found not to be significantly different from zero when anticipatory identification was high ($B = -0.05$, $p = 0.86$) or low ($B = 0.51$, $p = 0.08$). The Johnson-Neyman technique however suggested a significant relationship between post-entry pride and post-entry identification when anticipatory identification was 1.23 standard deviations or more below the mean, with a non-significant relationship between post-entry pride and post-entry identification above this value ($B < 0.59$, $p > 0.05$). This reflected the pattern of relationships between variables set out in Hypothesis Seven.

Figure 9.2: Two-Way Interaction Plot of the Moderating Effect of Anticipatory Identification on the Relationship between Post-Entry Pride and Post-Entry Identification



The moderated regression analysis was next repeated, this time exploring whether anticipatory identification might also moderate the relationship between post-entry respect and post-entry identification. Control variables, pre- and post-entry pride and pre-entry respect were controlled at Step One ($R^2 = 0.27$, $p = 0.03$). Subsequently a significant main

effect was again found for anticipatory identification ($\beta = 0.61$, $p = 0.008$) but a marginally non-significant main effect was observed for post-entry respect ($\beta = 0.29$, $p = 0.07$). On this occasion the interaction term was also non-significant ($\beta = -0.02$, $p = 0.91$). The small sample size within Study Four meant that statistical tests employed only had the power to detect large effects (Cohen, 1992). As such, the non-significance of the post-entry respect main effect could have been attributed to this low statistical power. However the size of the coefficient for the interaction term did not suggest that a significant moderation effect would have been observed in a test with greater statistical power. Accordingly, there was partial support for Hypothesis Seven, with anticipatory identification found to moderate the relationship between post-entry pride and post-entry identification, but not between post-entry respect and post-entry identification.

Table 9.17: Multiple Regression Analysis of the Interactive Effects of Anticipatory Identification and Post-Entry Pride on Post-Entry Identification

	B	SE B	β	t	R ²	Adj. R ²	ΔR^2	f
Step One					.27	.18	.27	2.88*
Organisation Size	-.27	.31	-.16	-.87				
Need for Identification	.18	.15	.22	1.18				
Pre-Entry Pride	.00	.22	.003	.01				
Pre-Entry Respect	.16	.19	.14	.84				
Post-Entry Pride	.44	.27	.39	1.64				
Step Two					.44	.32	.17	3.64*
Organisation Size	-.05	.31	-.03	-.17				
Need for Identification	.01	.16	.01	.04				
Pre-Entry Pride	-.20	.24	-.19	-.80				
Pre-Entry Respect	-.18	.22	-.16	-.80				

Post-Entry Pride	.20	.26	.17	.75
Post-Entry Respect	.40	.21	.29	1.86
Anticipatory Identification	.65	.23	.61	2.79**
Post-entry Respect x Anticipatory Identification	-.04	.30	-.02	-.12

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

9.2.9. Feedback Loop of Anticipatory Identification

Hypothesis 8: The relationship between anticipatory identification and post-entry identification will be mediated by post-entry social identity judgements.

Hierarchical multiple linear regression analysis was conducted to determine whether the relationship between anticipatory identification and post-entry identification was mediated by post-entry social identity judgements. Control variables, pre-entry pride and pre-entry respect were entered into the regression model at Step One ($R^2 = 0.22$, $p = 0.04$). Anticipatory identification was entered at Step Two and was found to account for an additional 15% of the variance in post-entry identification ($R^2\Delta = 0.15$, $p = 0.004$). However the entry of post-entry social identity judgements at Step Three did not make a significant contribution to the regression model ($R^2\Delta = 0.07$, $p = 0.10$). In line with the “causal steps” approach (Baron and Kenny, 1986), there was therefore no support for the proposition that post-entry social identity judgements mediated the relationship between anticipatory identification and post-entry identification.

The findings of this regression analysis must be interpreted with caution in light of the low statistical power of this test. To reduce the number of predictors within the regression model, and thus increase the power of the analysis, each social identity judgement was subsequently explored in isolation. In this analysis anticipatory identification did not have an indirect effect on post-entry identification through post-entry pride ($B = 0.05$, $SE = 0.08$; $z = 0.63$, $p = 0.53$; 95% CI, -0.03, 0.37). Equally, post-entry respect once again was not found to mediate the relationship between anticipatory identification and post-entry identification ($B < 0.001$, $SE = 0.17$; $z = 0.005$, $p > 0.99$; 95% CI, -0.12, 0.316). Accordingly, there was no support obtained for Hypothesis Eight within the current analysis.

Table 9.18: Multiple Regression Analysis of the Relationship between Anticipatory identification and Post-Entry Identification through Post-Entry Social Identity Judgements

Variable	B	SE B	β	t	R ²	Adj. R ²	ΔR^2	f
Step One					.22	.14	.22	2.81
Organisation Size	-.05	.28	-.03	-.17				
Need for Identification	.26	.15	.30	1.71				
Pre-Entry Pride	.24	.17	.24	1.44				
Pre-Entry Respect	.09	.19	.08	.46				
Step Two					.37	.29	.15	9.49**
Organisation Size	.18	.27	.11	.69				
Need for Identification	.07	.15	.10	.58				
Pre-Entry Pride	-.09	.19	-.09	-.47				
Pre-Entry Respect	-.12	.19	-.11	-.65				
Anticipatory Identification	.69	.22	.65	3.08**				
Step Three					.44	.33	.07	2.23
Organisation Size	-.06	.30	-.03	-.19				
Need for Identification	.00	.15	.00	.00				
Pre-Entry Pride	-.18	.21	-.17	-.85				
Pre-Entry Respect	-.17	.20	-.15	-.83				

Anticipatory Identification	.65	.23	.61	2.84**
Post-Entry Pride	.19	.26	.17	.75
Post-Entry Respect	.39	.20	.28	1.92

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

9.2.10. Assessment of the Conceptual Model

To further explore the conceptual model set out in Chapter Three, Structural Equation Modelling was conducted using AMOS (Version 20). Expectedly, in light of the failure above to find support for several of the key research hypotheses, the conceptual model was not found to be a good fit to the data ($\chi^2(36) = 91.24$, $p < 0.001$; RMSEA = 0.19; GFI = 0.78; NFI = 0.70; CFI = 0.78). However subsequent analysis was conducted to determine whether a range of alternative models represented a better fit to the data than the conceptual model. These models were:

Model Two (*direct post-entry impact of pre-entry social identity judgements*): To consider whether pre-entry social identity judgements, rather than anticipatory identification, were the key predictor variables within the model, Model Two specified that pre-entry social identity judgements would predict anticipatory identification, post-entry social identity judgements, post-entry identification, job satisfaction and turnover intention. This model therefore explored whether pre-entry social identity judgements, rather than anticipatory identification, may directly influence post-entry outcomes.

Model Three (*direct relationship between pre- and post-entry variables*): To examine whether there may be a direct relationship between pre- and post-entry variables, Model Three specified that there would be no mediated relationships between pre- and post-entry variables, i.e. pre-entry respect predicted post-entry respect, pre-entry pride predicted post-entry pride, anticipatory identification predicted post-entry identification and post-entry identification predicted turnover intention and job satisfaction.

Model Four (*independent pre- and post-entry social identity judgements model*): To examine whether pre- and post-entry social identity judgements impacted on post-entry identification through different paths, Model Four specified that pre-entry pride and pre-entry respect would predict post-entry identification through anticipatory identification, whilst post-entry pride and post-entry respect would also, independently, predict post-entry identification.

Model Five (*constant social identity model*): To consider whether participants' reporting of pre-entry social identity judgements, anticipatory identification, post-entry social identity judgements and post-entry identification were influenced by a single variable, Model Four specified that one latent "Constant Social Identity" variable would account for covariance in pre-entry social identity judgements, anticipatory identification, post-entry social identity judgements, post-entry identification and turnover intentions. This model therefore explored whether participants' reporting of measured variables both before and after entry was influenced by a single overarching social identity variable.

Model Six (*common method variance model*): To test the assumption that common method variance may explain the pattern of results observed in Study Four, Model Six specified that one latent "pre-entry social identity" variable and one latent "post-entry social identity" variable would account for covariance in participants' reporting of pre-entry and post-entry variables respectively. This model therefore tested whether common method variance at Time One and Time Two may account for covariance between the variables.

Path diagrams for these models are presented in Figure 9.4. As illustrated in Table 9.19, none of the models were found to have a good fit to the data, with all fit indices outside of the recommended cut-off values outlined in Chapter Six. Analysis of the AIC values for these models indicated that of all the models tested, Model Three (presented in Figure 9.3) possessed the "best" fit to the data. This suggested that within the current study, it may have been most appropriate to construe anticipatory identification and post-entry social identity judgements as having an independent impact upon post-entry identification, in keeping with the lack of support observed for Hypothesis Eight. However again it must be recognised that there was no clear substantive evidence to fully support this model, both within the structural equation modelling and within the hypothesis testing discussed above.

Despite this, it is important to recognise that models predicated upon the assumption of a common social identity variable from pre- to post-entry, or that indicated common method variance within the pre-entry and post-entry measurement instruments, were found to have a poorer fit to the data than models more closely aligned to the research hypotheses and the conceptual model. Accordingly, there appeared to be greater support for models which specified a meaningful, theoretically-driven relationship between at least some of the pre- and post-entry variables, in contrast to models which were more in keeping with a methodological explanation for these observations.

Table 9.19: Fit Indices and Model Comparison

Model	AIC	χ^2	df	p	RMSEA	GFI	NFI	CFI
Model One (Conceptual Model)	151.24	91.24	36	0.00	0.19	0.78	0.70	0.78
Model Two	155.48	97.48	37	0.00	0.19	0.75	0.68	0.75
Model Three	143.15	95.15	42	0.00	0.17	0.74	0.69	0.79
Model Four	156.57	104.57	40	0.00	0.19	0.71	0.67	0.74
Model Five	164.27	116.27	42	0.00	.200	0.68	0.62	0.70
Model Six	167.30	117.30	41	0.00	0.21	0.72	0.61	0.69

Figure 7.5: Path Diagram for Conceptual Model Study Four

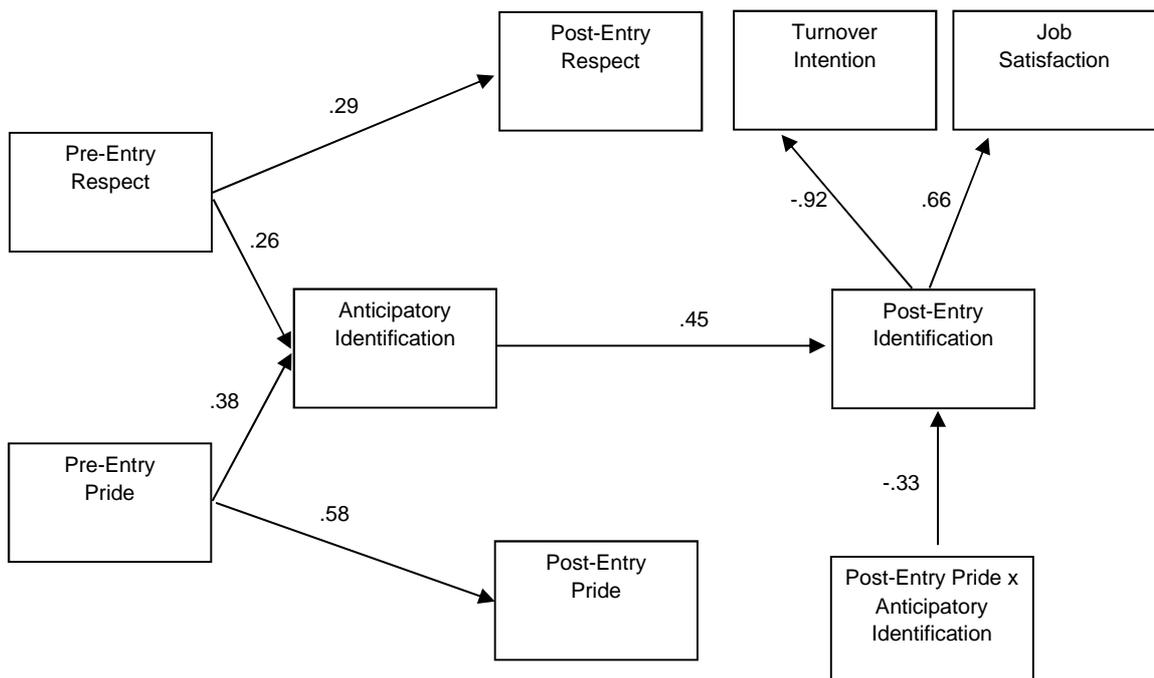


Figure 7.6: Path Diagrams for Alternative Models Study Four

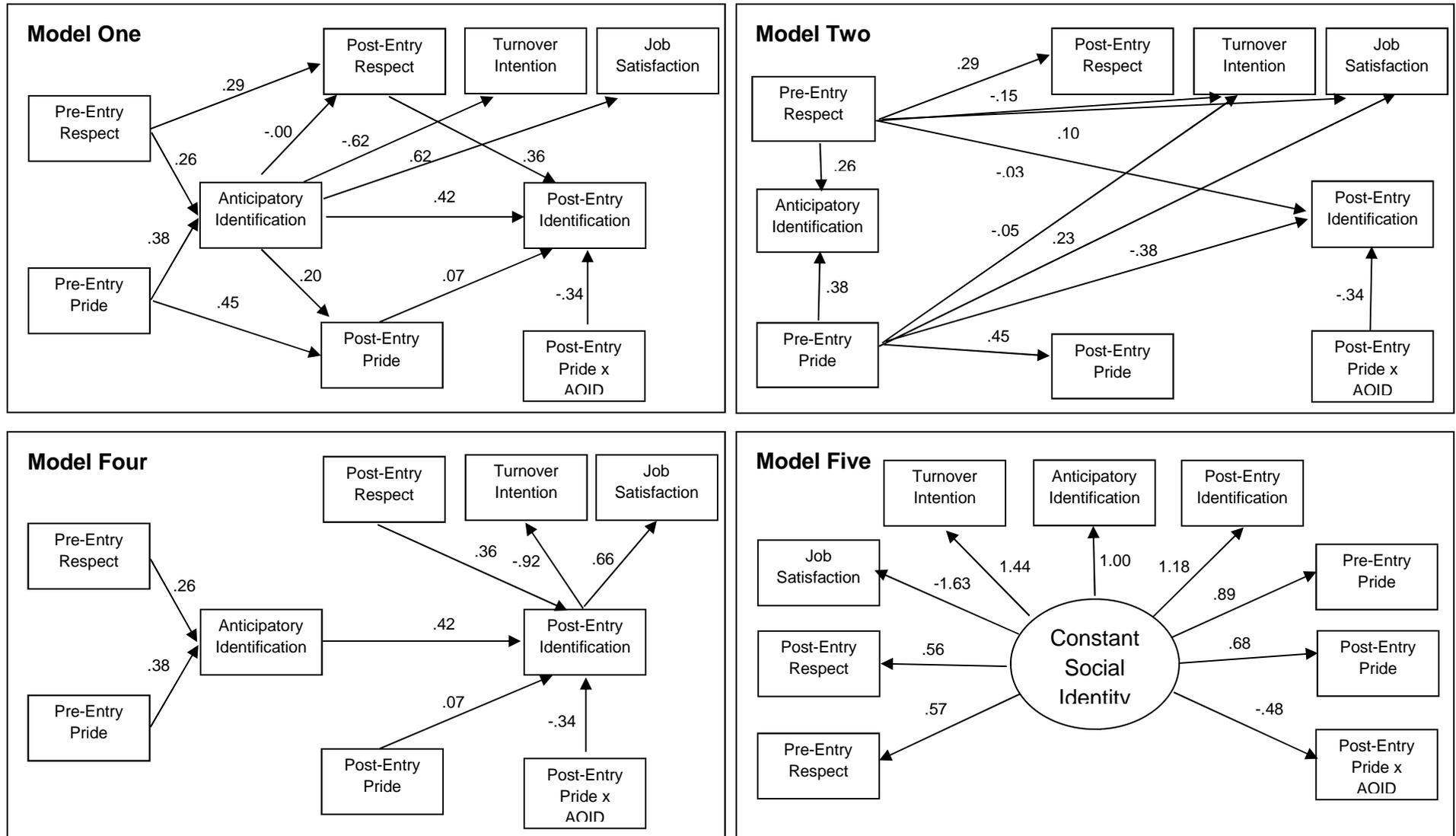
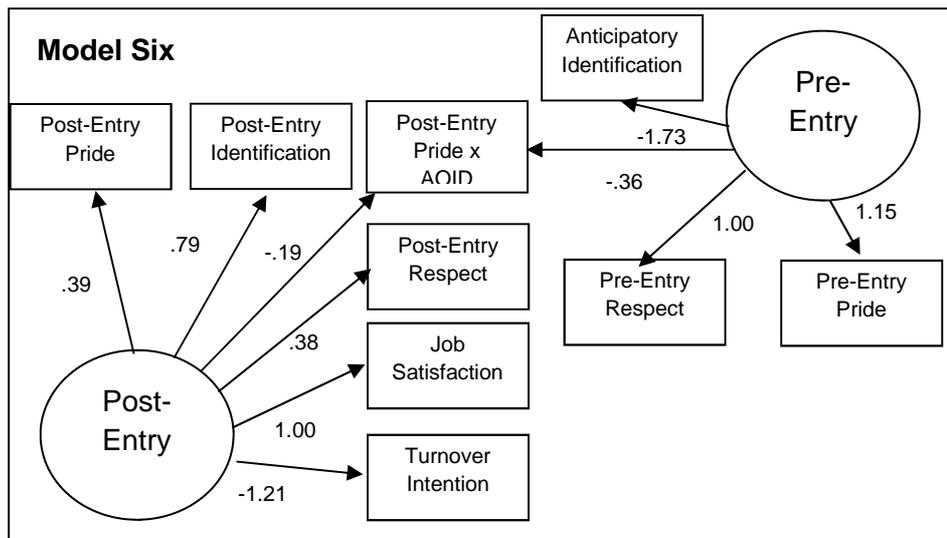


Figure 7.6: Path Diagrams for Alternative Models Study Four



Note: Ovals represent latent constructs and rectangles represent manifest constructs; Control variables and covariances included within analysis but excluded from diagrams for ease of interpretation; Model rotated to facilitate presentation.

9.3. Study Four Discussion

Study Four explored the pattern of antecedents and consequences of anticipatory identification previously investigated in Studies One and Three; looking to again establish a positive social identity motive as an antecedent of anticipatory identification. This study also investigated whether anticipatory identification might directly impact upon post-entry identification, as well as indirectly through buffering and feedback loop mechanisms. In this research a longitudinal survey design was adopted, focussing on newcomers' identification with a work organisation before and after entry. Studies One and Three had previously presented differing levels of support for the hypotheses set out in Chapter Three, this organisational context allowed the assumptions of the previous studies to be tested once more, this time within a work-based environment. Furthermore this research context enabled exploration of the relationship between anticipatory identification and important post-entry work outcomes, namely turnover intention and job satisfaction, for the first time. Although support was not obtained for the direct impact of anticipatory identification on job satisfaction and turnover intention, on the whole the results of Study Four were compatible with many of the findings of the three earlier studies. As such, this study allowed increased confidence that the pre- and post-entry social identity processes observed in other social groups could also impact upon individuals' relationship with a new work organisation.

9.3.1. Antecedents of Anticipatory Identification

Hypothesis One proposed that pre-entry social identity judgements would be positively related to anticipatory identification; Study Four once more found evidence to support this hypothesis. Newcomers' pride in their organisation and perceptions of respect received from the organisation prior to entry were both independent predictors of their identification with the organisation before joining. Although Study One had previously obtained equivalent findings to those observed within Study Four, the validity of the relationship between pre-entry social identity judgements and anticipatory identification had been questioned in light of the retrospective report design adopted in this earlier study. Moreover, whilst Study Three was thought to point to a causal relationship between pre-entry intergroup social identity judgements and anticipatory identification, it did not examine the impact of the perceived respect an individual received prior to entry. The triangulation of Study Four with Studies One and Three therefore provided clear support for the assumption that pre-entry social identity judgements positively predicted newcomers' anticipatory identification, contributing further to an understanding of the antecedents of anticipatory identification.

Consistent with the impact of pre-entry social identity judgements on anticipatory identification observed in Study One, pre-entry pride was found to be more closely linked to anticipatory identification than pre-entry respect. Thus a newcomer's perception that their future organisation had external prestige, and was held in high regard amongst organisational outsiders (Smidts et al., 2001), was a stronger predictor of the extent to which they identified with that organisation than the perception that they were valued by their future organisation. This observation again provided further post hoc validation for the findings of Study One; demonstrating that the reporting of pre-entry social identity judgements was equivalent for future members who had not yet joined the organisation and for current members who were retrospectively reporting their pre-entry experiences. This finding was also in line with previous studies that have explored the impact of post-entry intergroup and intragroup social identity judgements on post-entry identification (e.g. Fuller et al., 2006; Tyler and Blader, 2002). Accordingly, Study Four further extended our current understanding of the antecedents of anticipatory identification, highlighting that the impact of social identity judgements on identification appears comparable amongst current and future members of an organisation.

9.3.2. Consequences of Anticipatory Identification

In Chapter Three, post-entry identification was hypothesised to be a key post-entry consequence of anticipatory identification. Definitive support for this hypothesis had

however not been obtained in the preceding studies; Studies One and Three found no evidence that anticipatory identification predicted post-entry identification, whilst Study Two observed a significant positive relationship between these two variables. Study Four was unable to successfully resolve this inconsistency. The present study mirrored Study Two, and contradicted Studies One and Three, finding support for Hypothesis Three and showing anticipatory identification to be a relatively strong predictor of post-entry identification. It was previously suggested that a significant relationship between these variables in Study Two might have been the consequence of differences in participants' need for identification that remained unchanged from pre- to post-entry. Need for identification was however controlled in Study Four, thus this explanation has limited plausibility. Furthermore, whilst personality traits were not measured in this study, Studies Two and Three had found no evidence that any of the Big Five personality traits consistently predicted identification both before and after participants joined their social group. Therefore, again, individual differences between participants did not adequately explain the relationship between anticipatory identification and post-entry identification observed in Study Four. It is therefore necessary to look towards alternative explanations for the pattern of results observed across the four studies; this will be discussed in greater depth in Chapter Ten.

Despite this, we can nonetheless conclude that, within the organisational context explored in Study Four, the extent to which a newcomer identified with their organisation before they had formally become a member was indeed a significant predictor of the extent to which they identified with the organisation after joining. In Chapter Three it was suggested that a relationship between pre- and post-entry identification might be linked to a drive to preserve stability within one's self-concept. Accordingly, when a newcomer defines themselves in terms of an organisation prior to entry, they will look to protect this self-definition after joining. Individuals generally desire a positive and consistent self-concept (e.g. Shrauger, 1975; Swann et al., 1987). Identification with a social group is thought to contribute to this self-consistency (e.g. Dutton et al., 1994; Hogg and Abrams, 1990); thus by continuing to identify with the organisation in the same way before and after taking up membership, a newcomer can maintain a constant sense of who they are relative to their new organisation. In light of the current findings, there does appear to be some reason to suggest that a self-consistency motive could be implicated in the relationship between newcomers' pre- and post-entry identification within an organisational setting.

Although a significant direct relationship was observed between anticipatory identification and post-entry identification, there was no evidence of an indirect relationship between these variables, mediated by post-entry social identity judgements. The predicted feedback loop mechanism set out in Hypothesis Eight was not supported. It was also

noted that, when pre-entry social identity judgements were held constant, there was only limited support for the proposition that post-entry social identity judgements would significantly predict post-entry identification. This significant relationship had been present both in the studies reported in this thesis and, as discussed above, within the work of numerous previous researchers. The standardised regression coefficient in particular for post-entry pride in Study Four ($\beta = 0.17$) was considerably smaller than that observed in Study One ($\beta = 0.45$). It may therefore be contended that there is a weaker association between social identity judgements and post-entry identification when pre-entry judgements are also taken into account. Nonetheless, a sample size of only 45 was ultimately achieved in Study Four. The failure to find a significant relationship between post-entry social identity judgements and post-entry identification may plausibly have been the consequence of the reduced statistical power of the regression analysis. Indeed comparison of the regression coefficients for post-entry respect for these two studies does suggest that this might account for the non-significance of these coefficients (Study One: $\beta = 0.21$; Study Four: $\beta = 0.28$). There is therefore a need for considerable caution when interpreting, and drawing conclusions on the basis of, this analysis.

Study Four did however find some further support for the proposition that anticipatory identification acted as a buffer in the relationship between post-entry social identity judgements and post-entry identification. In Chapter Three, this buffering mechanism was once more attributed, at least in part, to a drive for self-consistency. Hypothesis Seven suggested that post-entry social identity judgements would have a weaker impact upon post-entry identification when anticipatory identification was high. It was argued that an individual with high levels of anticipatory identification would see less value in discontinuing their identification with an organisation after entry, even when faced with negative post-entry information about that organisation. Psychological withdrawal from the organisation would go against a desire for continuity and consistency within a newcomer's self-concept, even if subsequent experiences of the organisation had the potential to threaten the positive nature of this self-concept (e.g. Van Knippenberg et al., 2007). Indeed, under these conditions, ongoing organisational identification may actually help an individual to deal with such identity threats, either collectively or psychologically (e.g. Ellemers et al., 2002; Jetten et al., 2002). Consequently, by continuing to maintain a consistent level of identification with their new organisation after entry, an individual might not only avoid losing a core aspect of their self-definition, but also derive additional individual and collective coping mechanisms.

In support of Hypothesis Seven, there was found to be a non-significant relationship between participants' post-entry pride in the organisation and post-entry identification when anticipatory identification was high. Anticipatory identification therefore seemingly

served as a buffer in the relationship between post-entry pride and post-entry identification. This observation provided a timely and valuable replication of the findings observed in Study Two. By demonstrating that anticipatory identification interacted with post-entry social identity judgements within an organisational context, using a longitudinal design, further assurance was obtained that the buffering effect observed within Study Two was not simply an artefact of the research design adopted. Taking these results in combination ultimately provides an important step forward in understanding the consequences of anticipatory identification.

This same pattern of results however was not seen for the relationship between post-entry respect and post-entry identification. In this instance, the extent to which participants perceived themselves to be valued by the organisation after entry continued to significantly predict post-entry identification, regardless of how closely that individual had identified with the organisation prior to entry. These results were contrary to Study One's findings, where the relationship between post-entry identification and post-entry respect, but not post-entry pride, was moderated by anticipatory identification. Methodological and theoretical reasons were both put forward in Chapter Six to account for these findings in Study One. It was suggested that collinearity between pre-entry and post-entry pride may have suppressed any true interaction between post-entry pride and anticipatory identification. It was also suggested that, because highly identified members felt more secure in their membership of the organisation, information which communicated they were not valued within the organisation had less impact upon their identification (e.g. Lipponen et al., 2011). Yet in these conditions, high identifiers would nonetheless continue to attend to information concerning the external status of the organisation.

Neither account however appeared entirely plausible within the context of Study Four. There was no clear evidence of collinearity between pre- and post-entry respect which might have suppressed the buffering effect of anticipatory identification. Furthermore, the outcomes of membership security has less relevance here given that the significant interaction was between anticipatory identification and post-entry pride, not post-entry respect. We might however return to the low statistical power of the analysis discussed above to account for these observations. Examination of the regression coefficient for the interaction between anticipatory identification and post-entry respect ($\beta = -0.02$, $p = 0.91$) did not provide an indication that a significant interaction effect would have been observed in a test with greater statistical power. Nonetheless, the limited statistical power achieved within Study Four may still feasibly be at the heart of the non-significant interaction between anticipatory identification and post-entry respect.

It may also be possible to consider a theoretical justification for the contrasting results in Studies One and Four. In Chapter Six, it was proposed that a sense of belongingness might inhibit the search for, and interpretation of, subsequent cues regarding membership of the organisation, thus limiting the impact of these cues upon later organisational identification. Sleebos, Ellemers and de Gilder (2006) however have argued that, although the desire to belong is often seen a generic human need, this need will not necessarily be equally prevalent for every group an individual encounters. Thus whilst the experience of being valued within a social group might contribute to a positive social identity, there will be some groups for which being valued by the group is not central to one's self-view as a group member. In these groups, identification derived from perceptions of respect arguably might fluctuate more in response to situational cues, as this respect is not as crucial for the preservation of a positive and consistent sense of self.

It was also suggested in Chapter Six that perceptions of pride and perceptions of respect impact upon an individual's self-concept in very different ways; the former communicating belongingness within the organisation (De Cremer and Tyler, 2005) and the latter communicating that outsiders will view them more positively because of their association with the organisation (Smidts et al., 2001). Accordingly, even when a sense of belonging to a group is not central to an individual's self-concept, they may nonetheless seek personal self-enhancement through the intergroup prestige of that group (e.g. Branscombe, Spears, Ellemers and Doosje 2002). Under such circumstances, identification resulting from one's intergroup status may be more closely associated with the satisfaction of self-esteem and self-consistency needs, in contrast to identification resulting from one's value within group. As such, subsequent judgements regarding the external prestige of the group may be granted less significance in order to ensure a positive and stable sense of self.

Yet, whilst a focus on the reasons for group membership could shed some light on the different observations of Study Four and Study One, it rests on the supposition that participants in Study Four did not seek belongingness within their work organisation; the validity of such a supposition must be questioned. It may be argued that a desire to belong within the organisation might have been lower amongst these participants than amongst permanent employees or students at the start of a four-year university degree (as sampled in Study One). Despite this, is it plausible that these newcomers placed little emphasis on whether or not they were valued by their new colleagues? This assumption also appears contrary to the observed relationship between post-entry social identity judgements and post-entry identification in Study Four; in this study post-entry respect

was found to be a stronger predictor of post-entry identification than post-entry pride¹⁵. The centrality of different social identity judgements to an individual's self-concept was however not explicitly tested within the research, and further investigation would be necessary to verify or discount this proposition.

Turning to additional post-entry consequences of anticipatory identification, the organisational focus of Study Four provided a further extension to the preceding studies by allowing the relationship between anticipatory identification and post-entry work outcomes to be explored for the first time. In Chapter Three, links were drawn between anticipatory identification and post-entry work outcomes. It was argued that an individual who closely identified with an organisation would have little desire to leave the organisation (e.g. van Dick et al., 2004). Equally, high identifiers were thought disposed to perceive their organisation generally more positively. This positive disposition extends to one's role within the organisation, meaning that organisational identification positively predicts job satisfaction (e.g. Amiot, Terry et al., 2007; van Dick et al., 2004; van Dick et al., 2008). Hypotheses Four and Five extended these propositions to suggest that post-entry turnover intention would also be low and job satisfaction would also be high when an individual identified with an organisation prior to entry. Anticipatory identification would therefore also be associated with a lower desire to leave the organisation after entry and a positive construal of all aspects of the organisation, including one's job role.

Some evidence was found to support the proposition that anticipatory identification would be a significant indirect predictor of post-entry turnover intentions and post-entry job satisfaction through post-entry identification. However there was no evidence of a direct relationship between anticipatory identification and post-entry work outcomes. Moreover organisational identification acted as an intervening, but not a mediating, variable between outcome and predictor variables in both instances. These observations suggest a potentially more limited relationship between anticipatory identification and post-entry work outcomes. Accordingly, when looking to understand the consequences of anticipatory identification, it may arguably be most beneficial to attend to the more proximal outcomes of the construct. Whilst an individual's anticipatory identification did not impact upon post-entry work outcomes directly, it was implicated in social identity processes once a newcomer joined the organisation. Consideration of these social identity processes, rather than work outcomes more generally, may thus provide a more fruitful focus for an understanding of the post-entry consequences of anticipatory identification.

¹⁵ Although this could equally be attributed to the significant interactive effect of anticipatory identification and post-entry pride

9.3.3. Limitations

The small sample size in Study Four presented a notable limitation for the current research. As discussed above, the lower statistical power resulting from this sample size increased the possibility of incorrectly failing to reject the null hypothesis (Cohen, 1992). Where significant results were observed in this study, these results provided an important step forward in determining that the phenomena observed within the non-work contexts of Studies One, Two and Three were also applicable to work organisations. However it was necessary to show greater restraint in rejecting unsupported hypotheses in light of this low statistical power. In particular, Study Four did little to advance our understanding of the hypothesised feedback loop mechanism set out within the conceptual model. In light of the ambiguous evidence for this hypothesis in previous studies, this was considered an important limitation for this study and for the programme of research as a whole.

Specific characteristics of the sample may also have limited the representativeness of the findings obtained within Study Four. Although an organisational focus was adopted, participants were students about to embark upon a fixed-term, one-year placement as part of their degree course. Two important features may set these participants aside from organisational newcomers more generally. First, for many participants this would have been their first formal, full-time work assignment. These students arguably possessed a more limited understanding of, and exposure to, work organisations than the working population as a whole. It is worth recognising that a large number of organisational newcomers are experienced workers, who may approach organisational entry differently to novice workers (Cooper-Thomas et al., 2012). Accordingly, alternative entry strategies and career agendas may impact upon experienced newcomers' anticipatory identification and on the relationship between pre- and post-entry variables. Further investigation would therefore be necessary to determine whether the findings observed in this study would also be generalisable to experienced organisational newcomers.

The temporary nature of participants' employment may equally have led to different responses in this particular study to those we might observe amongst permanent employees. Findings regarding differences in key work outcomes such as commitment and productive behaviours between temporary and permanent employees are typically inconsistent (see De Cuyper, De Jong, De Witte, Isaksson, Rigotti and Schalk, 2008). Moreover researchers have previously found no difference in the organisational identification reported by permanent and temporary employees (e.g. Feather and Rauter, 2004). Nonetheless the sample used within Study Four did not provide the opportunity to establish whether social identity processes during organisational entry were similar or different for permanent and temporary employees. As such, it remains conceivable that

the antecedents and consequences of anticipatory identification within the present research may differ from those observed amongst permanent employees. This can be seen as a further limitation of Study Four. Despite this, the conclusions drawn from this study have potentially important practical implications for at least some forms of employment, and these will be discussed in greater depth within Chapter Ten.

CHAPTER TEN: GENERAL DISCUSSION

10.1. Chapter Summary

This chapter draws together the findings of the four studies described in Chapters Six to Nine. The combined findings are discussed with reference to the research hypotheses and conceptual model. The key theoretical implications of the findings are presented, followed by the potential practical consequences of this research for organisations, in particular with reference to recruitment and on-boarding practices. Potential limitations of the research are subsequently discussed as well as opportunities for future research. The chapter closes with a summary and conclusion of the thesis.

10.2. Antecedents of Anticipatory Identification

The first objective of the thesis, addressed by Research Questions One and Two, was to explore the specific antecedents of anticipatory identification. In an earlier investigation of the construct, Stephens and Dailey (2012) observed that exposure to an organisation prior to entry was associated with heightened anticipatory identification. This thesis looked to determine the conditions under which such pre-entry exposure should encourage an individual to identify with the organisation before joining. To do this, two key antecedents of anticipatory identification were tested: newcomers' desire to establish a positive social identity prior to entry and the salience of the organisation during the pre-entry period.

10.2.1. Positive Social Identity Motive

Research Question One: Will a newcomer identify more closely with an organisation prior to entry when it is seen as a source of positive social identity during the pre-entry period?

The first research question, initially presented in Section 1.2.1, asked whether a positive social identity motive may encourage a newcomer to identify within an organisation prior to entry. Aligned to this research question, Hypothesis One stated that pre-entry social identity judgements would be positively related to anticipatory identification. A positive social identity motive has been consistently observed as an antecedent of identification in a post-entry setting (e.g. Lipponen et al., 2005; Mael and Ashforth, 1992; Riketta, 2005; Smidts et al., 2001). Moreover, anticipatory identification within a social mobility context, and specifically a desire to move from one social group to another, has similarly been linked to the perceived status of the alternative social group (Ellemers et al., 1990). It was therefore proposed that when pre-entry exposure to the organisation led a newcomer to see it as a source of positive social identity before joining, this individual would begin to identify prior to formally taking up membership.

In Studies One, Three and Four pre-entry social identity judgements were first operationalised using the Group Engagement Model's concept of intergroup status (e.g. Blader and Tyler, 2009, Tyler and Blader, 2003). Consistent support for Hypothesis One was obtained across all three studies; in each instance the perceived status of the organisation prior to entry was a significant predictor of anticipatory identification. Studies One and Four adopted a correlational design to investigate the relationship between these variables. As a consequence, whilst a significant relationship was detected, the causal nature of this relationship could not be confirmed (Aldrich, 1995). Study Three however experimentally manipulated pre-entry status and again found the same significant relationship between pre-entry status and anticipatory identification. Together these studies make an important contribution to our understanding of the antecedents of anticipatory identification, providing strong backing for the view that anticipatory identification is heightened when an organisation is seen as a source of positive social identity prior to entry.

In addition to examining the effect of perceived organisational status on anticipatory identification, Studies One and Four also explored the impact of a further social identity judgement highlighted by the Group Engagement Model: newcomers' perceived intragroup status. The extent to which participants believed that they were respected and valued by the organisation prior to entry was likewise found to be a significant predictor of anticipatory identification. Causal inferences were less conclusive for this variable, which was only investigated using a correlational design. These findings nonetheless further contributed to our understanding of the antecedents of anticipatory identification, demonstrating the presence of an additional precursor to anticipatory identification, previously only observed within a post-entry context (e.g. Huo et al., 2010; Ellemers et al., 2013). Furthermore, as Studies One and Four measured both pre-entry social identity judgements simultaneously, it was possible to assess the relative influence of these two judgements. In both studies the status of the organisation prior to entry was found to be a stronger predictor of anticipatory identification than the pre-entry respect received from the organisation. Thus, in identifying with a future organisation, newcomers appeared to attach greater weight to the perception that membership of that new organisation would furnish them with a positive social identity within an intergroup, rather than intragroup, context.

De Cremer and Tyler (2005) have previously proposed that intragroup social identity judgements are likely to be a particularly pressing concern amongst newcomers to an organisation in contrast to "old-timers"; these judgements communicate important information about the newcomer's standing in relation to the organisation. Yet Studies One and Four suggest that, even though future members may be keen to establish that

they are valued by their new organisation, the capacity to “bask in the reflected glory” (Cialdini et al., 1976, p.366) of an organisation was a more influential driver of identification prior to entry. Again, this finding provides a further elaboration on our current understanding of anticipatory identification. It suggests that even though specific social identity judgements might be particularly relevant to an individual during entry into an organisation, we cannot assume that this will result in such judgements becoming a stronger predictor of anticipatory identification.

To account for the differential impact of pre-entry pride and pre-entry respect it may also be useful to reflect upon how individuals might arrive at social identity judgements prior to entry. Perceptions of pride in the organisation are thought to be derived from impressions of the status of the organisation as seen by outsiders (e.g. Tyler, 1999; Tyler and Blader, 2002; 2003); namely it perceived external prestige (Smidts et al., 2001) or construed external image (Dutton et al., 1994). As an outsider to the organisation themselves (albeit an outsider who will shortly become an insider), future members may feel well-placed to accurately evaluate the external status of their new organisation. In contrast, a newcomer must infer their intragroup status from the information they receive from the organisation during the pre-entry period, for example by learning about the support received by current members of the organisation (Boezeman and Ellemers, 2008). They must furthermore put faith in the accuracy, honesty and completeness of this information (Klotz, Da Motta Veiga, Buckley and Gavin, 2013). For this reason, pre-entry evaluations of respect may be more tentative and provisional than pre-entry evaluations of pride. Thus even though, as De Cremer and Tyler (2005) suggest, information about their standing within an organisation is highly valued by newcomers, the uncertain nature of such information could result in it having a more limited impact upon their identification with the organisation prior to entry. At present, however, this proposition remains untested. Further investigation of the sources of information newcomers use to arrive at pre-entry social identity judgements, along with the perceived trustworthiness of this information, would be necessary to determine whether this line of reasoning may account for the pattern of results observed in Studies One and Four.

10.2.1.1. Practical Implications

Although the impact of pre-entry respect was more modest in nature than pre-entry pride, it was still a significant predictor of anticipatory identification. The observation that both intergroup and intragroup social identity judgements can impact upon anticipatory identification consequently has useful practical implications for recruiters and managers. Researchers have previously argued that applicant attraction and job acceptance intentions can be influenced by placing emphasis on the image and reputation of an

organisation during recruitment and selection (e.g. Berkson, Ferris and Harris, 2002; Collins, 2007; Turban and Cable, 2003). Applicants' perceptions of their treatment by the organisation and its representatives prior to entry have similarly been shown to impact upon attraction to that organisation (e.g. Chapman, Uggerslev, Carroll, Piasentin, and Jones, 2005; Rynes, Bretz and Gerhart, 1991). The present research suggests that highlighting the status and prestige of the organisation and ensuring that newcomers feel valued and respected prior to entry may not only increase attraction to the organisation, but also evoke heightened anticipatory identification during the pre-entry period.

Concurring with Berkson et al. (2002), this does not mean *misleading* newcomers about the status of, and their status within, the organisation prior to entry. Drawing from the unmet expectations literature, a failure to fulfil these status expectations after entry conceivably could lead to psychological contract breach, increased anxiety, stress and emotional exhaustion and a decrease in organisational commitment and job satisfaction (e.g. Proost, van Ruysseveldt and van Dijke, 2012; Robinson, 1996; Wanous et al., 1992). Moreover, as will be discussed below, Study Three showed that a discrepancy between perceived pre- and post-entry social identity judgements can have negative consequences for post-entry identification. Managers and recruiters might instead be encouraged to reflect upon how their particular organisation could genuinely contribute to a positive social identity amongst newcomers. Communicating positive yet accurate information during the pre-entry period will likely provide greater benefits for both individual and organisation than deliberately misrepresenting the organisation to achieve temporarily heightened anticipatory identification prior to joining.

10.2.2. Social Identity Salience

Research Question Two: Will a newcomer identify more closely with an organisation prior to entry when the organisation is situationally relevant and meaningful to the newcomer, i.e. salient, during the pre-entry period?

The second research question raised in section 1.2.1 asked whether the salience of an organisation prior to entry could also impact upon anticipatory identification. In addressing this research question, Hypothesis Two predicted a positive relationship between pre-entry organisational salience and anticipatory identification. The term salience refers to the extent to which an organisation matches subjectively relevant feature of reality and a perceiver's expectations, goals and theories (e.g. Oakes et al., 1987; Turner et al., 1994). In other words, when an organisation is meaningful and relevant to an individual both within the current social context and with reference to previous and future social contexts, the salience of that organisation is heightened (e.g. Haslam et al., 2000). Van Dick and

colleagues have previously shown that when an organisation is salient in a post-entry setting, organisational identification is similarly heightened (e.g. van Dick et al., 2005; van Dick et al., 2009). Individuals thus appear more likely to identify with an organisation when it is situationally important to them at a given point in time. Study Two looked to determine whether this antecedent of identification would also be observed within a pre-entry context. However in contrast to the consistent support obtained for Hypothesis One, more limited evidence was found to indicate that pre-entry salience was a significant predictor of anticipatory identification.

To explore the impact of pre-entry salience on anticipatory identification, salience was successfully manipulated in Study Two by informing participants that their involvement with the group was likely to be above or below average. Yet whilst the pre-entry salience of the organisation reported by participants (using the item *“being a member of this group is important to me”*; Haslam et al., 1999) was a significant predictor of anticipatory identification, the manipulation itself did not predict anticipatory identification. Study Two provided some indication that participants’ openness to experience could have impacted upon this relationship. In Chapter Seven it was suggested that participants with low levels of openness to experience may not readily identify with any new social group, regardless of how salient that group was prior to entry. For instance such individuals have been shown to be less adaptable and slower to embrace change in contrast to more open individuals (e.g. Griffin and Hesketh, 2003; Le Pine et al., 2000). The moderating impact of this personality factor was not conclusively demonstrated within Study Two and further investigation would be necessary to fully substantiate the proposition. This nonetheless highlights a potentially valuable avenue for future research, moving beyond the organisational or contextual antecedents of anticipatory identification to also consider the role that individual differences might play in moderating these antecedents; a focus that has previously proved fruitful within a post-entry context (e.g. Epitropaki and Martin, 2005).

Chapter Seven also questioned the salience manipulation adopted within Study Two, citing this as another possible reason for the non-significant relationship between manipulated pre-entry salience and anticipatory identification. The manipulation adopted in this study focussed only on the cognitive accessibility of the social group to newcomers (Haslam, 2004); meaning that participants were likely to see the group as more or less subjectively meaningful prior to entry. However Milward and Haslam (2013) have recently found that the cognitive accessibility of the group interacts with its current contextual relevance, and only in combination do these two aspects of salience have a strong impact upon organisational identification. Thus in Study Two, a failure to observe a causal relationship between salience and anticipatory identification may have been due to a

failure to either measure or manipulate the immediate contextual relevance of the group. Subsequent investigation of the relationship between pre-entry salience and anticipatory identification may thus benefit from attending to the impact of both core aspects of salience during the pre-entry period.

Whilst support for a causal relationship between salience and anticipatory identification was not obtained in Study Two, it must be remembered that pre-entry salience was still found to be a significant predictor of the extent to which newcomers identified with the group prior to joining. Although the direction of this relationship can be questioned (see Haslam, 2004; Haslam et al., 2003), this finding nevertheless suggests that the subjective meaning and relevance of an organisation during the pre-entry period could be of consequence for anticipatory identification. This finding accordingly can be seen to make a further contribution to knowledge, setting out another potential pre-entry antecedent of anticipatory identification.

10.2.2.1. Practical Implications

The relationship between pre-entry salience and anticipatory identification can therefore have managerial implications, to be taken into account during recruitment, selection and on-boarding. Recruiters looking to evoke a sense of identification amongst newcomers prior to entry may consequently wish to consider ways in which organisational salience can be heightened before these newcomers formally take up membership. Researchers for instance have noted that selection practices or recruitment websites have the capacity to enhance the salience of an organisation prior to entry (e.g. Herriot, 2002; Walker, Feild, Giles, Bernerth and Short, 2011). The use of social media by organisations moreover increasingly provides new ways to stay in contact with future members prior to the start of employment (e.g. Joos, 2008). Such computer-mediated forms of communication can similarly impact upon the salience of a particular social identity (Spears, Lea and Postmes, 2001), and again may lead a newcomer to see the organisation as meaningful and relevant prior to entry. Attending more closely to the identity-related aspects of recruitment and selection activities may help recruiters not only to attract and select the best candidates, but also to positively impact upon the degree to which these candidates identify with the organisation during the pre-entry period.

Then again, the observed moderating effect of openness to experience on the relationship between perceptions of pre-entry salience and anticipatory identification indicates that newcomers' personality may also be implicated in the level of anticipatory identification they experience before formally taking up membership. As a consequence, even if managers and recruiters take steps to heighten the salience of the organisation during the

pre-entry period, individual differences between newcomers could ultimately determine the extent to which these steps will positively affect anticipatory identification. Organisations should consider carefully whether salience-enhancing practices will have sufficient impact to justify their implementation, particularly when contrasted to the seemingly more pervasive impact of pre-entry social identity judgements discussed above.

10.3. Consequences of Anticipatory Identification

The second objective of this thesis was to determine the consequences of newcomers' anticipatory identification. This objective was addressed by Research Questions Three, Four, Five and Six. The effects of social identity processes on applicant attraction have previously been recognised by researchers (e.g. Herriot, 2002; Lievens et al., 2007; Boezeman and Ellemers, 2008). Rather than directly contributing further to this body of work, the present research looked instead to consider whether the extent to which an individual identified with an organisation prior to entry could have a significant *post-entry* impact. This post-entry emphasis was considered to be of particular value for the investigation of anticipatory identification. If the impact of anticipatory identification continued after joining, this would provide increased justification for exploration of the construct in its own right, rather than simply as one further aspect of an individual's attraction to an organisation before joining. It would furthermore provide a clear rationale for organisations to take account of the previously discussed antecedents of anticipatory identification during their pre-entry contact with newcomers.

The post-entry consequences of anticipatory identification were addressed in two ways. The direct impact of anticipatory identification on post-entry outcomes was first examined, focussing on the influence of anticipatory identification on post-entry identification as well as work outcomes, including turnover intention and job satisfaction. A more complex relationship between anticipatory identification and post-entry identification was next investigated, which attended to the temporal dynamics of a newcomer's identification with an organisation over time. To do this, the research explored whether anticipatory identification, in combination with newcomers' drive to establish a positive social identity discussed above, had an indirect or an interactive impact upon organisational identification after joining.

10.3.1. Post-Entry Organisational Identification

Research Question Three: Will a newcomer's level of anticipatory identification, reported prior to entry, predict post-entry identification?

The third research question, first raised in Section 1.2.2, asked whether there was a relationship between a newcomer's identification with an organisation before and after entry. In investigating this question, Hypothesis Three proposed that anticipatory identification would be a significant direct predictor of post-entry identification. Organisational identification has been linked to the preservation of a positive and consistent self-concept (Dutton et al., 1994; Scott and Lane, 2000). Continuing to identify with an organisation over time was argued to contribute to this self-consistency, allowing an individual to maintain a stable sense of who they are in relation to the organisation. Longitudinal studies within a post-entry context have provided support for this proposition, showing relative continuity within participants' organisational identification (e.g. Bartels et al., 2009; Schaubroeck et al., 2013; Wan-Huggins et al., 1998). Considering that identification amongst newcomers was not believed to be qualitatively different in nature to that experienced after entry (e.g. Cardador and Pratt, 2006; Whetten, 2007), it was similarly suggested that this continuity may span the boundary from pre- to post-entry.

Inconsistent support was found for this hypothesis. In Studies Two and Four, anticipatory identification was found to be a significant predictor of post-entry identification, whilst in Studies One and Three a non-significant relationship was observed between the two variables. In accounting for this non-significant relationship, Chapter Six contemplated whether the identification experienced by newcomers might best be construed as "situated identification" (Rousseau, 1998). In contrast to "deep-structure" identification, which represents a more permanent integration of the organisation within the self-concept, situated identification is thought to be triggered by situational cues. Consequently it persists only as long as these situational cues remain (Ashforth et al., 2008). In the current setting, this would mean that anticipatory identification would be predicted by pre-entry experiences, whereas post-entry identification would be predicted by post-entry experiences; however we would not necessarily see an association between the identification experienced before and after joining. Yet, whilst Studies One and Three pointed towards this conclusion, anticipatory identification did predict post-entry identification in Studies Two and Four. Thus, in at least some instances, newcomers were shown to maintain consistency in their identification from pre- to post-entry.

On first reflection there looked to be little commonality between Studies Two and Four and between Studies One and Three that might explain the different pattern of relationships

observed in these studies. Anticipatory identification was found to be a significant predictor of post-entry identification both within an organisational setting (Study Four) and within minimal groups (Study Two). Moreover, a non-significant relationship between anticipatory identification and post-entry identification was found when anticipatory identification was both measured (Study One) and manipulated (Study Three). However although a common basis was not forthcoming to account for the findings of Study One and Study Three, separate examination of these studies did highlight two plausible accounts for the results obtained.

In Study One, pre-entry social identity judgements appeared to suppress the impact of anticipatory identification on post-entry identification; anticipatory identification was found to be a significant predictor of post-entry identification only when pre-entry social identity judgements were excluded from the analysis. Chapter Six posited that this observation was likely to have been a consequence of the research design adopted in Study One. The single-source, retrospective reporting design was argued to have led to artificial inflation of the correlations between variables, making the independent contribution of pre-entry and post-entry predictors difficult to distinguish (Lindell and Whitney, 2001). Anticipatory identification thus explained little unique variance in post-entry identification when pre-entry social identity judgements were controlled and accordingly was a non-significant predictor of post-entry identification.

In contrast to the methodological explanation put forward for the observations of Study One, a theoretical justification was arguably more apposite within Study Three. Unlike the earlier study, exclusion of pre-entry variables from the regression model in Study Three did not alter the non-significant relationship between anticipatory identification and post-entry identification. However unlike Studies One, Two and Four, in Study Three the status of the group was experimentally manipulated both before *and* after entry. As a result, the impact of immediate contextual cues on situated identification, as proposed by Rousseau (1998), may have particular relevance here. Participants received specific pre- and post-entry cues regarding the status of a group, with little further information about that group or their relationship with it. Within this setting it is plausible that participants' identification was the consequence of their current appraisals of the group, rather than a more involved and enduring social relationship. This observation has implications not only for a direct relationship between anticipatory identification and post-entry identification, but also for the hypothesised buffering effect of anticipatory identification on post-entry outcomes. It will therefore be returned to in more detail below.

Taking the aforementioned justifications into account, Studies Two and Four nonetheless demonstrated that anticipatory identification can be a significant predictor of post-entry

identification. This observation extends the extant literature and provides an important addition to our understanding of the antecedents of organisational identification. In particular it contributes to an awareness of the factors influencing organisational identification at the very start of one's membership of an organisation; a consideration which to date has received only limited attention within organisational identification research (Smith et al., 2010).

10.3.1.1. Practical Implications

Initial post-entry identification has been linked to new entrants' turnover intentions during the first six months of employment (Smith et al., 2010). In addition identification can play an important role in newcomers' adjustment to an organisation (e.g. Carmeli et al., 2007). Highly identified individuals, for example, are more likely to seek feedback and be focussed on the acquisition of new organisation-relevant skills and expertise (e.g. Chughtai and Buckley, 2010). They are also more likely to accept assistance from, and more readily communicate with, other members of the organisation (e.g. Haslam et al., 2005; Haslam et al., 2009; Postmes, 2003). The links found between anticipatory identification and initial post-entry identification observed in this research may thus be taken to suggest that social identity processes during the pre-entry period could play an important, yet currently under-acknowledged, role in newcomers' integration into their new organisation. This provides a clear reason for recruiters and managers to attend to the specific antecedents of anticipatory identification addressed within the first part of this thesis.

10.3.2. Post-Entry Work Outcomes

Research Question Four: Will a newcomer's level of anticipatory identification, reported prior to entry, predict post-entry work outcomes?

The fourth research question, presented in Section 1.2.2, asked whether anticipatory identification could also impact upon post-entry work outcomes and therefore contribute to an individual's assimilation into the organisation. To this end, post-entry work outcomes were also measured in Study Four, as indicators of newcomers' initial integration into the organisation. This study specifically focussed on the impact of anticipatory identification on turnover intentions and job satisfaction, previous associated with newcomers' adjustment to their new organisation (e.g. Bauer, Bodner, Erdogan, Truxillo and Tucker, 2007). It was hypothesised that when an individual identified with the organisation prior to entry, they would be more reluctant to leave the organisation after joining (Hypothesis Four). It was also predicted that they would have a more positive attitude towards the organisation overall, which would extend to their satisfaction within their job role

(Hypothesis Five). However there was no evidence to suggest that anticipatory identification directly predicted these post-entry work outcomes. Accordingly, the extent to which an individual saw the organisation as self-definitive prior to entry did not appear to determine whether or not they wished to remain a member of that organisation, nor their level of job satisfaction. The findings of Study Four however raised some suggestion that anticipatory identification may be a more distal predictor of post-entry work outcomes through post-entry identification. For both turnover intentions and job satisfaction, post-entry identification served as an intervening variable: anticipatory identification predicted post-entry identification, which in turn predicted post-entry work outcomes.

Despite this observation, within the current research context it appeared more appropriate and productive to view work outcomes as primarily influenced by a newcomer's post-entry identification, rather than their identification before joining the organisation. This reflects the previous findings of a number of researchers (e.g. Abrams et al., 1998; Mael and Ashforth, 1995; van Dick et al., 2004; van Dick et al., 2008), and is perhaps understandable given that job satisfaction and turnover intention have both been shown to vary as a function of newcomers' post-entry experiences (Vandenberghe, Panaccio, Bentein, Mignonac and Roussel, 2011). Thus the work outcomes investigated in Study Four were ultimately more responsive to a newcomer's immediate organisational identification, rather than the extent to which they identified with the organisation prior to entry.

It must however be noted that only two possible work outcomes were considered within the present research. It therefore remains plausible that anticipatory identification could positively influence any number of other work outcomes. In particular this research has not considered the impact of anticipatory identification on performance, either within a newcomer's job role or extra-role citizenship behaviour. For example, it might be argued that anticipatory identification could lead to greater relationship building or feedback-seeking during organisational entry, as post-entry identification has been shown to do (e.g. Chughtai and Buckley, 2010); such actions have previously been linked to newcomer learning and performance (Ashforth, Sluss and Saks, 2007). Hence there is further scope for investigation of these relationships, and to fully discount the impact of anticipatory identification on post-entry work outcomes may be premature at this stage.

10.3.3. Buffering Effect of Anticipatory Identification

Research Question Five: Can anticipatory identification act as a buffer in the relationship between a newcomer's post-entry perceptions of the organisation and their post-entry identification?

In addition to the direct impact of anticipatory identification on post-entry variables discussed above, it was proposed that anticipatory identification could also be implicated in a temporal dynamic of ongoing social identity processes. The fifth research question, initially raised in Section 1.2.2, asked whether this temporal dynamic might manifest itself as a “buffering effect” of anticipatory identification. It was argued that anticipatory identification would moderate the relationship between post-entry impressions of an organisation and post-entry identification, insofar as these impressions would ultimately have a more limited impact upon post-entry identification when initial anticipatory identification was high. Two variations of this buffering effect were put forward. First, it was proposed that anticipatory identification might buffer the relationship between post-entry information about the organisation and the perception that organisation was a source of positive social identity, operationalised as participants' perceptions of the status of the organisation. Second, it was proposed that anticipatory identification might instead buffer the relationship between perceptions of organisational status and post-entry identification.

Hypothesis Six addressed the first of these proposed buffering mechanisms. This hypothesis was founded on the proposition that when a newcomer identified with an organisation prior to entry, the organisation would become integrated within that individual's self-concept before they took up membership. Because of this, and motivated by a desire for self-enhancement, they would look to preserve a positive impression of the group, and through this also maintain a positive self-view (e.g. Sherman and Kim, 2005). Newcomers with high levels of anticipatory identification were thought likely to engage in social creativity strategies to protect their positive impression of the organisation (e.g. Cadinu and Cerchioni, 2001; Van Vugt and Hart, 2004). The consequence of this was argued to be a continuing perception that the organisation was a source of positive social identity, and in turn a continuing sense of organisational identification, even when in receipt of negative information about that organisation. No support was however found for this hypothesis in either Study Two or Study Three. Participants who received negative information about their group (in the form of low performance ratings during a group task) reported lower perceptions of group status, regardless of whether their anticipatory identification had been high or low. There was therefore no evidence to suggest that

highly identified newcomers looked to preserve the view that their group was a source of positive social identity when faced with information seemingly to the contrary.

However whilst this first hypothesised buffering mechanism was not upheld, it is nonetheless feasible that other group-serving mechanisms, not linked to the social standing of the group per se and thus not tested within the current research, could still have been employed by individuals with high levels of anticipatory identification. Koval, Laham, Haslam, Bastian and Whelan (2012), for instance, have found that individuals typically attribute in-group flaws to human nature, thus emphasise the “humanness” of their group in contrast to other groups. This tendency towards the humanisation of one’s in-group is thought to exist independently of self-enhancement motives (Haslam, Bain, Douge, Lee and Bastian, 2005). Accordingly, this, and potentially other biases, could arguably serve as separate group protective strategies, employed by high anticipatory identifiers but not captured by the current research design. A more thorough exploration of the impact of anticipatory identification on these alternative group-serving biases would therefore be necessary before the principles underpinning Hypothesis Six could be fully discounted. Furthermore, it is also important to note that the sample size attained in both Study Two and Study Three was insufficient to capture anything other than large effect sizes (Cohen, 1992). It is therefore conceivable that anticipatory identification may have acted as a buffer in the relationship between post-entry performance information and post-entry pride to a more limited degree; and this was simply not captured due to the power of the statistical tests employed. Once again, more robust testing of the first buffering mechanism would be necessary before the experimental hypothesis could be confidently rejected.

Greater endorsement was obtained for the second of the two hypothesised buffering mechanisms. Indeed evidence that anticipatory identification served to buffer the relationship between post-entry social identity judgements and post-entry identification was found in three out of the four studies reported in this thesis, providing notable support for Hypothesis Seven. These studies observed that as the level of anticipatory identification increased, the relationship between post-entry social identity judgements and post-entry identification became weaker; and at high levels of anticipatory identification, post-entry social identity judgements were no longer a significant predictor of post-entry identification. The research presented within this thesis therefore makes another important theoretical contribution in this regard, indicating for the first time that newcomers’ identification prior to entry can moderate social identity processes upon joining the organisation.

The support obtained for Hypothesis Seven, particularly in light of the failure to find similar support for Hypothesis Six, makes a further novel contribution to our understanding of anticipatory identification by highlighting the self-related motives that appear to prevail during newcomers' transition from pre- to post-entry. A desire for self-consistency is thought to serve as an alternative identity motive to self-esteem needs (Vignoles, Regalia, Manzi, Golledge and Scabini, 2006), and as such can supersede a desire for self-enhancement in certain contexts (Hogg and Abrams, 1990). In Chapter Three it was suggested that this need for self-consistency may encourage an individual not only to continue to identify with the organisation from before to after joining, as discussed above, but also to continue to identify even when opportunities for self-enhancement through membership of the organisation are more limited. Under such conditions, a highly identified newcomer may be likely to feel that distancing themselves from their new organisation post entry would be detrimental to the continuity of their self-concept (e.g. Van Knippenberg et al., 2007). It might also remove a valuable coping mechanism from the individual which would have enabled them to deal more effectively with threats to the perceived value of the group (e.g. Jetten et al., 2002). This coping mechanism may be particularly pertinent under the conditions of change and upheaval that the newcomers are likely to face (Iyer et al., 2009). In showing greater support for a self-consistency motive over a drive for self-enhancement, the present research arguably sheds further light on the importance of preserving a consistent sense of self during a newcomer's early relationship with their new organisation.

10.3.3.1. Practical Implications

The support for a self-consistency-related buffering effect has important practical implications for managers looking to support and facilitate new employees' transition into the organisation. Newcomers can experience a sense of surprise or reality shock after joining a new organisation, which can have a damaging impact upon their relationship with that organisation (e.g. Buchanan, 1974; Louis, 1980). This may be the consequence of the organisation failing to live up to the promises made during the recruitment and selection process (e.g. Porter and Steers, 1973; Wanous et al., 1992). However Boswell, Boudreau, and Tichy (2005) suggest that a "hangover" effect is, in reality, a more ubiquitous phenomenon amongst newcomers, as they become increasingly engaged in the more mundane aspects of organisational life. Moreover, this hangover effect is not significantly influenced by an organisation's fulfilment of its commitments or the effective socialisation of newcomers (Boswell, Shipp, Payne and Culbertson, 2009), thus is not necessarily the consequence of managerial failures on the part of the organisation. The finding that anticipatory identification can act as a buffer in the relationship between post-entry social identity judgements and post-entry identification may suggest that potential

hangover effects (such as a decline in positive social identity judgements) could have a less damaging effect on subsequent organisational identification when anticipatory identification is high. Managers might therefore be advised that a consideration of newcomers' anticipatory identification could be one way to establish a foundation for a positive and enduring relationship between individual and organisation.

10.3.4. Non-Hypothesised Findings

Whilst there was recurrent support for Hypothesis Seven, the buffering effect set out within this hypothesis was not observed consistently across all four studies. Two discrepancies are of particular note. First, in studies where both intergroup and intragroup social identity judgements were measured, anticipatory identification was found to moderate the relationship between post-entry identification and only one of these social identity judgements. Within a university setting, anticipatory identification moderated the relationship between post-entry identification and post-entry respect, but not post-entry pride. Conversely within a work organisation setting, anticipatory identification moderated the relationship between post-entry identification and post-entry pride, but not post-entry respect. Methodological explanations do exist for this divergence and were presented in Chapter Nine. However it was also suggested that these findings may be better understood in the context of newcomers' original motivation for joining a particular university or work organisation.

Chapter Nine suggested that new students may look first and foremost to feel a sense of belongingness and community through their membership of the university; a desire for external prestige may have been a less pressing concern for these newcomers. In contrast, within the specific sample studied in Study Four, new employees may have instead been seeking to achieve a sense of status and prestige in the eyes of outsiders. Although this is unlikely to be the case for all organisational newcomers, in the research context of Study Four, participants were inexperienced workers who were joining the organisation for only a short duration; furthermore they were doing so at the same time as the rest of their peers and with a clear focus on their employability prospects after completing the degree. As a consequence the perceived external prestige of the organisation was likely to have been of particular relevance to these particular newcomers. Under such circumstances, it may be suggested that newcomers might only possess well-defined social identity judgements for those aspects of their social identity which were the key drivers behind their decision to join the organisation in the first place.

Thus a newcomer within a university context may believe they have a thorough understanding of how they will be treated by other members of the university, for example

through attending open-days and meeting current staff and students, but might feel less secure in their knowledge of how the university was perceived by outsiders. In contrast, a newcomer within a work organisation setting may believe that they have an accurate comprehension of the prestige of the organisation, for instance through their job search activities and recruitment campaigns, but could be less aware of how they will be treated by their colleagues after joining. It may therefore be necessary for an individual to seek out, and respond to, information concerning these less thoroughly developed social identity judgements, regardless of the extent to which they defined themselves in terms of the organisation prior to entry.

Although this proposition might provide one explanation for the contrasting pattern of results observed in Studies One and Four, as highlighted in Chapter Nine, it rests on two unsubstantiated assumptions. First, it assumes that newcomers primarily focus on one social identity judgement over another in their motivation to join a particular organisation. Boezeman and Ellemers (2008) provide some support for this assumption, finding that respect, but not pride, judgements were positively associated with volunteers' attraction to a not-for-profit organisation. However, further investigation would be needed to corroborate this proposition within the context of anticipatory identification. Second, it supposes that some social identity judgements are less thoroughly developed than others upon joining the organisation and that this varies according to the organisational context. To the best of the author's knowledge, this has so far received no research attention. Considerably more testing of this assumption would therefore be necessary. Moreover, it remains very feasible that the findings obtained are simply artefacts of the methodological challenges faced within these two studies, as discussed in Chapters Six and Nine. Nonetheless the relationship between anticipatory identification, application and acceptance decisions and post-entry identification may prove a relevant area for future study.

The second divergence from the hypothesised buffering effect was observed in Study Three. In a similar vein to Studies One, Two and Four, Study Three observed that anticipatory identification moderated the relationship between post-entry social identity judgements and post-entry identification. However in contrast to these other studies, and contrary to Hypothesis Seven, Study Three found that the relationship between post-entry social identity judgements and post-entry identification actually became stronger, not weaker, as anticipatory identification increased. In Chapter Eight it was suggested that this observation could have been brought about by the manipulation of anticipatory identification adopted within this study. Through viewing the organisation as either high or low status prior to entry, participants came to report higher or lower identification with the group before joining. However given the minimal nature of the group within Study Three,

this status arguably became a defining feature of the group's identity, rather than simply serving an evaluative function. When post-entry experiences supported pre-entry impressions, this reinforced newcomers' initial identification with the group. However when post-entry experiences did not align to positive pre-entry perceptions, the group's identity may have been experienced as subjectively different to the group identity that the individual had perceived before joining. Thus continuity of the individual's identification would not necessarily have been observed over time (e.g. Ulrich et al., 2005; van Knippenberg et al., 2002; van Dick, Ullrich et al., 2006). In these circumstances, only if an individual continued to see the organisation both positively, and possessing the same identity before and after entry, would we expect post-entry identification to be heightened.

10.3.4.1. Practical Implications

The findings of Study Three, whilst dissimilar to Studies One, Two and Four, nonetheless set out an important boundary condition which, when viewed in line with the three remaining studies, has practical implications for managers. Studies One, Two and Four suggested that the act of identifying with an organisation prior to entry may help buffer the relationship between post-entry social identity judgements and, through this, potentially mitigate the damaging impact of reality shock or the post-entry hangover effects discussed above. However, the results of Study Three suggested that encouraging heightened anticipatory identification prior to entry appears to have limited post-entry benefits if the claims made by an organisation cannot be fulfilled after joining (e.g. Berkson et al., 2002). Managers should therefore be dissuaded from over-emphasising the status or prestige of the organisation simply to evoke a temporary state of anticipatory identification; this is unlikely to result in the positive post-entry outcomes they seek.

On the other hand, when favourable perceptions of the group during the pre-entry period were mirrored by post-entry experiences in Study Three, this appeared to reinforce the belief that the group was a source of positive social identity. As Kammeyer-Mueller, Wanberg, Rubenstein and Song (2013) have recently suggested, first impressions therefore seemed to act as a catalyst for subsequent impressions, resulting in an even closer relationship between post-entry social identity judgements and post-entry identification. At the same time, Study Three also found that newcomers who experienced low anticipatory identification were less affected by the pride they experienced after joining; thus even when such newcomers experienced high levels of post-entry pride, this had a more limited impact on post-entry identification. Again, these findings have important practical implications. When negative pre-entry impressions of an organisation lead to low levels of anticipatory identification, it appears that managers cannot simply rely on positive post-entry experiences to have a compensatory impact upon subsequent post-

entry identification. This suggests a necessity to actively consider the experiences and perceptions of newcomers during the pre-entry period. Failure to do so could be inadvertently associated with decreased anticipatory identification which cannot easily be remedied by affirmative action once the newcomer enters the organisation.

It must be recognised however that Study Three was the only study where anticipatory identification was successfully manipulated rather than measured. The studies that measured “naturally-occurring” anticipatory identification (including Study Two, in light of the non-significant relationship between manipulation of salience and anticipatory identification in this study) signalled a potentially more optimistic outlook for the relationship between low anticipatory identification, post-entry social identity judgements and post-entry identification. These studies suggested that when low anticipatory identifiers saw the organisation as a source of positive social identity after joining, they reported relatively similar levels of post-entry identification to those newcomers who closely identified with the organisation prior to entry. Thus as Doosje et al. (2002, p.71) have proposed, initially low identifiers appeared more “instrumental” in their post-entry identification, subsequently identifying with the group if it was in their self-interest and furnished them with a positive social identity. This nevertheless suggests that it may be possible for previously low anticipatory identification to increase after entry, provided that the newcomer comes to form positive perceptions once embedded within the organisation.

Drawing the findings of the four studies together, managers may be advised that actively encouraging newcomers to see the organisation as a source of positive social identity prior to entry can have post-entry benefits for organisational identification, but only if these expectations are fulfilled after entry. As such, this approach brings inherent risks if the organisation is unable to live up to the promises made during the pre-entry period. Managers must therefore consider carefully if and how they may best communicate identity-relevant information to applicants and future members in order to balance these risks. Yet under most conditions investigated within the present research, even low anticipatory identifiers can subsequently come to identify with the organisation, as long as it is seen as a source of positive social identity once they take up membership. As a result, there would arguably be no benefit in selecting applicants on the basis of their anticipatory identification, as low anticipatory identification can be reversed after entry. On the other hand, without the buffering effect of anticipatory identification, these low identifiers may be more vulnerable to the reality shock of joining a new organisation. Managers could therefore see benefits in recognising those newcomers who may feel more threatened during the process of organisational entry, and putting in place additional support systems to help mitigate this threat.

10.3.5. Feedback Loop of Anticipatory Identification

Research Question Six: Can an anticipatory identification feedback loop be observed, whereby a newcomer's anticipatory identification leads to more favourable post-entry perceptions of the organisation, which in turn strengthen post-entry organisational identification?

Research Question Six asked whether there might be an additional role for anticipatory identification in newcomers' ongoing social identity processes; namely that it may spark an identification feedback loop capable of crossing the boundary from pre- to post-entry. Such a feedback loop has been observed by researchers within a post-entry context (e.g. Di Sanza and Bullis, 1999; Dukerich et al., 2002), with heightened identification predicting more favourable impressions of the organisation which in turn reinforce subsequent organisational identification (Dutton et al., 1994). It was hypothesised that the same mechanism may similarly arise prior to entry, driven by a need for both self-enhancement and self-consistency.

In line with the satisfaction of self-enhancement needs, it was suggested that when an individual integrated the organisation into their self-concept prior to entry, they would be motivated to see it in a positive light after entry. This would have a self-serving function, allowing them to maintain positive self-esteem (Sherman and Kim, 2005). Self-enhancement motives were argued to be particularly beneficial for newcomers, helping them feel that their decision to join the organisation was rational and helping their adjustment to their new organisation (e.g. Hui and Lee, 2000; Lawler et al., 1975). With regards to self-consistency needs, it was contended that newcomers may also be more likely to seek out, and recall, post-entry information that fitted with their original pre-entry relationship with the organisation (e.g. Swann and Read, 1981). This would allow a valued sense of continuity between their pre- and post-entry social identities in relation to their new organisation and would preserve continuity and coherence within their self-concept. Again, this was thought to be of benefit to newcomers by providing a source of stability during what would otherwise be a period of change and upheaval (e.g. Iyer et al., 2009).

This feedback loop mechanism was operationalised in Hypothesis Eight as an indirect relationship between anticipatory identification and post-entry identification, mediated by post-entry social identity judgements. Inconsistent support was obtained for this hypothesis. In the two minimal group studies, a significant indirect relationship was observed, taking the form of a partial mediation effect in Study Two and full mediation effect in Study Three. In contrast, post-entry social identity judgements were not found to mediate the relationship between anticipatory identification and post-entry identification in

Studies One and Four: the two studies that explored identification within specific organisational settings, rather than within minimal groups. In sum, anticipatory identification feedback loops were observed in some circumstances. This once more contributes to our understanding of identification by highlighting an additional post-entry consequence of anticipatory identification. On the other hand, the presence or absence of this feedback loop appeared highly contingent on the research design employed and the nature of the sample within a particular study.

One clear difference which may account for the pattern of findings obtained across the four studies was the amount of information newcomers were likely to possess about the group or organisation after joining. In Studies One and Four, newcomers would become increasingly embedded within the organisation after entry, and would be subject to organisational socialisation (e.g. Jones, 1986), as well as engaging in proactive information-seeking and relationship building (e.g. Bauer et al., 2007). As a consequence these individuals would be potentially less reliant on their identification with the organisation prior to entry to inform their post-entry impressions of the organisation; there should have been sufficient information immediately available to make this unnecessary. Conversely, within Studies Two and Three, newcomers had access to much more limited information about the group, and were not in a position to seek out further evidence to augment their initial impressions of the group. Under these conditions, where more elaborated information about the group is lacking, newcomers are thought to use their own self-knowledge to fill in the gaps regarding their in group (e.g. Otten and Epstude, 2006; van Veelen et al. 2014). Thus in the minimal groups of Studies Two and Three, where information about the group was more limited, referring back to their identification with the group prior to entry may have been a useful way to draw more thorough conclusions about the group, and inform their post-entry social identity judgements, rather than purely relying on the post-entry performance feedback they received.

Although such a conclusion would extend our understanding of the post-entry consequences of anticipatory identification, it could also be taken as an indication that anticipatory identification feedback loops may have limited application to newcomers' entry into "real world" organisations rather than minimal groups. However there are several reasons to suggest that there might still be benefit in attending to anticipatory feedback loops outside of a laboratory setting. Van Veelen et al. (2014) for instance, have found self-anchoring to be a driving force behind newcomers' identification with an organisation during the first week of membership. In contrast, the one month lag between entry and data collection in both Studies One and Four may have been enough time for newcomers to gather sufficient post-entry information about the organisation to no longer necessitate reference to their identification prior to joining the organisation. As such, it is

feasible that anticipatory identification could have had an impact upon a newcomer's very early post-entry social identity judgements, which may have been captured if participants' responses had been obtained even closer to organisational entry.

In addition, it is also possible to consider circumstances where group members do not have the ability to acquire comprehensive information about the group, not due to their tenure but as a result of the nature of the group. One example of this may be virtual working environments, where the absence of physical contact between colleagues is thought to likewise encourage the projection of unconfirmed attributes onto one's work group or organisation (Fiol and O'Connor, 2005). In such cases, one's anticipatory identification with an organisation may again be a particularly useful source of post-entry information, and encourage the form of feedback loops observed in Studies Two and Three. Further investigation of the relationship between anticipatory identification and post-entry social identity judgements specifically contrasting real versus virtual environments would therefore be a useful extension to the current research, helping to determine whether an anticipatory identification feedback loop can occur outside of experimental conditions.

10.3.5.1. Practical Implications

The conflicting support for Hypothesis Eight makes it unwise to set out definitive practical guidance on the basis of this research; although the steps outlined above could go some way to addressing this. Even so, it is possible to highlight some considerations for managers, which may come to bear as individuals join a new organisation. In particular, whilst heightened anticipatory identification may not ordinarily be associated with positive social identity judgements after entry, the findings discussed above suggest that there could be some circumstances when this post-entry influence is observed. In particular this may be the case when an individual has not had the opportunity to arrive at social identity judgements through their post-entry experiences within the organisation, for example due to very limited tenure or restricted contact between the newcomer and other organisational members. In such instances, heightened anticipatory identification could have a positive effect upon post-entry impressions of the organisation and so again allow a newcomer's transition to formal membership to be a more positive, self-enhancing experience. In view of this, managers may once more be advised to consider how they can realistically promote anticipatory identification prior to entry, following the principles set out at the start of this chapter. Managers might also be advised that such anticipatory identification will not necessarily strengthen an individual's identification once they are embedded within the organisation. Nevertheless even short-term benefits immediately after entry, particularly in combination with the buffering effect of anticipatory identification

previously discussed, could mean that a more specific managerial focus on newcomers' identity processes during the pre-entry period has potential value for both individuals and organisations.

10.4. Limitations

The methodological limitations of the individual studies which comprise this thesis are outlined within their respective chapters. The reader is directed to the individual study chapters for a detailed discussion of the potential methodological limitations applicable to each study. However there exist a number of further potential limitations common across all four studies and of relevance to the research findings as a whole. These limitations are discussed below.

Although this thesis has addressed the post-entry consequence of anticipatory identification, these consequences were only examined with a very short-term focus, with post-entry outcomes measured only one month after entry in Studies One and Four. Above it was suggested that newcomers' anticipatory identification may aid the formation of positive relationships and help mitigate the negative consequences of reality shock that can accompany organisational entry. Framed this way, the time-lag adopted in this research remains appropriate. However it is unclear whether anticipatory identification could have long-term consequences once an individual is fully embedded within an organisation. When newcomers have been members of an organisation for some time, they will typically have access to a broader range of experiences which might frame their social identity. For example, Kramer (2010) argues that these post-entry experiences generally have a greater impact upon an individual's relationship with the organisation than their pre-entry involvement. Yet this was not explicitly tested within the current research. To be certain of the later impact of anticipatory identification, it would be necessary to explore the relationship between pre- and post-entry variables over a longer period of time, to determine whether the impact of anticipatory identification remained relevant many months after entry, or if instead this influence wanes with tenure.

The research also highlighted another, potentially more deep-rooted, challenge for the study of anticipatory identification. A fundamental principle of all four studies was that the identification experienced by different stakeholder groups is essentially identical in nature (e.g. Scott and Lane, 2000; Whetten, 2007). Thus anticipatory identification could be measured in the same way, and possess equivalent antecedents and consequences to post-entry identification. For the most part, this assumption was validated by the current research findings. However confirmatory factor analysis indicated below optimal construct validity for the measures of anticipatory identification used within Studies Two and Three.

It was contended in Chapter Seven that even models with good levels of construct validity had the potential to be rejected in these two studies due to the sample size employed (e.g. Bentler and Chou, 1987). Active steps were not taken to address this issue during the research, yet it remains conceivable that the fit indices were in fact an accurate reflection of the construct validity of anticipatory identification as measured in Studies Two and Three; if so failure to reject this model would have constituted a Type I error. Whilst initial construct validation was conducted within the Study One pilot, more rigorous assessment of the measurement model, in particular within the minimal group setting explored within Studies Two and Three, would have been needed to have full confidence in the construct validity of measures of anticipatory identification.

Another important challenge to the hypothesised outcomes of anticipatory identification can also be recognised. The conceptual model investigated in this thesis saw anticipatory identification as both a moderator and independent variable in the relationship between post-entry social identity judgements and post-entry identification. As discussed in Chapter Seven, Preacher et al. (2007) have demonstrated the statistical feasibility of this assumption. However the validity of a “three variable” moderated mediation model can be challenged. Approaches to moderated mediation (or mediated moderation) have typically relied on “four variable” models (i.e. an independent variable, a dependent variable, a mediator *and* a moderator; e.g. Edwards and Lambert, 2007; Muller, Judd and Yzerbyt, 2005). Jacoby and Sassenberg (2011) have argued that this is not an oversight on the part of these authors, but rather that the inclusion of an X by M interaction term within a mediation model breaches the assumptions of mediated OLS regression, for example that error terms are independent and that the dependent variable is an additive function of predictor variables (e.g. Cohen and Cohen, 1983). Moreover, at a conceptual level, it may be questioned whether, realistically, anticipatory identification could simultaneously both lead newcomers to form more positive social identity judgements after entry and limit the influence of these judgements on post-entry identification.

However there are several points of note this respect. First, to a certain extent this consideration becomes moot in light of the research findings presented above. In the organisational samples of Studies One and Four, the hypothesised feedback loop was not observed; it therefore becomes unnecessary to question whether $X \times M$ and $X \rightarrow M \rightarrow Y$ could realistically occur simultaneously within the regression model. As discussed above, the observation of both moderation and mediation effects in Studies Two and Three may have been a consequence of the research design adopted, rather than true effects present within the population. Second, at a theoretical level, whilst the feasibility of both feedback loop and buffering mechanisms occur concurrently in a practical setting might be questioned, this does not mean that these two mechanisms are not important in

determining the consequences of anticipatory identification. Rather it might be contended that one of these mechanisms may take precedence over the other, according to the nature of newcomers' post-entry experiences within an organisation. For example, according to whether an individual's post-entry perceptions of an organisation are positive, negative or ambiguous. Finally whilst the statistical methods through which three variable moderated mediation models are investigated have been questioned (e.g. Jacoby and Sassenberg, 2011), at this stage criticism has been limited and conceptual in nature. Further development and testing of these statistical analysis techniques may therefore be beneficial before this approach is rejected outright. Nonetheless at present it may be prudent to encourage researchers and practitioners to consider the buffering or feedback loop mechanisms of anticipatory identification in isolation, rather than to engage in further exploration of both mechanisms simultaneously.

Finally, it is also important to bear in mind the characteristics of the samples used within the research. By and large participants were students with, for the most part, only limited experience of joining and becoming integrated into formal organisations. Cooper-Thomas et al. (2012) have argued that experienced newcomers approach the process of joining a new organisation in a different way to neophyte newcomers, and in particular tend to use a wider range of strategies to ensure their own adjustment to the organisation. By focussing primarily on students' anticipatory identification, understanding of the greater complexity and proactivity implicated in experienced newcomers' organisational entry may have been lost within the current research. Indeed, Study Three, the only study within this thesis to include potentially more experienced newcomers (in the form of members of university staff), found a contrasting pattern of results to the other three studies. Although, as discussed above, theoretical justifications were advanced for these different findings, it was nonetheless possible that sample characteristics may have been at the root of this difference. Replication of the studies incorporated within this thesis, with specific consideration of the level of experience of newcomers (in terms of the extent of their work experience or the number of different organisations they have previously joined), would be required to fully lay this concern to rest.

10.5. Directions for Future Research

There is value in recognising that, whilst a Social Identity perspective has come to dominate research on organisational identification, it is by no means the only approach that can be taken to understand an individual's identification with an organisation. Furthermore the dominance of this approach may prevent researchers from attending more closely to other identification-related research questions. In particular a Social Identity Theory approach is argued to focus on the *why* but not the *how* of identification

(Ashforth et al., 2008). Studies that have considered the “*how?*” question, appear to indicate a more elaborate and nuanced process than arguably is captured by more social cognitive approaches (Vough, 2012). Yet even within a Social Identity Theory tradition, researchers contend that social identity is multi-faceted, comprising of cognitive, evaluative, emotional and behavioural components (e.g. Ellemers et al., 1999; van Dick 2001; van Dick et al., 2004). The research presented within this thesis arguably has not granted equal attention to each of these components. In particular, the role of emotion has been generally overlooked within the current analysis, yet could be seen as a particularly important aspect of identification (Johnson, Morgeson and Hekman, 2012).

Having demonstrated that anticipatory identification does occur prior to entry, and can have important post-entry consequences, a potentially important focus for future research would be to more clearly attend to some of the more complex aspects of identification not addressed by the current research. For instance how, on perceiving a future organisation to be a source of positive social identity, do newcomers come to integrate that organisation within their self-concept? Similarly, does an affective feeling of oneness with a group, as opposed to a cognitive perception of oneness, also manifest during the pre-entry period? If so, do the post-entry consequences of felt, rather than perceived, oneness differ? Considering such research questions may allow a more thorough and refined understanding of anticipatory identification than afforded by the current research.

Another potentially fruitful avenue of future enquiry may be further consideration of more distal antecedents of anticipatory identification. The studies within this thesis have focussed on what are arguably proximal drivers of anticipatory identification, in the form of pre-entry intergroup and intragroup social identity judgements. However what aspects of an individuals’ involvement with an organisation prior to entry bring about these social identity judgements? Are there specific pre-entry practices that are associated with positive pre-entry social identity judgements and through this heightened anticipatory identification? A notable body of research has found deliberate managerial practices, including organisational communication (e.g. Bartels, Peters, de Jong, Pruyn and van der Molen, 2010), socialisation tactics (e.g. Ashforth and Saks, 1996) and organisational support (Edwards and Peccei, 2010), to be associated with organisational identification amongst current members of an organisation. There is similarly evidence to suggest that future members do attend, and respond, to such practices prior to entry into the organisation (e.g. Cable, Aiman-Smith, Mulvey and Edwards, 2000; Casper and Buffardi, 2004). Indeed, these practices could be said to have become much easier to accomplish with the advent of increasingly sophisticated web-based communication; such forms of digital contact have previously been shown to be effective in the socialisation of newcomers within an organisation (e.g. Waldeck, Seibold and Flanagin, 2004).

Accordingly, further research into the specific pre-entry practices which bring about anticipatory identification could be of considerable utility to managers and recruiters.

The present research has focussed on organisational anticipatory identification, specifically considering newcomers' identification prior to entry into a new organisation. The minimal group settings of Studies Two and Three however suggest that this phenomenon is not confined to organisational identification. An individual may similarly be thought to experience a sense of anticipatory identification with other social categories, for example a new occupation or a new work group (Ashforth, 2001). These different foci of anticipatory identification were not considered within the present research; however a greater understanding of an individual's identification prior to joining such groups may help further strengthen our understanding of anticipatory identification. This may be particularly appropriate in view of Ullrich, Wieseke, Christ, Schulze and van Dick's (2007) proposition of an "identity matching principle" (see also Edwards and Peccei, 2010). These researchers have shown identification to have the strongest impact upon outcomes at the same level of categorisation; thus team identification is most closely associated with team-related outcomes, whilst organisational identification is most closely associated with organisation-related outcomes. As a result, we would not necessarily expect to observe the same post-entry effects of anticipatory team identification as anticipatory organisational identification. Understanding whether and how the post-entry consequences of pre-entry identification differ according to the focus of that identification may therefore also allow further opportunities to extend and strengthen our knowledge of anticipatory identification.

10.6. Conclusion

This thesis addressed the antecedents and consequences of anticipatory identification: newcomers' identification with an organisation prior to entry. Future members' social identities have previously been studied within the context of applicant attraction (e.g. Boezeman and Ellemers, 2008; Lievens, 2007). However by exploring both the pre-entry antecedents and post-entry consequences of anticipatory identification, this thesis sought to position anticipatory identification as a construct worthy of consideration in its own right, and not simply a specific facet of applicant attraction. In pursuing this objective, the research presented within this thesis was able to make several notable contributions to theory and research into organisational identification.

The first aim of the thesis was to investigate factors resulting in heightened anticipatory identification during the pre-entry period. Drawing on a social identity approach to organisational identification, it was predicted that newcomers would identify more closely

with their future organisation when it was seen as a source of positive social identity prior to entry. Consistent support for this prediction was found within Studies One, Three and Four. This observation made a novel contribution to the existing organisational identification literature, demonstrating that factors associated with identification amongst current members of an organisation could similarly evoke identification amongst future members. It was also predicted that when the organisation was salient prior to entry, newcomers would experience higher anticipatory identification. A failure to detect a causal relationship between the two variables in Study Two meant that evidence in support of this proposition was more tentative. A significant relationship between newcomers' perceptions of salience and anticipatory identification was nonetheless observed. Moreover individual differences between newcomers, most notably in their openness to experience, were found to moderate the relationship between pre-entry salience and anticipatory identification. These findings again provided a further extension to current research on organisational identification, suggesting that whilst antecedents of organisational identification previously observed within a post-entry context may also be influential within a pre-entry setting, individual differences between individuals could shape the extent to which these antecedents evoke a sense of anticipatory identification before the individual formally joins the organisation.

The second aim of this thesis was to explore the post-entry consequences of anticipatory identification. In observing that anticipatory identification impacted upon newcomers' perceptions of, and relationship with, the organisation after entry, the thesis demonstrated that the influence of anticipatory identification can span beyond applicant attraction, and continues to be of relevance once an individual is embedded within the organisation. Anticipatory identification was shown to predict post-entry identification either directly or indirectly through post-entry social identity judgements in each of the three studies where newcomers reported their level of anticipatory identification prior to entering the group or organisation. These findings provided an important extension to current organisational identification research, as initial research that explored the relationship between anticipatory identification and post-entry identification relied solely on retrospective reporting of anticipatory identification after entry (e.g. Stephens and Dailey, 2012).

The finding within this thesis that anticipatory identification moderated the relationship between post-entry social identity judgements and post-entry identification makes an additional unique contribution to the organisational identification literature. Considerable research attention has been afforded to the post-entry antecedents of organisational identification over the past twenty-five years. By establishing that anticipatory identification can significantly influence the relationship between subsequent organisational identification and these antecedents, this thesis has suggested that researchers looking to

fully understand what leads a newcomer to identify with an organisation at the start of their tenure cannot rely on an examination of post-entry factors alone; they must also consider the extent to which the individual defined themselves in terms of the organisation prior to entry.

The continuing rise in the use of social media by organisations as well as the adoption of increasingly sophisticated methods of recruitment and selection have arguably resulted in newcomers having more extensive contact with organisations prior to entry now than ever before. As a consequence the opportunities for future members to see and define themselves in terms of their new organisation have also grown considerably. This thesis thus provides a timely and relevant investigation into anticipatory identification. It has emphasised the pre-entry period as a formative phase in shaping newcomers' identification with their organisation both before and after entry. Moreover, the thesis has established a specific set of antecedents of anticipatory identification across a series of studies. In doing so, this research has not only highlighted to both researchers and practitioners the value of attending to and understanding newcomers' anticipatory identification, but also ways in which this identification can actually be promoted during the pre-entry period. Anticipatory identification can therefore now not merely be viewed as a construct in its own right; it can also be viewed as a construct that plays a potentially important role in evoking a positive and enduring relationship between newcomers and their new organisation.

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APPENDIX ONE

STUDY ONE MATERIALS



Welcome

You are invited to take part in a survey that will be used as part of a PhD research project. This research looks at how new students identify with their university. In particular we are interested in this relationship both before and after students start their degree.

To help you to decide whether or not you would like to take part, the information on this page provides details about what you would be required to do and the researcher's obligations to you. Please read this information carefully and, if you are happy to take part, confirm your consent at the bottom of the page.

What will I be asked to do?

In this survey you will be asked to indicate the extent to which you agree with a series of statements. There are no right or wrong answers to these questions. The responses cannot, and are in no way intended to, make judgements about you or your relationship with the university.

Do I have to take part?

Your participation in this research is entirely voluntary; it is your choice whether or not you take part. If you decide not to take part this will not affect your academic assessment in any way. If you do take part you are free to withdraw at any point. If you choose to withdraw you may do so without providing a reason.

What will happen to the information I provide?

The findings of this research will be used within a PhD research project. The results will be included within a PhD thesis and may also be used within other published work. The information you provide will be treated confidentially and your responses will not be seen by anyone except the researcher. Data will be stored securely and will comply with all data protection requirements. Any findings published from the research will be presented in cumulative form and will not be attributable to you in any way.

Will anyone know how I responded?

Your responses will be anonymous and you will not be required to provide your name.

Who should I speak to if I want more information?

If you would like more information or have any further questions before completing the survey please contact Fran Boag-Munroe at boagmufe@aston.ac.uk or telephone 0121 204 3318.

If you are happy to continue please click the button at the bottom of this page to start the survey. Please note that by clicking 'continue' you confirm that you have read and understood the information provided and you are willing to take part in this research.

Continue >

Please think about your impressions of Aston University **before you joined** and indicate the degree to which you agree with each of the following statements:

1.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
a. Before I joined, I saw myself as a member of Aston University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Before I joined, I was pleased to be a member of Aston University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Before I joined, I felt strong ties with Aston University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Before I joined, I identified with other members of Aston University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
a. Before I joined, I felt that most members of the Aston University community would respect my values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Before I joined, I felt that most members of the Aston University community would think I have accomplished a great deal in my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Before I joined, I felt that most members of the Aston University community would approve of how I live my life these days	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Before I joined, I believed that most members of the Aston University community would respect me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Before I joined, I believed that I would make a good impression on other members of the Aston University community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
a. Before I joined, I could not think of another university I would rather attend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Before I joined, I was proud to think of myself as a member of the Aston University community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Before I joined, when someone praised the accomplishments of a member of the Aston University community, I felt like it was a personal compliment to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Before I joined, I talked up Aston University to my friends as a good place to go to university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Before I joined, I felt good when people describe me as a typical Aston University student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Before I joined, I often thought about joining another university instead	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Before I joined, I thought that I would probably look for an alternative university the following year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continue >

Now please think about **all** of the groups you belong to (for example this could be sports teams you either play for or support, religious groups, work groups, clubs you are a member of etc.). With reference to all these groups please indicate the degree to which you agree with each of the following statements:

4.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
a. I have a lot in common with other members of my groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I enjoy being part of my groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. No matter which group I belong to, I would like to think of myself as representing what that group stands for	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I would rather say 'we' than 'they' when talking about the groups I am part of	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I am comfortable with other people knowing about my group memberships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. When I think about myself, I think about the groups I am part of	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Being a member of groups provides me with a strong sense of who I am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Being a part of groups provides me with an identity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. My understanding of who I am comes from the groups I am part of	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Without the groups I am part of, I would feel incomplete	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. My groups illustrate who I am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continue >

Please think about your impressions of Aston University **now** and indicate the degree to which you agree with each of the following statements:

5.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
a. I see myself as a member of Aston University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I am pleased to be a member of Aston University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I feel strong ties with Aston University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I identify with other members of Aston University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
a. If they knew me well, most members of the Aston University community would respect my values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. If they knew me well, most members of the Aston University community would think I have accomplished a great deal in my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. If they knew me well, most members of the Aston University community would approve of how I live my life these days	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I believe most members of the Aston University community respect me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I believe that I make a good impression on other members of the Aston University community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
a. I cannot think of another university I would rather attend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I am proud to think of myself as a member of the Aston University community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. When someone praises the accomplishments of a member of the Aston University community, I feel like it is a personal compliment to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I talk up Aston University to my friends as a good place to go to university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I feel good when people describe me as a typical Aston University student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I often think about transferring to another university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I will probably look for an alternative university in the next year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continue >

8. Which of these statements best describes you? (Optional)

- Aston was my first choice university
- Aston was my reserve/second choice university
- I came to Aston through clearing but had already considered joining this university
- I came to Aston through clearing and had not previously considered joining this university

9. Where are you currently living? (Optional)

- University halls of residence
- Private halls of residence
- Your own private accommodation (rented or owned)
- With parents or family
- Other (*please specify*):

10. How would you describe your gender? (Optional)

- Male
- Female

11. Are you a home, EU or international student? (Optional)

- Home student
- EU student
- International student

12. How old are you? (Optional)

Continue >

Thank you

Please remember that the responses you have just provided cannot, and are not intended to, make judgements about your relationship with the university or any other aspect of your degree course.

We do however realise that starting university can be a challenging time for many students. If completing this survey has raised any issues you would like to discuss further, Aston University has a counselling service which is available to provide advice and support to all students. Counselling can be contacted on **0121 204 4007** or by email at **counselling@aston.ac.uk**.

You also have access to a personal tutor who can provide additional support if you feel this would be beneficial. If you do not know who your tutor is please contact the undergraduate programme office.

Alternatively if you would like more general information a Freshers' Guild to Thriving at Aston University can be found at:

www1.aston.ac.uk/current-students/health-wellbeing/counselling/problems/14freshers/

If you have any questions please feel free to contact Fran Boag-Munroe at boagmufe@aston.ac.uk or telephone 0121 204 3318

You have now completed the survey - please [click continue to submit your responses](#)

[Continue >](#)

APPENDIX TWO

STUDY TWO MATERIALS

Group Involvement Questionnaire (for Salience Prime)

Group Involvement Questionnaire

Welcome

On the following pages you will find a series of questions. These questions will be used to determine your likely involvement with the virtual group you will shortly be joining. The survey should take no more than 5 minutes to complete.

We would like to reiterate that your participation in this research is entirely voluntary, that you are free to withdraw at any point during the research and that the information you provide will be treated confidentially and in line with Data Protection regulations.

You will be required to enter your participant number so that your responses remain anonymous. This number will have been provided to you via email. If you have not received this email please contact the researcher using the contact details below.

If you have any further questions please contact Fran Boag-Munroe at boagmufe@aston.ac.uk or telephone 0121 204 3318 before commencing this questionnaire

Please press "next" to receive instructions on how to complete this questionnaire.

Group Involvement Questionnaire

Please enter your participant number in the space provided below

Group Involvement Questionnaire

What is your age?

What is your gender?

Female

Male

Group Involvement Questionnaire

Instructions

On the following page you will find a series of questions. For each question you will be asked to state which of the two options you would prefer, for example:

Would you prefer to spend your free time in an art gallery or in a park?

Art Gallery

Park

Whilst you may like both options, you are asked to indicate which is more preferable to you.

Your response to these questions will be used to determine your likely involvement with the virtual group you will shortly be joining.

Please note, these questions do not directly measure group involvement. However considerable pre-testing and statistical analysis has shown that people who are more involved with virtual groups also tend to provide a certain pattern of responses; whilst people who are less involved with virtual groups tend to provide a different pattern of responses.

Please press "next" to begin the questionnaire.

Group Involvement Questionnaire

Would you rather take an early morning class on a Monday or a late afternoon class on a Friday?

- Morning class on a Monday
- Afternoon class on a Friday

On average, do you go to bed closer to 11:00pm or closer to 2:00am?

- 11:00pm
- 2:00am

Are you normally a person who takes charge of a situation or do you let others take the lead?

- Take charge of a situation
- Let others take the lead

Would you prefer to spend your vacation in a mountain lodge or a beach house?

- Mountain lodge
- Beach house

Do you generally start working on assignments as soon as you receive them or leave them until the last minute?

- As soon as I receive them
- Leave them until the last minute

Would you prefer to spend your free time watching TV or reading a book?

- Watching TV
- Reading a book

Do you think it is more important in life to be practical or creative?

- Practical
- Creative

Group Involvement Questionnaire

If you inherited a small amount of money would you invest it or spend it straight away?

- Invest it
 Spend it

Is it more accurate to describe you as someone who is down-to-earth or who has their head in the clouds?

- Down-to-earth
 Head in the clouds

Would you prefer to spend your free time in an art gallery or in a park?

- Art Gallery
 Park

If time travel were possible, would you prefer to travel into the past or into the future?

- Into the past
 Into the future

Do you generally like to make plans in advance or leave things until the last minute?

- Make plans in advance
 Leave things until the last minute

Do you tend to be shy or outgoing around people you've only just met?

- Shy
 Outgoing

Do you like to be first to own the latest technology or do you only buy new gadgets when other people you know already have them?

- First to own
 Let others buy first

Do you prefer the weather to be sunny or snowy?

- Sunny
 Snowy

Do you think that, in general, it more important to relax or to keep busy?

- Relax
 Keep busy

Pre-Entry Measurement Instrument

Pre-Virtual Group Activity Questionnaire

In a few moments you will be provided with a link to the virtual group activity; however we would first like you to answer a few more questions before taking part in this activity.

Some of these questions will be about you and some will be about your current impressions of your group.

These questions will take no more than a few minutes to answer. As with all aspects of this your participation in this research is entirely voluntary and you are free to withdraw at any point during the research. However you will not receive the link to the virtual group activity until you have responded to these questions.

Please click next to begin.

Pre-Virtual Group Activity Questionnaire

Please enter your participant number in the space provided below:

Please enter your group number in the space provided below:

Please enter your group involvement score in the space provided below:

Pre-Virtual Group Activity Questionnaire

Please indicate the extent to which you agree with each of the following statements:

I am someone who...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Is talkative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tends to find fault with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does a thorough job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is depressed, blue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is original, comes up with new ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is reserved	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is helpful and unselfish with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can be somewhat careless	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is relaxed, handles stress well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is curious about many different things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is full of energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Starts quarrels with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is a reliable worker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can be tense	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is ingenious, a deep thinker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generates a lot of enthusiasm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has a forgiving nature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tends to be disorganized	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worries a lot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has an active imagination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tends to be quiet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is generally trusting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pre-Virtual Group Activity Questionnaire

Please indicate the extent to which you agree with each of the following statements:

I am someone who...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Tends to be lazy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is emotionally stable, not easily upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is inventive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has an assertive personality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can be cold and aloof	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Perseveres until the task is finished	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can be moody	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Values artistic, aesthetic experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is sometimes shy, inhibited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is considerate and kind to almost everyone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does things efficiently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remains calm in tense situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prefers work that is routine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is outgoing, sociable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is sometimes rude to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Makes plans and follows through with them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gets nervous easily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likes to reflect, play with ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has few artistic interests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likes to cooperate with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is easily distracted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is sophisticated in art, music, or literature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pre-Virtual Group Activity Questionnaire

Now please think about the group you will shortly be joining and indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I see myself as a member of this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am pleased to be a member of this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel strong ties with this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I identify with other members of this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pre-Virtual Group Activity Questionnaire

Now please think about the group you will shortly be joining and indicate the extent to which you agree with the following statement:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Being a member of this group is important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Group Activity

Welcome

On the following pages you will find a series of decision scenarios for which two possible solutions have been provided. Please indicate which of these solutions you think is the most appropriate, based on the information provided and on your own knowledge and experience.

Although both solutions provided for each scenario are viable, we have asked a panel of experts to determine which solution is the better of the two. It is this solution that we will be looking for your group to identify during the course of this activity.

Your fellow group members have also been presented with the same decision scenarios and will be working through the activity at the same time as you. Therefore whilst we would like you to think carefully about these decisions, try to work as quickly as you can in order to prevent any unnecessary delays for the rest of your group.

There are nine scenarios in total and these will be presented to you in three sets of three. Each set of three scenarios can be accessed via a link that you will receive at the end of the preceding part. Please click next to reach the first set of decision scenarios.

The university is looking to get more students involved in extra-curricular activities and has set aside a small budget to facilitate this. You are a working group which has been asked to decide where this money should be allocated in order to get as many students involved as possible. What should this money go towards?

- Increasing the advertising budget of existing clubs and societies
- Making a wider range of clubs and societies available to students

You are on the management board of a large multinational technology company. There have been production problems with one of the products you are just about to launch. These problems mean that the product would not be competitively priced and would be unlikely to sell well within the market. What should you do?

- Invest more money to try to find a solution to the problems
- Scrap the project and look to develop a more cost effective product

Due to a tax windfall, the City Council unexpectedly has an additional £1 million in this year's budget. You are members of the Council's finance committee and have been charged with determining where this additional money should be allocated. What should you do with the money?

- Distribute the money equally across all departments so that every council service receives more money this year.
- Invest in a one-off cultural project that the council would not otherwise have had the capital to support.

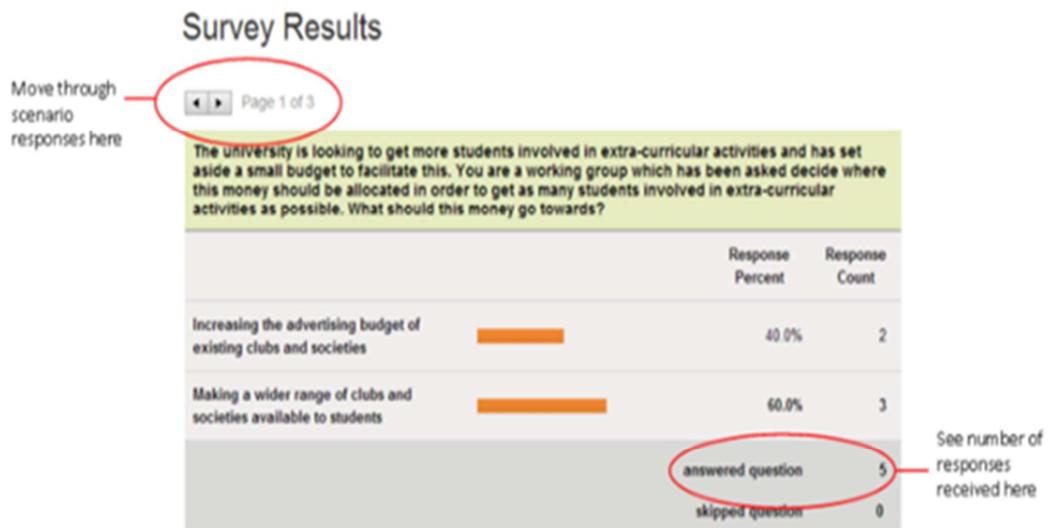
Thank you, you have now completed the first set of decision scenarios.

When you click "done" you will be able to see the solutions your fellow group members provided for these scenarios.

There are five people in your group and when you move to the next page you should be able to see the responses of all five group members. If not all responses have been registered, please wait a few moments and then press refresh on your internet browser. Please repeat this until the responses of all five members have appeared.

You can see that all five people have responded when the number of "answered questions" for each scenario is five (please ignore the information on "skipped questions" this is not relevant for your activity).

An example of what you will see on the following page is provided below.



Now that you have seen the responses of your fellow group members, we would like you go through the decision scenarios again and make a final decision about which of the two possible solutions for each of the scenarios is the most appropriate.

You should base your decision on the information provided, on your own knowledge and experience and now also on the opinion of your fellow group members. This current part of the activity should have opened in a new window or tab (depending on your web browser). You can refer back to your group's answers should you wish to by clicking on this previous window/tab.

Please note, we will be assigning points to the group on the basis of the number of group members who make the correct final decision and not according to the amount of agreement amongst members. You should not adopt a solution preferred by other group members if you disagree with this decision.

As before whilst we would like you to think carefully about these decisions, please try to work as quickly as you can in order to prevent any unnecessary delays for the rest of your group.

Please click next to reach the first decision scenario.

Due to a tax windfall, the City Council unexpectedly has an additional £1 million in this year's budget. You are members of the Council's finance committee and have been charged with determining where this additional money should be allocated. What should you do with the money?

- Distribute the money equally across all departments so that every council service receives more money this year.
- Invest in a one-off cultural project that the council would not otherwise have had the capital to support.

The university is looking to get more students involved in extra-curricular activities and has set aside a small budget to facilitate this. You are a working group which has been asked to decide where this money should be allocated in order to get as many students involved as possible. What should this money go towards?

- Increasing the advertising budget of existing clubs and societies
- Making a wider range of clubs and societies available to students

You are on the management board of a large multinational technology company. There have been production problems with one of the products you are just about to launch. These problems mean that the product would not be competitively priced and would be unlikely to sell well within the market. What should you do?

- Invest more money to try to find a solution to the problems
- Scrap the project and look to develop a more cost effective product

On the following pages you will find the second set of decision scenarios.

The instructions for these decision scenarios are the same as the first. You will be provided with two possible solutions for each scenario. Please indicate which of these solutions you think is the most appropriate, based on the information provided and on your own knowledge and experience.

Although both solutions in each scenario are viable, we have again asked a panel of experts to determine which solution is the better of the two. It is this solution that we will be looking for your group to identify during the course of this activity.

Your fellow group members have also been presented with the same decision scenarios. Therefore whilst we would like you to think carefully about these decisions, try to work as quickly as you can in order to prevent any unnecessary delays for the rest of your group.

Please click next to reach the first decision scenario.

You are owners of a small local coffee shop. The business has been struggling as a result of the recession; people now have less disposable income to spend on takeaway coffee. At present the coffee shop employs six members of staff, but to ensure the future of the business it is necessary to cut staffing costs. How should you do this?

- Reducing the working hours of all members of staff
- Making some of the staff redundant

You are members of the university's entertainment committee. You have a fixed budget for student entertainment for the academic year and you need to decide how to spend this money. You want to encourage as many students as possible to attend events over the course of the year. What should you do?

- Put on a large number of small, low cost events
- Put on a small number of large, expensive events

You are on the management board of a national supermarket chain. You want to increase the number of customers who shop at your stores every month and need to decide what would be the most effective way to encourage more people to buy their groceries at your supermarket. What should you do?

- Improve the quality of products already on offer in stores
- Make a wider range of products available to customers

Thank you, you have now completed the second set of decision scenarios.

When you click "done" you will be able to see the solutions your fellow group members provided for these scenarios.

As before, there are five people in your group and when you press "done" you should be able to see the responses of all five group members. If not all responses have been registered, please wait a few moments and then press refresh on your internet browser. Please repeat this until the responses of all five members have appeared.

Now that you have seen the responses of your fellow group members, we would like you go through the decision scenarios again and make a final decision about which of the two possible solutions for each of the scenarios is the most appropriate.

You should base your decision on the information provided, on your own knowledge and experience and now also on the opinion of your fellow group members. This current part of the activity should have opened in a new tab or window. You can refer back to your group's answers should you wish to, by clicking on the previous tab/window.

Please note, we will be assigning points to the group on the basis of the number of group members who make the correct final decision and not according to the amount of agreement amongst members. You should not adopt a solution preferred by other group members if you disagree with this decision.

As before whilst we would like you to think carefully about these decisions, please try to work as quickly as you can in order to prevent any unnecessary delays for the rest of your group.

Please click next to reach the first decision scenario.

You are owners of a small local coffee shop. The business has been struggling as a result of the recession; people now have less disposable income to spend on takeaway coffee. At present the coffee shop employs six members of staff, but to ensure the future of the business it is necessary to cut staffing costs. How should you do this?

- Reducing the working hours of all members of staff
- Making some of the staff redundant

You are members of the university's entertainment committee. You have a fixed budget for student entertainment for the academic year and you need to decide how to spend this money. You want to encourage as many students as possible to attend events over the course of the year. What should you do?

- Put on a large number of small, low cost events
- Put on a small number of large, expensive events

You are on the management board of a national supermarket chain. You want to increase the number of customers who shop at your stores every month and need to decide what would be the most effective way to encourage more people to buy their groceries at your supermarket. What should you do?

- Improve the quality of products already on offer in stores
- Make a wider range of products available to customers

On the following pages you will find the third and final set of decision scenarios.

The instructions for these decision scenarios are the same as the first two. You will be provided with two possible solutions for each scenario. Please indicate which of these solutions you think is the most appropriate, based on the information provided and on your own knowledge and experience.

Although both solutions in each scenario are viable, we have again asked a panel of experts to determine which solution is the better of the two. It is this solution that we will be looking for your group to identify during the course of this activity.

Your fellow group members have also been presented with the same decision scenarios. Therefore whilst we would like you to think carefully about these decisions, try to work as quickly as you can in order to prevent any unnecessary delays for the rest of your group.

Please click next to reach the first decision scenario.

You are the management team of a local branch of a national cinema chain. You have received notification from Head Office that the chain is looking to increase its profits, and so your cinema needs to make more money during the next financial year. How should you do this?

- Putting on promotions to increase the number of customers coming to the cinema each month
- Increasing the price customers pay for tickets

The university wants staff and students to engage more with the local community. To encourage this, they are looking to set-up an initiative that focusses on one particular aspect of community engagement. You are working group which has been asked to determine what is likely to have the greatest impact upon the local community. What should you focus on?

- Encouraging staff and students to engage more with voluntary projects in the local community.
- Encouraging staff and students to engage more with small and medium-sized businesses in the local community.

You are the board of a large real estate company. You have been granted planning permission to build a new office block in the centre of Birmingham. This would be a landmark building similar to the “Gherkin” in London, but you do not yet have tenants to occupy the building. You need to decide when to start construction on this project. When should you start construction?

- Start construction now without tenants lined up, as it will be easier to promote the building once construction is complete.
- Wait until you have enough tenants to occupy the building before you start construction, as you need to make a profit from the building as soon as it is built.

Thank you, you have now completed the third set of decision scenarios.

When you click “done” you will be able to see the solutions your fellow group members provided for these scenarios.

As before, there are five people in your group and when you press “done” you should be able to see the responses of all five group members. If not all responses have been registered, please wait a few moments and then press refresh on your internet browser. Please repeat this until the responses of all five members have appeared.

Now that you have seen the responses of your fellow group members, we would like you go through the decision scenarios again and make a final decision about which of the two possible solutions for each of the scenarios is the most appropriate.

You should base your decision on the information provided, on your own knowledge and experience and now also on the opinion of your fellow group members. This current part of the activity should have opened in a new tab or window. You can refer back to your group's answers should you wish to, by clicking on the previous tab/window.

Please note, we will be assigning points to the group on the basis of the number of group members who make the correct final decision and not according to the amount of agreement amongst members. You should not adopt a solution preferred by other group members if you disagree with this decision.

As before whilst we would like you to think carefully about these decisions, please try to work as quickly as you can in order to prevent any unnecessary delays for the rest of your group.

Please click next to reach the first decision scenario.

You are the management team of a local branch of a national cinema chain. You have received notification from Head Office that the chain is looking to increase its profits, and so your cinema needs to make more money during the next financial year. How should you do this?

- Putting on promotions to increase the number of customers coming to the cinema each month
- Increasing the price customers pay for tickets

The university wants staff and students to engage more with the local community. To encourage this, they are looking to set-up an initiative that focusses on one particular aspect of community engagement. You are working group which has been asked to determine what is likely to have the greatest impact upon the local community. What should you focus on?

- Encouraging staff and students to engage more with voluntary projects in the local community.
- Encouraging staff and students to engage more with small and medium-sized businesses in the local community.

You are the board of a large real estate company. You have been granted planning permission to build a new office block in the centre of Birmingham. This would be a landmark building similar to the “Gherkin” in London, but you do not yet have tenants to occupy the building. You need to decide when to start construction on this project. When should you start construction?

- Start construction now without tenants lined up, as it will be easier to promote the building once construction is complete.
- Wait until you have enough tenants to occupy the building before you start construction, as you need to make a profit from the building as soon as it is built.

Post-Entry Measurement Instrument

Virtual Group Activity Follow-Up Questionnaire

Thank you for recently taking part in our virtual group decision-making activity.

We have a few final questions we would like you to answer before your participation in this study is complete.

These questions will take no more than a minute or so to answer. As with all aspects of this your participation in this research is entirely voluntary and that you are free to withdraw at any point during the research.

Please click "next" to reach this questionnaire.

Virtual Group Activity Follow-Up Questionnaire

1. Please enter your participant number in the space provided below:

Participant Number

2. Please enter the score your group achieved on the virtual group activity in the space provided below.

Virtual group activity score

Virtual Group Activity Follow-Up Questionnaire

3. On a scale of 1 to 10, how well do you think your group has performed in this activity?

(1 = could not have performed worse; 10 = could not have performed better).

1 2 3 4 5 6 7 8 9 10

Virtual Group Activity Follow-Up Questionnaire

4. Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I see myself as a member of this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am pleased to be a member of this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel strong ties with this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I identify with other members of this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Virtual Group Activity Follow-Up Questionnaire

5. Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
This is one of the best groups to belong to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People would be impressed if I told them I was a member of this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This group would be well respected by other groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that being a member of this group reflects well on me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be proud to tell others I was a member of this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX THREE

STUDY THREE MATERIALS

Group Decision-Making Questionnaire (Status Prime)

Group Decision-Making Questionnaire

Welcome

Thank you for agreeing to take part in this research study; this is the first stage of the study that you are required to complete.

On the following page you will find a short questionnaire we would like you to complete in your own time. This questionnaire will ask you how much you agree with each of a series of different statements about your decision-making style. There are no right or wrong answers to these questions.

The responses you provide will be combined with the responses of the other people assigned to your group to create a composite score. This composite score will be used to determine which decision-making activity your group should complete.

The questionnaire should take no more than two minutes to complete, however it is recommended you complete it as soon as possible because we cannot progress to stage two of the study until we receive your responses.

We would like to reiterate that your participation in this research is entirely voluntary, that you are free to withdraw at any point during the research and that the information you provide will be treated confidentially and in line with Data Protection regulations.

At the end of the questionnaire you will be required to enter your participant number so that your responses remain anonymous. This number will have been emailed to you separately from this questionnaire. If you have not received this email please contact the researcher using the contact details below.

If you have any further questions please contact Fran Boag-Munroe at boagmufe@aston.ac.uk or telephone 0121 204 3318 before commencing this questionnaire

Please press "next" start the questionnaire

Group Decision-Making Questionnaire

1. Please enter your participant number in the space provided:

2. How old are you?

3. What is your gender?

Female

Male

Group Decision-Making Questionnaire

4. Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Agree Strongly
I feel as if I'm under tremendous time pressure when making decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel better about choosing if I can convince myself that the decision is not all that important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to consider all of the alternatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I have a decision to make I try not to think about it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer to leave decisions to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whenever I get upset by having to make decisions I choose on the spur of the moment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to find out the disadvantages of all alternatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am inclined to blame others when decisions turn out badly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I waste a lot of time on trivial matters before getting to the final decision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel uncomfortable about making decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider how best to carry out the decision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even after I have made a decision I delay acting upon it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After making a decision I am inclined to undervalue the worth of the alternatives I did not choose	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When making decisions I like to collect lots of information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I avoid making decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I only want to hear information about my preferred alternative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I have to make a decision I wait for a long time before starting to think about it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't like to take responsibility for making decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to be clear about my objectives before choosing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I forget or overlook important information about choice alternatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The possibility that some small thing might go wrong causes me to swing abruptly in my preferences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If a decision can be made by me or another person I let the other person make it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whenever I face a difficult decision I feel pessimistic about finding a good solution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take a lot of care before choosing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I choose on the basis of some small thing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't make decisions unless I really have to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I delay making decisions until it is too late	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer that people who are better informed decide for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After a decision is made I spend a lot of time convincing myself it was correct	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I put off making decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can't think straight if I have to make decisions in a hurry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pre-Entry Measurement Instrument

Pre-Virtual Group Activity Questionnaire

In a few moments you will be provided with a link to the virtual group activity; however we would first like you to answer a few more questions before taking part in this activity.

Some of these questions will be about you and some will be about your current impressions of your group.

These questions will take only a few minutes to answer. As with all aspects of this your participation in this research is entirely voluntary and that you are free to withdraw at any point during the research. However you will not receive the link to the virtual group activity until you have responded to these questions.

Please click next to begin.

Pre-Virtual Group Activity Questionnaire

1. Please enter your participant number in the space provided below:

Participant Number

2. Please enter your group number in the space provided below:

3. Please indicate which decision-making activity your group has been assigned to:

- High Level Decision-Making Activity
 Low Level Decision-Making Activity

Pre-Virtual Group Activity Questionnaire

1. On a scale of 1 – 10, how much status do you think this group has compared to other groups completing this virtual group activity?

(1 = could not have lower status; 10 = could not have higher status)

- 1 2 3 4 5 6 7 8 9 10

Pre-Virtual Group Activity Questionnaire

Please indicate the extent to which you agree with each of the following statements:

I am someone who...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Is talkative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tends to find fault with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does a thorough job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is depressed, blue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is original, comes up with new ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is reserved	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is helpful and unselfish with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can be somewhat careless	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is relaxed, handles stress well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is curious about many different things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is full of energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Starts quarrels with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is a reliable worker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can be tense	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is ingenious, a deep thinker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generates a lot of enthusiasm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has a forgiving nature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tends to be disorganized	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worries a lot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has an active imagination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tends to be quiet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is generally trusting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pre-Virtual Group Activity Questionnaire

Please indicate the extent to which you agree with each of the following statements:

I am someone who...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Tends to be lazy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is emotionally stable, not easily upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is inventive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has an assertive personality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can be cold and aloof	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Perseveres until the task is finished	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can be moody	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Values artistic, aesthetic experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is sometimes shy, inhibited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is considerate and kind to almost everyone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does things efficiently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remains calm in tense situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prefers work that is routine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is outgoing, sociable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is sometimes rude to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Makes plans and follows through with them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gets nervous easily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likes to reflect, play with ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has few artistic interests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likes to cooperate with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is easily distracted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is sophisticated in art, music, or literature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pre-Virtual Group Activity Questionnaire

Now please think about the group you will shortly be joining and indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I see myself as a member of this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am pleased to be a member of this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel strong ties with this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I identify with other members of this group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pre-Virtual Group Activity Questionnaire

1. Now please think about all of the groups you belong to (for example this could be sports teams you either play for or support, religious groups, work groups, clubs you are a member of etc.). With reference to all these groups please indicate the degree to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I have a lot in common with other members of my groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy being part of my groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No matter which group I belong to, I would like to think of myself as representing what that group stands for	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would rather say 'we' than 'they' when talking about the groups I am part of	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am comfortable with other people knowing about my group memberships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I think about myself, I think about the groups I am part of	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being a member of groups provides me with a strong sense of who I am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being a part of groups provides me with an identity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My understanding of who I am comes from the groups I am part of	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Without the groups I am part of, I would feel incomplete	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My groups illustrate who I am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX FOUR

STUDY FOUR MATERIALS

Time One Survey

Placement Student Survey 2013

Welcome

You are invited to take part in two surveys that will be used as part of a research project into the attitudes of new employees. The research is looking to understand what affects the relationship people have with the company they work for. In particular we are interested in this relationship before a new employee officially joins a company.

You will be eligible to participate in this study if:

1. You have been offered, and have accepted, a placement position;
2. The placement position has not yet started, but is due to start within the next three months; and
3. You have not worked at the company before.

The study is made up of two short surveys which should each take no more than a few minutes to complete. You will be asked to fill in the first survey now, and then will be contacted again once you start your placement. In each survey you will be asked to indicate the extent to which you agree with a series of statements relating to your current impression of your organisation.

There are no right or wrong answers to these questions. The responses you give cannot, and are in no way intended to, make judgements about you or your relationship with your employer, either now or when you start work.

To help you to decide whether or not you would like to take part, the information on the next page provides details about the purpose of the research, what would be required of you and the researcher's obligations to you. Please read this information carefully and then, if you are happy to take part, confirm your consent at the bottom of the page.

Placement Student Survey 2013

Participant Information

What is the purpose of the research?

This research is looking to understand how people's impressions of an organisation prior to starting a new job can affect the relationship they have with their new organisation both before and after they start work.

What will I be required to do?

If you would like to participate in this research you will be asked to fill in a survey which should take no more than a few minutes to complete. You will be asked how much you agree with a series of statements about your current impression of the organisation that you will shortly be joining. There are no right or wrong answers to these questions.

After completing this survey you will be invited to participate in another survey at the start of your employment. Your participation in this survey does not obligate you to take part in the subsequent survey and you can withdraw from the research at any time.

Do I have to take part in this research?

Your participation in this research is entirely voluntary; it is your choice whether or not you take part. If you do take part you are free to withdraw at any point during the research. If you choose to withdraw you may do so without providing a reason.

How will the findings of this research be used?

The findings of this research may be used in published work or public presentations. This information will not, and is not intended to, make judgements about any aspect of your relationship with your organisation or your success within your job.

Who will see the information I provide within the survey?

The information you provide within the survey will be treated confidentially and your responses will not be seen by anyone except the researcher. Data will be stored securely and will be destroyed after completion of the research project. Any findings published from the research will be presented in cumulative form and will not be attributable to you in any way.

*** Thank you for taking the time to read this information. If you have any questions please contact Fran Boag-Munroe at boagmufe@aston.ac.uk. If you wish to participate please confirm your consent below.**

I confirm that I have read and understood the information provided and agree to participate in this survey.

Placement Student Survey 2013

In the following section you will be presented with a number of different statements. Please think about your current impressions of your future organisation and indicate the extent to which you agree with each of these statements using the scales provided.

Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
The organisation is one of the best in its field.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People are impressed when I tell them I will be working at the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organisation is well respected in its field.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that working at the organisation will reflect well on me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud to tell others I will be working at the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
The managers at the organisation will respect the work I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The managers at the organisation will respect my work-related ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The managers at the organisation will think highly of the quality of my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The managers at the organisation will appreciate my unique contributions on the job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The managers at the organisation will think that I have valuable insights and ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The managers at the organisation will think it difficult to replace me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Placement Student Survey 2013

Now please think about all of the groups you belong to (for example this could be sports teams you either play for or support, religious groups, study groups, clubs you are a member of etc.). With reference to all of these groups please indicate the degree to which you agree with the statements below using the scales provided.

Please indicate the degree to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I have a lot in common with other members of the groups I am part of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy being part of my groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No matter which group I belong to, I would like to think of myself as representing what that group stands for.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would rather say 'we' than 'they' when talking about the groups I am part of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am comfortable with other people knowing about my group memberships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I think about myself, I think about the groups I am part of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being a member of groups provides me with a strong sense of who I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being a part of groups provides me with an identity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My understanding of who I am comes from the groups I am part of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Without the groups I am part of, I would feel incomplete.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My groups illustrate who I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Placement Student Survey 2013

Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
When someone criticises the organisation, it feels like a personal insult.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very interested in what others think about the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I talk about the organisation I usually say "we" rather than "they".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organisation's successes are my successes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When someone praises the organisation it feels like a personal compliment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If a story in the media criticised the organisation, I would feel embarrassed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I see myself as a member of the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am pleased to be a member of the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel strong ties with the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I identify with other members of the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Placement Student Survey 2013

What is the size of the organisation?

- <100 employees
 100 - 250 employees
 250 - 500 employees
 500+ employees

What is your gender?

- Female
 Male

What is your age?

Placement Student Survey 2013

Next Steps

We would like to invite you to participate in an additional survey at the start of your employment. To participate please provide your email address below as well as your anticipated start date at your new organisation.

Email address:

*** Anticipated Start Date:**

Please note - Providing your contact details does not mean that you will be required to participate, however it will mean that the researcher will contact you again using the details you have provided.

Time Two Survey

Placement Student Survey 2013

Welcome

Thank you for recently completing our survey regarding the placement you are currently undertaking. As mentioned in the original survey, we would like you to complete a short follow-up survey now that you have joined your placement organisation.

This survey should take no more than a few minutes to complete. Even though you completed the first survey, you are not obliged to complete this one as well. However as the purpose of the research is to understand the relationship between people's impressions of an organisation before and after joining, the responses you provide in this survey are of vital importance to the research project. If you do not complete this survey we will unfortunately not be able to use the responses you provided in the earlier survey too.

During the survey you will be asked to indicate the extent to which you agree with a series of statements relating to your current impression of your organisation. There are no right or wrong answers to these questions. The responses you give cannot, and are in no way intended to, make judgements about you or your relationship with your employer, either now or when you start work.

To help you to decide whether or not you would like to take part, the information on the next page provides details about the purpose of the research, what would be required of you and the researcher's obligations to you. Please read this information carefully and then, if you are happy to take part, confirm your consent at the bottom of the page.

Placement Student Survey 2013

Participant Information

What is the purpose of the research?

This research is looking to understand how people's impressions of an organisation prior to starting a new job can affect the relationship they have with their new organisation both before and after they start work.

What will I be required to do?

If you would like to participate in this research you will be asked to fill in a survey which should take no more than a few minutes to complete. You will be asked how much you agree with a series of statements about your current impression of the organisation you have recently joined. There are no right or wrong answers to these questions.

Do I have to take part in this research?

Your participation in this research is entirely voluntary; it is your choice whether or not you take part. If you do take part you are free to withdraw at any point during the research. If you choose to withdraw you may do so without providing a reason.

How will the findings of this research be used?

The findings of this research may be used in published work or public presentations. This information will not, and is not intended to, make judgements about any aspect of your relationship with your organisation or your success within your job.

Who will see the information I provide within the survey?

The information you provide within the survey will be treated confidentially and your responses will not be seen by anyone except the researcher. Data will be stored securely and will be destroyed after completion of the research project. Any findings published from the research will be presented in cumulative form and will not be attributable to you in any way.

*** Thank you for taking the time to read this information. If you have any questions please contact Fran Boag-Munroe at boagmufe@aston.ac.uk. If you wish to participate please confirm your consent below.**

I confirm that I have read and understood the information provided and agree to participate in this survey.

Placement Student Survey 2013

In the following section you will be presented with a number of different statements. Please think about your impressions of your placement organisation now that you have joined and indicate the extent to which you agree with each of these statements using the scales provided.

Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
The organisation is one of the best in its field.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People are impressed when I tell them I am working at the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organisation is well respected in its field.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that working at the organisation reflect well on me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud to tell others I work at the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
The managers at the organisation respect the work I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The managers at the organisation respect my work-related ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The managers at the organisation think highly of the quality of my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The managers at the organisation appreciate my unique contributions on the job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The managers at the organisation think that I have valuable insights and ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The managers at the organisation think it difficult to replace me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Placement Student Survey 2013

Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
All in all, I am satisfied with my current job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job measures up to the sort of job I wanted when I took it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowing what I know now, if I had to decide all over again whether to take my job, I would.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy the work that I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Placement Student Survey 2013

Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
When someone criticises the organisation, it feels like a personal insult.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very interested in what others think about the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I talk about the organisation I usually say "we" rather than "they".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organisation's successes are my successes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When someone praises the organisation it feels like a personal compliment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If a story in the media criticised the organisation, I would feel embarrassed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I see myself as a member of the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am pleased to be a member of the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel strong ties with the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I identify with other members of the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Placement Student Survey 2013

Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I often feel like quitting this organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Despite the obligations I have made to this organisation, I want to quit my job as soon as possible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to stay with this organisation as long as possible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I could, I would quit today.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX FIVE

PARTICIPANT DEBRIEFING FORM (STUDY TWO)

Thank you for taking part in this study; your participation is now over. However it is important to make you aware of the purpose of the research and several aspects of the study which were not as they may have appeared. The researcher will have already have discussed this information with you, however we recommend that you read the contents of this information sheet carefully and to raise any queries you have with the researcher either before you leave or using the contact details provided at the end of this sheet.

After you have read this information we will ask you to sign to confirm whether or not you are happy for the data we have collected from you during the course of this study to be used within our research. You already signed a consent form at the beginning of the study; however it is very important that you reconfirm your consent now that you have access to all the facts relating to this research.

The Purpose of the Research

Throughout the study we have told you that we were investigating decision-making in virtual groups. This was, in fact, not the case. Our research actually looks at people's relationship with social groups during what we call the "pre-entry period": the period of time that starts when a person knows that they may be joining a new group and ends when they officially become a member of that group. We are particularly interested in the effect that a person's relationship with a social group during the pre-entry period has on their impressions of the group once they actually become a member.

We were unable to tell you this at the start of our study because research has previously shown that, when a person knows their relationship with a social group is being examined, they tend to either be more positive or more negative about the group, depending on what they think the researchers would like them to say. Because we were interested in what you really thought about your group during this activity, and did not want you to simply try to please us, we withheld the true focus of our research until you had completed the group activity.

The Group

You were informed that you would be taking part in the activity with four other people. In fact, you completed the activity on your own and the responses of the other "group members" had been pre-programmed by us. If you suspected that this was the case please inform the researcher. We did this not to trick you, but because we did not want anything that the other group members did to bias your attitudes towards the group. Often people drop out of this sort of activity half-way through which may have made you feel differently about the group. Alternatively the responses given by the other group members could have biased your opinions, for example if everyone within the group gave similar or different answers to you. It was important that we tried to minimise the impact of other factors which might influence your impressions of the group after joining, so that we could clearly see whether your impression of the group during the pre-entry period had an effect on your impressions after entry. For ease, we refer to your "group" below. In each instance please remember that this was not a real group, even though at the time you believed it was.

Your Group Involvement Score

Before you came today you completed an online questionnaire which we told you would measure your group involvement; we also provided you with your Group Involvement Score before you took part in the group activity. We are indeed interested in your group involvement however the questionnaire you completed was not actually able to measure this. We cannot tell whether you are likely to be more or less involved in a group by

looking at information such as what time you go to bed or when you prefer to attend classes. The Group Involvement Score we gave you was therefore not a true reflection of how involved you are likely to be with the group. This score was instead used as what we call a “prime” and was intended to encourage you to think about the group in a particular way.

You were told that your Group Involvement Score was [above/below] average and that this meant that you were likely to be [more/less] involved with the virtual group than a typical student. By telling you this, the intention was to encourage you to believe, for a short period of time, that you would be [more/less] involved with the group and so feel a greater sense of belonging to the group. As we mentioned above, we are interested in understanding the effect of a person’s relationship with a social group during the pre-entry period. In this particular study we are looking at whether feeling a higher or lower sense of belonging to a group before joining has an impact upon how people respond to feedback about the group once they become a member.

The Virtual Group Activity

Once we had provided your “Group Involvement Score” we asked you to take part in an activity where you responded to a series of decision-making scenarios. Although we told you that there were correct answers to these decisions, this was, in fact, not the case. We told you this so that the feedback we provide regarding your group’s performance could be compared to other groups and we could say whether your score was [above/below] average; this would not have been possible if either choice within the decision-making scenario had been equally valid. However because there were no right or wrong answers, and the responses of your four other group members were pre-programmed, the feedback we ultimately provided was also false. Indeed the score we gave you was simply an arbitrary score which was realistic given the nature of the activity.

It was also not true that your group’s score was [above/below] average; your performance could not be classified as above or below average because the activity and, the score resulting from it, had been fabricated. To reiterate, the feedback we provided regarding your group’s performance during the activity was false, the score we gave you is in no way indicative of your likely success within virtual groups now or in the future. Even if we wished to make judgements about your performance within virtual groups, it would not be possible to do so using the group activity you have just completed. Our only reason for providing feedback regarding your performance was to see how you would respond to this information.

We mentioned above that we were interested in whether a person’s sense of involvement with the group prior to joining makes them respond differently to feedback regarding the group’s performance after joining. We had already provided your “Group Involvement Score” in order to encourage you to feel [more/less] involved with the group before completing the decision-making activity. We wanted you to believe that your group had performed [above/below] average so that we could see whether you would respond differently to this feedback compared to someone who felt [less/more] involved with the group before joining. Once we had provided you with feedback, we asked you to answer a series of questions about your impressions of the group and your feelings towards the group. When we analyses the answers you have provided to these questions we will be looking to see your answers differ from other participants who were encouraged to feel a [higher/lower] sense of belonging to the group before joining.

Therefore although it may have appeared that we were most interested in your group’s performance during the decision-making activity, for us the most important information you provided was at the end of the activity, in the last set of questions you completed. We took the steps we did during the course of this study (including providing you with misleading information about the purpose of the study, your “group involvement score” and your group’s performance on the decision-making task) in order to learn why you provided the responses you did within this final questionnaire. We would like to reassure you that any

misleading information we gave you before or during the study was intended only to ensure the integrity of the research, and should in no way be taken as a personal affront or a sign of disrespect. We highly value your contribution to our study and hope that the responses you have provided will give us further important insight into people's relationship with social groups.

Right to Withdraw

If after reading the information provided in this debriefing sheet, you decide that you do not want your responses to be included within our research, you are still able to withdraw at this stage; in which case your responses will immediately be destroyed. There will be no detriment to you in any way if you do decide to withdraw and you will still receive payment for your time. If you provide your consent below, but change your mind after you leave today, you can still withdraw by emailing the researcher using the contact details below.

Reimbursement for participation

Once you have signed the form below, the researcher will provide you with £5 to reimburse you for the time you have spent completing this activity. You will be required to sign to confirm you have received this payment; receipt of payment places you under no future obligation to the researcher.

Raising Concerns

This study has been reviewed and sanctioned by Aston Business School's Ethics Committee. However if you wish to express concern about any aspect of the study you are within your rights to pursue this further. In the first instance you are directed to the researcher's main supervisor Dr Ann Davis (a.j.davis@aston.ac.uk). Alternatively you may highlight your concerns directly to the Ethics Committee by contacting Bhomali Grover (b.grover@aston.ac.uk).

If the study has raised any personal issues you would like to discuss further, you may discuss these with the researcher in confidence. Aston University also has a counselling service which is available to provide advice and support to all students. Counselling can be contacted on 0121 204 4007 or by email at counselling@aston.ac.uk.

Confidentiality and Use of Research Findings

The findings of this research will be used within a PhD research project. The results will be included within a PhD thesis and may also be used within other published work. The information you provide will be treated confidentially and your responses will not be seen by anyone except the researcher. Data will be stored securely and will comply with all data protection requirements. Any findings published from the research will be presented in cumulative form and will not be attributable to you in any way. Your response will remain anonymous. You were provided with a participant number which we will use for the purposes of analysis. This participant number cannot be used to trace the responses you provided back to you and is the only information we will use to differentiate your response from those of other participants.

You will be required to sign your name at the bottom of this sheet to confirm that you have read and understood the information provided in this information sheet and that you either consent or do not consent for the responses you have provided to be used within this research. This cover sheet will be detached from the survey as soon as it is received by the researcher and stored separately from your survey so that you cannot be identified from your signature.

Aside from the communication channels outlined above, we would be grateful if you would refrain from discussing this research with anyone who has not already participated in the study until the end of the spring term. We are still in the process of conducting this research and pre-knowledge of the purpose of the study would bias future participants' responses and mean that their data cannot be used.

Contact details

Please do not sign to confirm your consent unless you are happy with, and fully understand, everything that has been communicated to you in this debriefing sheet. If you are unsure about any aspect of this research or have any further questions please speak to the researcher now or alternatively contact Fran Boag-Munroe at boagmufe@aston.ac.uk or telephone 0121 204 3318. If you would like further information on the study once it is completed you can also contact the researcher using the contact details provided.

Confirmation of Consent

I have read and understood the information contained within this debriefing sheet and consent/do not consent [delete as appropriate] to my responses being included within this research.

Signed:

Participant Number:

Date:

APPENDIX SIX

PARTICIPANT DEBRIEFING FORM (STUDY THREE)

Thank you for taking part in this study; your participation is now over. However it is important to make you aware of the purpose of the research and several aspects of the study which were not as they may have appeared. The researcher will have already have discussed this information with you, however we recommend that you read the contents of this information sheet carefully and to raise any queries you have with the researcher either before you leave or using the contact details provided at the end of this sheet.

After you have read this information we will ask you to sign to confirm whether or not you are happy for the data we have collected from you during the course of this study to be used within our research. You already signed a consent form at the beginning of the study, however it is very important that you reconfirm your consent now that you have access to all the facts relating to this research.

The Purpose of the Research

Throughout the study we have told you that we were investigating decision-making in virtual groups. This was, in fact, not the case. Our research actually looks at the impressions people's form of social groups during what we call the "pre-entry period": the period of time that starts when a person knows that they are due to join a new group and ends when they officially become a member of that group. We are particularly interested in the effect that a person's initial impressions of with a social group during the pre-entry period has on their subsequent impressions of the group once they actually become a member.

We were unable to tell you this at the start of our study because research has previously shown that, when a person knows their impressions of a social group are being examined, they tend to either be more positive or more negative about the group, depending on what they think the researchers would like them to say. Because we were interested in what you really thought about your group during this activity, and did not want you to simply try to please us, we withheld the true focus of our research until you had completed the group activity.

The Group

You were informed that you would be taking part in the activity with four other people. In fact, you completed the activity on your own and the responses of the other "group members" had been pre-programmed by us. If you suspected that this was the case please inform the researcher. We did this not to trick you, but because we did not want anything that the other group members did to bias your attitudes towards the group. Often people drop out of this sort of activity half-way through which may have made you feel differently about the group. Alternatively the responses given by the other group members could have biased your opinions, for example if everyone within the group gave similar or different answers to you. It was important that we tried to minimise the impact of other factors which might influence your impressions of the group after joining, so that we could clearly see whether your impression of the group during the pre-entry period had an effect on your impressions after entry. For ease, we refer to your "group" below. In each instance please remember that this was not a real group, even though at the time you believed it was.

The Decision-Making Questionnaire

Before you came today you completed an online questionnaire which we told you looked at your decision-making capacity. We also told you that we would combine your responses with other group members' responses to come up with score for the whole group to determine whether your group should complete the high- or low-level decision-

making activity. Although the questionnaire you completed is often used to look at decision-making, it is not used to determine capacity for decision-making. As mentioned above, you were not taking part with four other people as we led you to believe. Therefore the score we gave you was not derived from your group's combined responses and we did not, indeed would not be able to, determine that your decision-making capacity was [above/below] average. This was in fact false feedback, as was our decision to assign your group the [high/low] decision-making activity. The score we provided, along with the feedback that this was [above/below] average and your group's allocation to the [high/low] decision-making activity was instead used as what we call a "prime". It was intended to encourage you to think about the group in a particular way. By providing you with this information about your group, we wanted you to feel, for a short period of time, that the group you would shortly be working with was of [high/low] status, and therefore a group that you would be [very/not very] proud to be a member of. As we mentioned above, we are interested in understanding the effect of a person's impressions of a social group during the pre-entry period. In this particular study we are looking at whether feeling that a group has [high/low] status before joining has an impact upon how people respond to feedback about the group once they become a member.

The Virtual Group Activity

Once we had assigned your group to the [high/low] decision-making activity, we asked you to take part in a group activity where you responded to a series of decision-making scenarios. Although we told you that there were correct answers to these decisions, this was, in fact, not the case. We told you this so that the feedback we provide regarding your group's performance could be compared to other groups and we could say whether your score was [above/below] average; this would not have been possible if either choice within the decision-making scenario had been equally valid. However because there were no right or wrong answers, and the responses of your four other group members were pre-programmed, the feedback we ultimately provided was also false. Indeed the score we gave you was simply an arbitrary score which was realistic given the nature of the activity.

It was also not true that your group's score was [above/below] average; your performance could not be classified as above or below average because the activity and, the score resulting from it, had been fabricated. To reiterate, the feedback we provided regarding your group's performance during the activity was false, the score we gave you is in no way indicative of your likely success within virtual groups now or in the future. Even if we wished to make judgements about your performance within virtual groups, it would not be possible to do so using the group activity you have just completed. Our only reason for providing feedback regarding your performance was to see how you would respond to this information.

We mentioned above that we were interested in whether a person's impressions of the status of a group prior to joining make them respond differently to feedback regarding the group's performance after joining. We had already encouraged you to feel that your group was of [high/low] status by providing false feedback and allocating you to the [high/low] decision-making activity before completing the decision-making activity. We wanted you to believe that your group had performed [above/below] average so that we could see whether you would respond differently to this feedback compared to someone who felt that their group was of [low/status] status before joining. Once we had provided you with feedback, we asked you to answer a series of questions about your impressions of the group and your feelings towards the group. When we analyse the answers you have provided to these questions we will be looking to see your answers differ from other participants who were encouraged to feel that their group was of [low/status] status before joining.

Therefore although it may have appeared that we were most interested in your group's performance during the decision-making activity, for us the most important information you provided was at the end of the activity, in the last set of questions you completed. We took

the steps we did during the course of this study (including providing you with misleading information about the purpose of the study, your “decision-making capacity” and your group’s performance on the decision-making task) in order to learn why you provided the responses you did within this final questionnaire. We would like to reassure you that any misleading information we gave you before or during the study was intended only to ensure the integrity of the research, and should in no way be taken as a personal affront or a sign of disrespect. We highly value your contribution to our study and hope that the responses you have provided will give us further important insight into people’s relationship with social groups.

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Reimbursement for participation

Once you have signed the form below, the researcher will provide you with £5 to reimburse you for the time you have spent completing this activity. You will be required to sign to confirm you have received this payment; receipt of payment places you under no future obligation to the researcher. If you withdrew before the end of the study you will receive a pro-rated amount and will be asked to sign to recognise this on the payment sheet.

Raising Concerns

This study has been reviewed and sanctioned by Aston Business School’s Ethics Committee. However if you wish to express concern about any aspect of the study you are within your rights to pursue this further. In the first instance you are directed to the researcher’s main supervisor Dr Ann Davis (a.j.davis@aston.ac.uk). Alternatively you may highlight your concerns directly to the Ethics Committee by contacting Bhomali Grover (b.grover@aston.ac.uk).

If the study has raised any personal issues you would like to discuss further, you may discuss these with the researcher in confidence. Aston University also has a counselling service which is available to provide advice and support to all students. Counselling can be contacted on 0121 204 4007 or by email at counselling@aston.ac.uk.

Confidentiality and Use of Research Findings

The findings of this research will be used within a PhD research project. The results will be included within a PhD thesis and may also be used within other published work. The information you provide will be treated confidentially and your responses will not be seen by anyone except the researcher. Data will be stored securely and will comply with all data protection requirements. Any findings published from the research will be presented in cumulative form and will not be attributable to you in any way. Your response will remain anonymous. You were provided with a participant number which we will use for the purposes of analysis. This participant number cannot be used to trace the responses you provided back to you and is the only information we will use to differentiate your response from those of other participants.

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Contact details

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Confirmation of Consent

I have read and understood the information contained within this debriefing sheet and consent/do not consent [delete as appropriate] to my responses being included within this research.

Signed:

Participant Number:

Date: