Conceptualizing Leadership Perceptions as Attitudes: Using Attitude Theory to Further Understand the Leadership Process

Allan Lee¹, Robin Martin¹, Geoff Thomas², Yves Guillaume³ and Greg Maio⁴

¹Alliance Manchester Business School, University of Manchester
²Surrey Business School, University of Surrey
³Aston Business School, Aston University
⁴Cardiff University

Authors Information:

Allan Lee: Alliance Manchester Business School, Booth Street East, Manchester, M15 6PB, UK, (e-mail: allan.lee@mbs.ac.uk; Tel: +447888657094)

Robin Martin: Alliance Manchester Business School, Booth Street East, Manchester, M15 6PB, UK, (e-mail: robin.martin@mbs.ac.uk; Tel: +447888657094)

Geoff Thomas: Surrey Business School, University of Surrey, Guildford, Surrey, GU2 7XH, UK, (email: gt0011@surrey.ac.uk)

Yves Guillaume, Aston Business School, Aston University, Birmingham, B4 7ET, UK, (email: Y.R.F.GUILLaUME2@aston.ac.uk)

Greg Maio, Cardiff University, School of Psychology, Cardiff, CF10 3XQ, UK, (email: Maio@cardiff.ac.uk)
Abstract

Leadership is one of the most examined factors in relation to understanding employee well-being and performance. While there are disparate approaches to studying leadership, they share a common assumption that perceptions of a leader’s behavior determine reactions to the leader. The concept of leadership perception is poorly understood in most theoretical approaches. To address this, we propose that there are many benefits from examining leadership perceptions as an attitude towards the leader. In this review, we show how research examining a number of aspects of attitudes (content, structure and function) can advance understanding of leadership perceptions and how these affect work-related outcomes. Such a perspective provides a more multi-faceted understanding of leadership perceptions than previously envisaged and this can provide a more detailed understanding of how such perceptions affect outcomes. In addition, we examine some of the main theoretical and methodological implications of viewing leadership perceptions as attitudes to the wider leadership area. The cross-fertilization of research from the attitudes literature to understanding leadership perceptions provides new insights into leadership processes and potential avenues for further research.
1. Introduction

Effective leadership offers a solution to the problem of how to organize collective effort; consequently, it is central to organizational effectiveness (Hogan & Kaiser, 2005). Leadership has been investigated from a variety of perspectives. Indeed, myriad theories exist attempting to describe leadership and ultimately to explain how leadership influences employee attitudes and behaviors. Currently, popular theories include transformational leadership (e.g., Bass, 1985; Bass & Avolio, 1990), leader-member exchange (LMX; e.g., Graen & Uhl-Bien, 1995) and servant leadership (e.g., Greenleaf, 1977).

While there are differences between the various theories, the underlying common theme is that they draw upon the process of leadership perceptions (from both the follower and leader) as determinants of reactions to the leadership process. Leadership theories typically measure the leader’s leadership style by asking followers whether or not their leader acts in a way that represents that style of leadership. Thus it can be argued that the vast majority of leadership research is based on the measurement of follower’s perceptions of their leader. This commonality is important as leadership perceptions typically represent followers’ subjective evaluations and judgments of leadership and therefore, as argued in this review, are synonymous with the way attitudes are conceptualized.

In this context, we refer to attitudes as an evaluation of an object in terms of the degree of it being favorable or unfavorable (e.g., Eagly & Chaiken 1993). Of relevance, job attitudes is one of the most central and enduring constructs in individual-level organizational research (Harrison, Newman, & Roth, 2006). Common job attitudes that are examined include work attitudes, job satisfaction, or organizational commitment (Judge & Kammeyer-Mueller, 2012). We propose that leadership perceptions can also be considered an attitude. For example, judgments concerning the quality of leader-member relationships can be considered a relationship attitude while servant leadership reflects followers’ attitude to the degree that their leader demonstrates this style.
The aim of this review is to show how the application of theory and research into attitudes can be a useful framework for understanding leadership perceptions and therefore, ultimately, leadership effectiveness. While there is a literature examining evaluations of the leader (such as supervision satisfaction, Kinicki, McKee-Ryan, Schriesheim, & Carson, 2002), this has primarily relied on global evaluations rather than exploring the nuances associated with various aspects that comprise an attitude. Therefore, we believe that this is the first systematic application of attitude theory to understanding leadership perceptions and we believe there are six main benefits of this approach.

First, the adoption of an attitudes framework moves research away from a leader-centric approach, that assumes leadership measures accurately reflect leader’s behaviors, to a more follower-centric approach that characterizes leadership perceptions as a property of both the follower and the leader (Thomas, Martin, & Riggio, 2013).

Second, the application of attitude research to leadership perceptions gives new and important insights into aspects of its underlying content, structure and functions that hitherto have not been extensively explored. For example, based on attitude research it can be suggested that leadership perceptions are composed of three components (affect, cognition and behavior) and this tripartite framework can provide a more differentiated understanding of leadership perceptions than is currently the case.

Third, the use of an attitudes framework offers insights into the nature of leadership perceptions and new ways to understand how these attitudes can be formed, maintained and enhanced. For example, an important characteristic of attitudes is its strength (i.e., the extent to which one’s evaluation is crystallized and enduring) with strongly held attitudes more difficult to change than weakly held attitudes. Applying this to leadership perceptions aids understanding of why such perceptions may be stable over time and are difficult to change.

Fourth, attitude research has extensively examined the relationship between both implicit and explicit attitudes and consequences such as information processing, persistence
and behavior. Frameworks such as the Theory of Planned Behavior (Ajzen, 1988) and Motivation and Opportunity as Determinants model (Fazio, 1990), which both examine the attitude-behavior link, can be utilized to extend understanding of the link between both implicit and explicit leadership perceptions and work outcomes such as performance.

Fifth, the application of an attitudes framework provides a common understanding of leadership perceptions across many different leadership approaches providing a unifying theme. As our review will demonstrate there is considerable variation in the extent that leadership measures contain items that correspond to the different attitudinal components. This variation, we suggest, might explain inconsistencies between different leadership measures and various outcomes.

Finally, the greater understating of leadership perceptions that arise from using an attitudes framework gives many practical implications concerning leadership development and training programmes. Most leadership programmes focus on developing leaders’ skills or meta-competencies (Day, 2001) while this review shows that it is equally important for leaders to understand the processes that followers engage in interpreting their behaviors. If leaders understand that their follower’s perceptions are attitudes (and not simple evaluations), then they can develop an insight into how these attitudes form and how to change them.

The review is presented in two parts. In the first part we show how research and theory in attitudes can inform leadership perceptions with relevance to three main aspects of attitudes: content, structure and function. Given space limitations, we have focused on some of the main contemporary leadership theories to illustrate the benefits of the cross-fertilization but we recognise that this analysis could apply to a broader range of theories. In the second part we explore the theoretical and practical implications of our analysis and suggest avenues for future research. In this section we specifically focus on the implications of examining leadership perceptions as an attitude for understanding the leadership process.

2. **Attitude content**
In this section, we outline how using attitude theory can provide new insights into understanding the content of leadership perceptions.

2.1 A tripartite view of attitudes: Affect, cognition and behavior

The definition above highlights that attitudes refer to an overall evaluation of objects (Eagly & Chaiken, 1993). Attitudes are evaluative in that they reflect the degree that our response to objects are positive and approach-oriented versus negative and avoidance-oriented (Eaton et al., 2008). But what are these evaluation based on? Why do people develop strong thoughts and feelings about objects such as, places, politicians, sports teams, films, and, of interest to this article, leaders? Research shows such favorability arises because of individuals’ beliefs, feelings, and past experiences regarding such objects. It has been suggested that evaluative responses can be classified into affective, cognitive or behavioral components of an attitude or a combination thereof (e.g., Allport, 1935; Harding, Kutner, Proshansky, & Chein, 1954; Katz & Stotland, 1959; Rosenberg & Hovland, 1960; Zanna & Rempel, 1984, 1988). Olson and Zanna (1993) summarise the tripartite model of attitudes by stating that most attitude researchers agree that “…evaluation constitutes a central, perhaps predominant, aspect of attitudes” and “…affective cognitive and behavioral antecedents of attitudes can be distinguished” (p. 119).

In general, people who have a positive attitude toward an attitude object tend to have aligned attitudinal components, whereby cognition, affect and behavior are uniformly favorable toward the object, whereas people with negative attitudes regarding an attitude object have unfavorable affective, cognitive and behavioral components that express unfavorability toward the object (see Eagly & Chaiken, 1993). However, people’s feelings, beliefs and behaviors toward an object can sometimes differ in their valence (direction) and have implications for their overall attitude (Haddock & Maio, 2004). Furthermore, empirical studies demonstrate that some attitudes are uniquely related to feelings about the attitude object, whereas other attitudes are uniquely related to beliefs about the attitude object. Such findings have showed low to
moderate correlations between the different components of attitudes toward a large variety of issues. For example, feelings (i.e. affect) are particularly strong indicators of attitudes toward blood donation (Breckler & Wiggins, 1989), smoking (Trafimow & Sheeran, 1998), condom use (de Wit, Victoir, & Van den Bergh, 1997), deaf people (Kiger, 1997), politicians (Glaser & Salovey, 1998), and alcohol and marijuana use in frequent users of these drugs (Simons & Carey, 1998). Conversely, cognitions are strong predictors of reactions to persuasive messages (Breckler & Wiggins, 1991) and attitudes toward a variety of controversial social issues (e.g., capital punishment, legalized abortion, and nuclear weapons; Breckler & Wiggins, 1989; Crites, Fabrigar, & Petty, 1994).

These findings were supported by a meta-analytic analysis that highlights the importance of what the authors called ‘hedonic–instrumental correspondence’ (Glasman & Albarracin, 2006). Hedonically-orientated behaviors tend to be affectively driven (e.g., the desire to play games), whereas instrumentally-orientated behaviors (e.g., studying for an exam), are more likely to be cognitively driven (Millar & Millar, 1998; Millar & Tesser, 1992). The meta-analytic results show that focusing on the affective components of one’s attitude leads to greater behavior correlation when the behavior is hedonic in nature. Conversely, focusing on feelings may decrease attitude–behavior correspondence when the behavior is instrumental. The reverse is also true (Glasman & Albarracin, 2006). There is also evidence to show that attitude-relevant feelings and beliefs are also clustered separately in memory (Trafimow & Sheeran, 1998).

2.11 Content of leadership measures

Since we propose that leadership perceptions can be conceptualized as attitudes, then it is important to examine the extent that current measures of leadership perceptions cover the three components of attitudes we described above (i.e., affect, cognition and behavior). For example, one of the most popular scales for measuring LMX quality (LMX-MDM, Liden & Maslyn, 1998) distinguishes between the degree that the leader-follower relationship is based
on four ‘currencies of exchange’: liking one another (affect), loyalty to each other (loyalty), reputation (professional respect), and task-related behaviors (contribution). This scale provided the additional dimension of professional respect to previous multidimensional LMX scales (e.g., Dienesch, 1985; Phillips, Duran, & Howell, 1993; Schriesheim, Neider, Scandura, & Tepper, 1992). It is important to determine whether these dimensions map onto the tripartite model of attitudes described above. For example, one would expect the ‘affect’ dimension of the LMX-MDM to tap into followers’ affective component of their attitude toward the dyadic relationship. In addition, the ‘contribution’ dimension of the LMX-MDM measure should tap into the behavioral component of their attitude as it relates to the current level of work-oriented activity each member puts forth. The LMX-MDM, therefore, is one of the few examples of a leadership measure that, theoretically, should capture distinct attitudinal components.

In the context of the current review it is important to determine the extent that current leadership measures contain items that measure the three components of attitudes (i.e., affect, cognition, and behavior). Since the majority of these measures have not been previously classified in this way (for exception see Schriesheim & Liu, 2013), the authors conducted an initial content analysis of the items in a number of prominent leadership measures. We acknowledge that this is not a rigorous approach but we did this to illustrate the extent that different leadership measures contain items that reflect the three components of attitudes. We chose some of the most popular measures of leadership perceptions from a variety of theoretical orientations. Each of the five authors independently coded the extent to which each of the items for the leadership measures were predominantly affectively-, cognitively- or behaviorally-orientated (see Table 1). We then summed the ratings across the five authors and identified items where there was a high level of agreement (i.e., at least 3 out of 5 agreed on same dimension).

Insert Table 1 About here
Referring to Table 1, a number of interesting observations can be made. There is considerable variation both within and between leadership measures in the extent that they contain items that fall into the three attitudinal components. Across all the leadership measures, cognitive items were the most frequent (71%), followed by affective (25%), with very few behavioral items (4%). With reference to the LMX-MDM scale we described above, it is notable that there were items in each of the three attitudinal dimensions. As expected, all three items in the LMX-MDM ‘affect’ dimension were rated as being affective by the authors. With respect to the ‘contribution’ dimension of the LMX-MDM, only two items were rated as behavioral and the remaining item as being affective. The other items in the LMX-MDM measure were rated as either affective or cognitive. In terms of the other leadership measures, some were rated as purely cognitive (such as, Authentic Leadership Inventory, Neider, & Schriesheim, 2011: Authentic Leadership Questionnaire, Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008), some purely affective (such as, Abusive Supervision Scale, Tepper, 2000), and finally some a mixture of different attitudinal components (such as, Transformational Leadership, Avolio & Bass, 1999: Ethical Leadership, Brown, Trevino, & Harrison, 2005).

Some items were difficult to code in that there was low consensus amongst the authors. This is not surprising for several reasons. First, the tripartite attitude classification is a heuristic guide and, in fact, many attitude items can be composed of a mixture of dimensions (Olson & Zanna, 1993). Second, the leadership measures we reviewed have not been explicitly designed to capture particular attitude content and therefore are likely to capture a range of evaluative responses. An example of this is the Abusive Supervision measure (Tepper, 2000) that asks respondents to judge how often their supervisor, for example, ridicules them, or invades their privacy. Such items ask for a cognitive evaluation of their leader’s behavior but, due to the very negative nature of the behavior being assessed, it is highly likely to lead to an affective reaction.
While Table 1 provides a useful starting point to classify the content of leadership items, we do not claim that our ratings reflect a rigorous evaluation of the content of leadership measures. Therefore, following a technique developed by Hinkin and Tracey (1999) we conducted a more comprehensive content validity assessment, on a smaller number of leadership scales, using a method that utilizes analysis of variance (ANOVA) to empirically test item distinctiveness. This technique can be used with relatively small sample sizes (Hinkin & Schriesheim, 2008), and has been used previously to investigate the content validity of leadership measures (Hinkin & Schriesheim, 2008). For example, Schriesheim and Liu (2013) recently used the technique to assess the extent that the items in the LMX scales measure the three components of attitudes. Using this analysis we asked a panel of university faculty and doctoral students (in the fields of Organizational Behavior or Social Psychology) to assess the extent that measures of leadership reflected the various attitude components (affect, cognition and behavior). For each leadership item the raters (N=28) indicated the extent that they felt it was affective, cognitive and behavioral. So, for example, for the following item from the TLI scale (Podsakoff et al. 1990); “My supervisor has a clear understanding of where we are going”, respondents were asked to indicate on three separate scales the degree to which the item reflected an affective, cognitive and behavioral attitude component (each rated on a scale from strongly disagree – strongly agree). We then calculated the extent that each item represented a distinct attitude component using ANOVA to compare the mean scores. As respondents were asked to provide three rating for each leadership item, we limited our assessment to four leadership scales, which represent three contemporary and popular theories of leadership (LMX, transformational and authentic; see appendix 1 for items). The results of this content assessment can be seen in Table 2.

Table 2 has many similarities to the initial assessment shown in Table 1. The items in the LMX-7 scale (Graen & uhl-Bien, 1995) were rated as largely cognitive in both analyses.
The same is true of the Transformational Leadership Inventory (TLI; Podsakoff et al. 1990), which was also viewed as largely cognitive by both sets methods. Differences, however, were evident when comparing the LMX-MDM measure (Liden & Maslyn, 1998). Namely, the authors categorized the scale as mainly affective (see Table 1); with half of the items being rated this way, In contrast, Table 2 shows that the larger panel of raters only rated three items as clearly affective. On many of the items respondents failed to clearly distinguish between affective and cognitive components, with four of the twelve items showing a lack of distinctiveness between components. Interestingly, similar findings were shown in the analysis conducted by Schriesheim and Liu (2013), which demonstrated that the subject matter experts also struggled to classify many of the LMX-MDM items as distinctively cognitive, behavioral or affective. As discussed earlier, this is not surprising as attitude scales do not always clearly relate to just one attitude component and the leadership scales were not designed to focus on a particular attitude component.

It is often the case that the language used in attitudinal items can make it hard to distinguish which component of an attitude it is addressing. This is particularly true when trying to distinguish between affective and cognitive components. Take, for example, the following item from the LMX-MDM scale: “I admire my supervisor's professional skills”. The word ‘admire’ might suggest, to some, that this is an affective component of an attitude, as admiration might be considered to indicate a positive emotion felt towards the supervisor. Others, however, might view this item as an indication of a cognitive component as it represents a person’s beliefs about the professional abilities of their leader. In other cases attitude items may contain a mixture of attitudinal components. The following item from the TLI (Podsakoff et al., 1990) can be argued to contain both affective and cognitive components: “My supervisor shows respect for my personal feelings”. The item, which as Table 2 shows was not clearly rated as either affective or cognitive, is asking respondents to make a cognitive judgement about whether or not they think their supervisor acts in a certain way. However, the
item also asks about personal feelings, which indicates it also has an affective component. For instance, if a respondent indicates that the supervisor does not respect their personal feelings this would presumably indicate a negative affective reaction.

To conclude, Tables 1 and 2 provide a preliminary illustration demonstrating that leadership measures contain a range of different attitudinal components. As reviewed above there was a wide variation in the types of attitudinal components in many of the leadership measures. This observation is important because, as will be illustrated throughout this review, the different attitudinal components have effects on a range of processes and outcomes that are relevant to leadership research. The findings also highlight the benefit of future research that focuses on the development of leadership scales that take into account the tripartite view of attitudes. Specifically, developing scales that clearly distinguish and measure affective, cognitive and behavioral components of leadership attitudes can facilitate an understanding of how different components influence different outcomes.

2.2 Differential impact of tripartite content on outcomes

One of the reasons to examine the attitudinal components in leadership measures is because it is likely that they have a differential impact on important work-related outcomes. One might expect there to be consistency between the three attitudinal components and corresponding work outcomes (attitudinal component-outcome consistency). For example, one might expect affectively-based measures to predict hedonic (i.e. affective) outcomes (such as, affective organizational commitment), cognitively-based attitudinal measures to predict instrumental (i.e. cognitive) outcomes (such as, organizational identification), and behaviorally-based attitudinal measures to predict behavioral outcomes (such as, task performance).

There is relatively little research in the leadership domain that examines the impact of the different attitudinal components on work-related outcomes. As an exception, the LMX-MDM (Liden & Maslyn, 1998) described above, examined the association between the four
different dimensions and various employee outcomes, including; organizational commitment, turnover intentions, satisfaction with supervision and leader-rated performance. The results give some support for attitudinal content-outcome consistency. For example, the ‘affect’ and ‘professional respect’ dimensions of the LMX-MDM (which were rated as affective in our content analysis) both predicted an affective outcome (i.e., supervisor satisfaction). Likewise, the ‘contribution’ dimension of the LMX-MDM (which was rated as behavioral in our content analysis) predicted supervisor-rated performance.

Others studies have also examined the relation between the dimensions of LMX-MDM and various outcomes. While it is difficult to determine a clear pattern between the studies, there is evidence that the ‘affect’ dimension was a strong predictor of affective-based outcome such as, organizational commitment and supervisor satisfaction (Ansari, Hung, & Aafaqi, 2007; Greguras & Ford, 2006; Settoon, Bennett, & Liden, 1996; Wang, Law, & Chen, 2008). However, some studies do not support the attitudinal content-outcome consistency. For example, some studies found that the ‘loyalty’ dimension (which according to Table 2 is mainly cognitive-based) best predicted task performance (Greguras & Ford, 2006; Law, Wang, & Hui, 2010) and OCB (Lo, Ramayah, & Hui, 2006). Given the paucity of research in this area we cannot draw firm conclusions but the above research highlights the fact that the relation between leadership perceptions and work-related outcomes is likely to be affected by the content of attitudinal measures and the type of outcome examined.

The issue of correspondence between attitudinal components and outcomes raises the interesting question of how to classify particular leadership outcomes. Many of the commonly measured outcomes of leadership also reflect perceptions, either leader or follower, and attitudes. Some of these outcomes are explicitly considered to be attitudinal, such as job satisfaction and organizational commitment. Scholars have noted that job satisfaction measures do not purely represent either affective or cognitive components of an attitude, with scales likely containing some degree of affect and cognition (e.g., Fisher, 2000; Weiss, 2002).
However, based on a content assessment of two popular job satisfaction measures, Schleicher, Watt and Greguras (2004) highlighted that the Overall Job Satisfaction Scale (OJS; Brayfield & Rothe, 1951) is more affectively based than the Minnesota Satisfaction Questionnaire (MSQ; D. J. Weiss, Dawis, England, & Lofquist, 1967) and the MSQ is more cognitively based than the OJS. Other outcomes, such as rating of performance, are not explicitly discussed as an attitude or perception. However, like leadership measures, ratings of performance (e.g., task performance, organizational citizenship behavior and counterproductive work behavior) require either the leader or follower to evaluate and judge some aspect of their own, or others’ behavior.

Some outcomes seem intuitively easy to distinguish as affective, cognitive or behavioral. For example, affective organizational commitment is defined as "an affective or emotional attachment to the organization such that the strongly committed individual identifies with, is involved in, and enjoys membership in, the organization" (Allen & Meyer, 1990, p. 2). This definition implies an affective attitudinal component and the items seem to reflect this by focusing on employees’ feelings about the organization (e.g., I feel a strong sense of belonging to my organization). Therefore, according to the correspondence hypothesis, affective organizational commitment should be more strongly related to an affective component of a leadership perception.

One of the most commonly measured outcomes associated with leadership is follower performance. One might assume that performance represents a behavioral component of an attitude as it relates to the task performed by an individual. In the case of citizenship behavior (OCB), for example, it relates to whether or not individual perform acts such as helping others or not taking undeserved breaks (e.g., Williams & Anderson, 1991). When such scales are self-rated and respondents are rating their own behavior measures of performance do reflect the behavioral component. However, it is often the case that leaders are asked to rate their followers’ behavior. When this is the case such performance measures reflect a cognitive
attitudinal component as they are concerned with perceptions of another person’s behavior. It is beyond the scope of this paper to provide a comprehensive analysis of the content of leadership outcomes, but it is interesting to highlight that the majority of outcomes (except objective performance) reflect perceptions and thus can also be evaluated as attitudinal.

2.3 Relationship between affective and cognitive components

In the above sections we considered the three attitudinal dimensions as individual components when, in fact, they are likely to relate to each other. In this section we consider three aspects of the relationship between the attitudinal components that have been examined in the attitudes area that have relevance for understanding leadership perceptions.

The first aspect we examine concerns the consistency between affect and cognitive components of attitudes (ACC: affect cognitive consistency). A great deal of evidence supports the proposition that the affective and cognitive components of an attitude object are sometimes inconsistent (e.g., Cacioppo, Gardner, & Berntson, 1997; Hochschild, 1981; Thompson, Zanna, & Griffin, 1995; Zaller, 1992). Meta-analytic evidence also supports the contention that ACC moderates the link between attitudes and behavior (Kraus, 1995). Job satisfaction research has demonstrated the importance of considering ACC in relation to the relationship between job satisfaction and job performance (Schleicher et al., 2004); with those employees higher in ACC showing a significantly larger correlation between job satisfaction and job performance. Such findings can be applied to leadership perceptions and highlight the importance of knowing whether a measure is cognitive-based or affective-based and if there is consistency between attitudes. These findings demonstrate the importance of understanding the contribution of affective versus cognitive components of the leadership attitudes that people develop.

The second aspect concerns the role of primacy effects between affect vs. cognitive attitudinal components on attitudinal evaluations (e.g., Edwards, 1990; Edwards & von Hippel, 1995). This primacy effect refers to the sequence of affect and cognition in an attitude's formation and has been shown, for example, to be an important determinant of its subsequent
resistance to affective and cognitive means of persuasion (e.g., Edwards, 1990). This is particularly pertinent to the study of leadership as research has shown the importance of liking in the early stages of leader-follower relationship development and its role as a precursor of leadership ratings (Engle & Lord, 1997; Lewter & Lord, 1992; Liden, Wayne, & Stilwell, 1993; Wayne & Ferris, 1990). Liden et al. (1993), for instance, showed that liking assessed during the first two weeks of a leader–follower relationship predicted followers’ ratings of the relationship six months later. This suggests that the initial basis for attitudinal evaluations can affect the interpretation of future attitude-relevant information.

The third aspect concerns the fact that the influence of affective, cognitive and behavioral components on overall attitudinal evaluations can vary across both between individuals and attitude objects (e.g., Eagly, Mladinic, & Otto, 1994; Esses et al., 1993; Haddock, Zanna, & Esses., 1993). Some individuals, across a wide range of attitude objects, possess attitudes that are largely consistent with either their affective or cognitive responses. Other individuals base their attitudes on both their affective feelings and cognitive beliefs equally or to a greater or lesser extent (Huskinson & Haddock, 2004). Thus, affective and cognitive components are relied upon to different extents across individuals. A number of studies have shown that differences in affective and cognitive underpinnings of attitudes are related to individual differences in the motivational disposition of need for affect (e.g., Haddock, Maio, Arnold, & Huskinson, 2008; Huskinson & Haddock, 2004; Maio & Esses, 2001) and need for cognition (e.g., Cacioppo, Petty, Feinstein, & Jarvis, 1996; Haddock et al. 2008).

3. Attitude structure

Another key theme in attitude research is the investigation of the underlying structure of attitudes. Much of this work has been carried out under the theme of *attitude strength* because differences in the underlying structure of attitudes are thought to produce differences in the strength of the attitude. Therefore, as well as paying attention to the content of leadership
attitudes, leadership research can benefit from an appreciation of the structure and strength of leadership attitudes.

3.1 Facets of attitude strength

When measuring leadership perceptions, researchers examine the valence (direction) and the extremity (where they lie on the continuum from positive to negative) of follower’s attitudes. So, for example, the authentic leadership measure examines the extent that followers evaluate their leader as being authentic (low vs. high). Focusing purely on the valence of leadership attitudes is limited as it fails to account for other facets of attitudes that determine the strength of that attitude. Indeed, there are a number of qualities of an attitude that, independent of the valence of the attitude, reflect the strength of an attitude and consequently determine the extent that the attitude is consequential (Fazio, 1986). Research recognizes that “…the underlying attitudes of two individuals with identical scale scores may differ in many other respects that may affect the relation of the attitude score to the behavior manifested by those individuals” (Fazio & Zanna, 1978, p. 399). These qualities have garnered a large body of research, producing an increasingly complex understanding of the factors that predict when attitudes are consequential and when they are not. ACC, as described above, is an example of a facet of attitude strength; other dimensions include: accessibility, ambivalence, extremity and importance and all relate to the broader concept of attitude strength. Table 3 provides a brief description of the facets of attitude strength.

Insert Table 3 About Here

As can be seen in Table 3, some of the features related to attitude strength reflect inherently subjective perceptions of the attitude-holder. For instance, attitude importance is a personal judgment of significance, reflecting the degree to which a person cares deeply about the attitude and is motivated to protect, express, and to be faithful to it in action. Similarly, attitude certainty is another subjective judgment, related to a subjective sense of the justification for holding a particular attitude. Attitude strength dimensions that rely on
subjective judgement are well suited to measurement in surveys (see Krosnick & Abelson, 1991) and thus can be easily incorporated into research designs that are frequently used to examine leadership. Other attitude strength dimensions may be harder to measure subjectively as they reflect the content and structure of representations stored in long-term memory. *Attitude accessibility* signifies the nature of the relation between an object’s representation and its evaluation stored in memory, which controls the speed and ease with which the attitude comes to mind upon encountering the object. In Fazio’s (1995) research, response latency has been employed as an index of attitude accessibility, which is thought of as being a good indicator of attitude strength, in part because accessible attitudes are more likely to be activated automatically on exposure to the attitude object than inaccessible attitudes. Due to its automatic activation, attitude accessibility is closely related to the concept of implicit attitudes. Many scholars have recognized that values, attitudes, and goals operate at implicit levels (Bargh & Chartrand, 1999; Carver & Scheier, 1998; Greenwald & Banaji, 1995), occurring outside of people’s awareness, intention, and control (De Houwer & Moors, 2007). Thus the more accessible one’s attitude, the more likely it will be automatically activated in the presence of the attitude object. In recent years a great deal of attention has been paid to the role of implicit attitudes. Implicit attitudes have been shown to have powerful effects on people’s cognitions and behaviors (e.g., Greenwald, Smith, Sriram, Bar-Anan, & Nosek, 2009).

### 3.1 Consequences of attitude strength

A large literature now exists documenting the relations of the attitude attributes with the four defining features of strong attitudes (i.e., resistance to change, stability over time, and a powerful impact on thought and on behavior; Krosnick & Petty, 1995). These four features will be discussed in more detail below.

#### 3.1.1 Information Processing

It has long been understood that attitudes can have profound effects on perceivers’ judgments of their social world (Olson & Zanna, 1993). Attitude scholars contend that attitudes
can influence every step of the information-processing sequence, including attention, encoding, comprehension, interpretation, elaboration, and memory (e.g., Eagly & Chaiken 1993; Fazio 1990; Hamilton et al 1990; Kunda, 1990). A central tenet of the theory of cognitive dissonance (Festinger, 1957) is that people are motivated to maintain consistency of their cognitive structure. Because cognitive inconsistency is aversive (e.g., Jonas, Diehl, & Brömer, 1997; Maio, Bell, & Esses, 1996; Nordgren, van Harreveld, & van der Pligt, 2006) it is argued that people predominantly seek out and pay close attention to new information that confirms their existing attitudes and avoid information that might contradict their attitudes (see meta-analysis by Hart et al., 2009). This preference for supportive information over opposing information has traditionally been termed ‘selective exposure’ and as a ‘confirmation bias’ (Jonas, Schulz-Hardt, Frey, & Thelen, 2001). A number of studies have demonstrated that stronger attitudes produce more pronounced selective exposure effects (e.g., Brannon, Tagler, & Eagly, 2007; Holbrook, Berent, Krosnick, Visser, & Boninger, 2005; Holton & Pyszczynski, 1989). Research also shows that people overrate the quality of the justification that they can provide for their positions on topics; especially when they have strong attitudes (Fisher & Keil, 2014).

Research demonstrating that strong attitudes impact information can have important implications for the study of leadership. It suggests that attitudes towards one’s leader can impact on the information processing of followers, particularly when their attitudes are strong.

The idea that leadership perceptions can influence followers information processing is not a novel one. The categorization theory developed by Lord, Foti, and Phillips (1982) theorized how perception as a leader and the content of generic leadership categories biases ratings of past behavior, affects behavioral expectations for the target stimuli, and may even define appropriate behavior for the stimuli.

This work has spurred more recent research related to implicit leadership theories (ILT). ILTs represent cognitive structures or schemas specifying traits and behaviors that followers expect from leaders (e.g., Epitropaki & Martin, 2004). These representations are
unconsciously held by followers and help to distinguish ‘leaders’ from ‘non-leaders’ as they are activated when followers interact with a person in a leadership position (Kenney, Schwartz-Kenney, & Blascovich, 1996; Shondrick & Lord, 2010). Research has examined how the match between an employees’ implicit leader profile and their actual leader’s characteristics influences outcomes including the quality of LMX employee outcomes, such as organizational commitment, job satisfaction, and well-being (Epitropaki & Martin, 2005).

ILIIs focus on an individual’s general beliefs about what characterizes a leader and does not represent a specific implicit attitude about one’s actual leader. This work typically examines how ILIs contribute to the development of leadership perceptions. When followers develop strong attitudes about their leaders the work described above suggests followers might, for example, selectively pay attention to, or remember information about their leader that fits with their attitude. Thus, for instance, followers who strongly perceive their leader as ‘authentic’ may selectively ignore inconsistent information about their leader such as a failure to share information or admit mistakes. Thus considering leadership perceptions as attitudes extends work related to ILIs by encouraging an investigation into the consequences of the attitudes, once formed, in terms of information processing.

Interestingly, attitudinal ambivalence can have differing effects on the processing of attitude-relevant information. Some research shows that ambivalent respondents use more effort and deliberation in processing information, due to the motivation to seek out and scrutinize any information that can resolve the tension, than do respondents low in ambivalence (Brömer, 1998; Jonas et al., 1997; Maio et al., 1996; Nordgren et al. 2006). This suggests that one way for leaders to create attitude change in their followers is to first try to create attitudinal ambivalence.

3.12 Resistance to Counter-Attitudinal Persuasion

People are believed to be motivated to resist counter-attitudinal persuasion (i.e., influence designed to change their attitude) in order to hold ‘correct’ attitudes, restore freedom,
or maintain psychological consistency and sense of control (Wegener, Petty, Smoak, & Fabrigar, 2004). This reflects similar motivations that influence the selective processing of attitudinal relevant information discussed above. Indeed, resistance to persuasion is equally influenced by the strength of the attitude that is under attack from persuasive messages. Research demonstrates that strong attitudes show greater resistance to persuasion (e.g., Fazio, 1995; Tormala & Petty, 2002; Zuwerink & Devine, 1996). Attitudes that are ambivalent, for example, are more pliable in the face of a persuasive communication (Armitage, & Conner, 2000).

The role of attitude strength in the persuasion process is important to consider with respect to leadership perceptions. Persuasion is an inherent part of a leader’s role. To be effective leaders must persuade followers that they are trustworthy and competent. Transformational leaders, for example, aim to change their followers’ attitudes, values, and beliefs to align them with those of the organization and guide their followers towards self-development and improved accomplishments (Bass, 1998). Transactional leaders, in contrast, guide followers based on a system of reward and punishment. Various influence tactics used by transformational and transactional leaders have been identified, including: rational persuasion, inspirational appeals, consultation, personal appeals, exchange, legitimating tactics, pressure, and coalition tactics (Epitropaki & Martin, 2013; Yukl, 2002; Yukl & Seifert, 2002). However, the research discussed above suggests that leader persuasion attempts may be less impactful when their followers hold strong leadership attitudes. When this is the case followers are more likely to resist persuasive appeals and continue holding the same leader attitudes. In other words it may be difficult for leaders to alter their follower’s attitudes towards them. This also has implications for leadership development programs that are designed to change leader’s behaviors in order to improve leadership and followers attitudes towards that leader. Such programs might benefit from paying attitude to research related to attitude change and the best way to persuade those holding strong attitudes to change.
Furthermore, research has revealed that individual differences in attitude structure are differentially influenced by persuasion that is affect-based or cognitive-based. Affect-based persuasion attempts to highlight a positive affective response associated with the attitude object, whereas cognitive-based persuasion focuses on the attributes associated with the object (e.g., Haddock et al., 2008). Indeed, persuasion researchers have often reported a matching effect, where the message that targets the individual’s attitudinal basis directly is more persuasive than the message that does not (e.g., Huskinson & Haddock, 2004; Haddock et al., 2008). Specifically, affective appeals are more influential among affect-based compared to cognition-based attitudes, and that cognition-based attitudes are more influenced by cognitive than affective information. Again such findings have implications for leadership as it suggests that the way leaders try to persuade followers should match the content of the follower’s attitude. It is clear that liking plays a powerful role in the early development of leader-follower relationships (Liden et al., 1993) and it is probable that for many followers leader-follower attitudes may be based on affect. In such cases leaders may be more persuasive if they make persuasive appeals rather than rational, cognitively-based appeals.

3.13 Persistence over time

It is highly likely that attitudes that resist counter-persuasion are subject to biased information processing, are more likely to persist over time and thus show high levels of stability. Thus, research demonstrates that strong attitudes are more stable over time (e.g., Bassili, 1996; Swann, Pelham, & Chidester, 1988; Visser, Bizer, & Krosnick, 2006; Zuwerink & Devine, 1996). The question of attitude stability is an important one as scholars have questioned whether attitudes should be conceptualized as mentally represented summary evaluations that can be retrieved from memory or, alternatively, as temporary constructions. According to the attitudes-as-temporary-constructions approach, attitudes are construed ‘on the spot’ on the basis of temporarily accessible pieces of knowledge (Wilson & Hodges, 1992; Schwarz, 2000; Schwarz & Bohner, 2001). Researchers favoring a construal view on attitudes
are sceptical with regard to the impact of attitudes on behavior and argue that attitudes are mainly context dependent and therefore not stable over time (e.g., Schwarz, 2000; Schwarz & Bohner, 2001). Holland, Verplanken, and Van Knippenberg (2002) suggest these views can be reconciled through consideration of attitude strength, suggesting that strong attitudes are more stable and likely to be retrieved from memory, whereas weak attitudes may be construed on-the-spot.

The stability of attitudes is pertinent to leadership research that has paid relatively little attention to the development and stability of followers’ leadership perceptions. For example, with regards to leader–member relationships, it is important to understand how the relationship develops from the initial interaction through to the later stages of the relationship (Liden et al., 1993) but also how stable these relationships are once established. To date, relatively little is known about how the relationships develop and are maintained over time. The few studies that have measured LMX (in)stability have revealed that the relationship tends to be relatively stable over time, with correlations ranging from .41 to .72 (Bauer & Green, 1996; Liden et al., 1993; Nahrgang, Morgeson, & Ilies 2009; Volmer, Niessen, Spurk, Linz, & Abele, 2011). Similar correlations have been reported in regards to the stability of transformational leadership (e.g., Bommer, Rich, & Rubin, 2005). Given the lack of research attention related to the stability of leadership perceptions, the role of attitude strength in determining stability is of particular interest to our current understanding of leadership.

Scholars have emphasized that in order to build useful theories of organizational behavior discerning the rate of change in constructs is vital (George & Jones, 2000). In order for leaders to be effective it is important to understand the stability of follower’s perceptions. If such perceptions are characterized by instability then it highlights the need for leaders to pay attention to the maintenance of how they are perceived. Attitude theory would suggest that if a follower has formed a strong attitude about their leader it may be stable because, for example, they focus their attention on attitude congruent information. This might suggest that if, for
example, followers strongly perceive their leader as transformational then they will likely maintain this perception over time. This also has implications for leaders who may find it difficult to change a follower’s attitude when it has been formed.

3.14 Prediction of behavior

In many ways the utility of the examining leadership perceptions as an attitude rests on the assumption that attitudes influence behavior. Positive attitudes should predispose approach tendencies whereas negative attitudes should predispose avoidance tendencies (Ajzen & Fishbein, 2000). The same is true of leadership theories that suggest that leadership styles should motivate follower behaviors (such as performance). However, over many years of attitude research, this basic proposition has been challenged by findings showing that on many occasions attitudes are not good predictors of behavior (e.g., Ajzen, 1988; Leippe & Elkin, 1987; Wicker, 1969). In fact, it appears that there is considerable variability in the degree that attitudes predict behavior (Ajzen, 2000). Similar findings have been shown in leadership research that shows a high degree of variability between measures of leadership and employee behavior such as task performance and OCB. Transformational leadership, for example, is typically correlated with followers’ job performance (e.g., Judge & Piccolo, 2004), but inconsistent effects have emerged in both field studies and laboratory experiments (Barling, Weber, & Kelloway, 1996; Bono & Judge, 2003; Dvir, Eden, Avolio, & Shamir, 2002; Kirkpatrick & Locke, 1996). Similar findings are shown with respect to the relationship between LMX and work outcomes such as OCB; some studies report a negative relationship between the two variables (e.g., Loi & Ngo, 2009) with others reporting non-significant (e.g., Wat & Shaffer, 2005), weak positive (e.g., Bernerth, Armenakis, Feild, Giles, & Walker, 2007) and strong positive (e.g., Henderson, Wayne, Shore, Bommer, & Tetrick, 2008) associations.

In order to address the inconsistent results between attitudes and behaviors, researchers have responded by elucidating the conditions that enhance or reduce consistency between attitudes and behaviors; providing a much clearer understanding of both how and when
attitudes predict behavior (e.g., Lord et al., 1991). Such understanding may be helpful in informing leadership research by specifying when and how leadership attitude can lead to employee behavioral outcomes. Two seminal theories explaining the link between attitude and behavior are the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein, 1967; Fishbein & Ajzen, 1975) and its expanded version, the theory of planned behavior (TPB; Ajzen, 1988, 1991). TPB asserts that behavior is directed by one’s attitude and two other considerations: beliefs about the normative expectations of others and beliefs about the presence of factors that may foster or obstruct performance of the behavior. The normative beliefs result in perceived social pressure or subjective norms; and control beliefs give rise to perceived behavioral control, the perceived ease or difficulty of performing the behavior. Broadly speaking the theory suggests that a more favorable attitude, stronger subjective norms, and greater perceived control should create stronger intentions to perform a related behavior.

TPB has received considerable attention in the literature and has been used to understand a wide range of behaviors, such as health behaviors (e.g., McEachan, Conner, Taylor, & Lawton, 2011), driving safety (e.g., Elliott, Armitage, & Baughan, 2003) and ethical decision-making (e.g. Buchan, 2005). The model has had some application in the organizational behavior domain, for example, as a framework to examine the development of turnover intentions and later voluntary turnover (Van Breukelen, Van der Vlist, & Steensma, 2004) and intentions to support organizational change (Jimmieson, Peach, & White, 2008). The framework has not been utilized to explain how leadership attitudes lead to behavioral intentions and behavior. Research has investigated the role of leadership perceptions in the development of follower intentions to engage in various behaviors. For example, transformational leadership has been shown to lead to increased feedback-seeking intention (Levy, Cober, & Miller, 2002), whilst perceptions of leader integrity is associated with lower intentions to commit unethical acts (Peterson, 2003). Various leadership perceptions have been associated with followers intention to quit the organization, such as LMX (e.g. Harris,
Wheeler, & Kacmar, 2009), abusive supervision (e.g., Khan, Qureshi, & Ahmad, 2010), and servant leadership (Jaramillo, Grisaffe, Chonko, & Roberts, 2009). However, although there is evidence that leadership attitudes do lead to the development of behavioral intentions; studies have not included leadership attitudes within the wider TPB framework. Interestingly, the role of self-efficacy, which shares many similarities with the concept of perceived behavioral control is often investigated as a mediator between leadership perceptions (e.g., Gong, Huang, & Farh, 2009; Hu, & Liden, 2013; Pillai, & Williams, 2004) and outcomes, as opposed to the way it is factored into the TPB framework as an additional antecedent.

Attitude strength has been consistently shown to moderate the attitude-intention and attitude-behavior link (e.g., Connor, Povey, Sparks, James, & Shepherd, 2003; Cooke & Sheeran, 2004). Research in the organizational behavior domain, for example, has demonstrated that job attitude strength moderates the relationship between job satisfaction and several criteria of interest to organizational behavior researchers (job performance, organizational citizenship behavior, withdrawal; Schleicher, Smith, Casper, Watt, & Greguras, 2015). Focusing specifically on ACC, Schleicher, et al. (2004) demonstrated the moderating effect it had on the job satisfaction-job performance relationship, with those employees high in ACC showing a significantly larger correlation between job satisfaction and performance than those low in ACC. Similarly, research shows that job ambivalence (i.e., the coexistence of positive and negative job evaluations) moderates the job satisfaction-OCB relationship (Ziegler, Schlett, Casel, & Diehl, 2012).

In fact, a wealth of research demonstrates that attitude strength moderates the attitude-behavior link. Thus, applying theory related to attitude strength to leadership attitudes has great potential to extend our understanding of when leadership attitudes will influence followers’ thoughts and behaviors. This would involve investigating not just the extent that followers hold positive or negative attitudes about their leader but also examining whether or not these attitudes are certain, importance or ambivalent. For instance, LMX theory, has considered the
relationship to exist on a continuum from low to high quality (Martin, Epitropaki, Thomas, & Topakas, 2010). However, regardless of the overall quality, leader-follower relationships may be comprised of an array of positive and negative evaluations. Thus, for example, high-quality LMX may be accompanied by both positive (e.g., enjoy the company of the manager) and negative aspects (e.g., not receiving enough task feedback). Measures of relationship attitudes, developed in social psychology and the relationship science literatures, similarly suggest that unidimensional measures fail to address the complexity of relationships satisfactorily. Accordingly authors have developed scales where it is possible for a relationship to be high on positive relationship qualities, high on negative relationship qualities, high on both positive and negative relationship qualities, or high on neither (e.g., Mattson, Paldino, Johnson, 2007). Such measurement can therefore capture various types of relationship attitudes, including those characterized by ambivalence. Considering ambivalence in leader-follower relationships could allow researchers to gain a far greater understanding of when leader-follower relationship will be more impactful.

In two separate studies recent research has utilized two aspects of attitudes strength (importance and ambivalence) to investigate the relationship between LMX and performance and OCB. The findings of this work shows that LMX attitude importance moderates the relationship between LMX and OCB, mediated by the degree that followers felt obligated towards their leader (Lee, Martin, Thomas, & Guillaume, under review). An additional study demonstrated that LMX attitude ambivalence (measured as a subjective evaluation) had a negative effect on task performance, independent of overall LMX quality (Lee, Thomas, Martin, & Guillaume, under review). This negative effect was shown to be mediated by negative affect that resulted from holding an ambivalent, inconsistent attitude about one’s leader.

In summary, one of the central goals of attitude research has been to explain both how and when an attitude predicts behavior. A great deal of research and theory now exists to
provide confidence that in many instances attitudes are a good predictor of subsequent action. Given that one of the main goals of leadership research has been to link leadership perception to work behaviors such as task performance and OCB, it seems prudent for future research to utilize attitude research to extend understanding of this link. Frameworks such as attitude strength and TPB may be particular useful in this endeavour.

3.2 Implicit attitudes and behavior

The theories of reasoned action and planned behavior, discussed above, are predicated on the notion that human social behavior is reasoned, controlled, and in some way planned. TPB, for instance, assumes that before acting individuals take account of the possible consequences, the normative expectations of significant referents and factors that may obstruct the performance of such action. Thus according to the TPB, leadership attitudes should influence employee’s actions in a deliberate and planned way. Although these models do not necessarily imply a deliberate, effortful retrieval of such information prior to every behavior, these perspective have been challenged by many theorists who argue that human behavior is often automatic, mindless, or habitual (e.g., Aarts, Verplanken, & van Knippenberg, 1998; Fazio, 1990; Triandis, 1977). Indeed, evidence has accumulated highlighting the fact that many behaviors are driven by unconscious processes. These processes are intuitive, spontaneous and unintentional (e.g., Bargh, 1994; Wilson, 2002) and therefore are not captured through traditional self-report attitude scales. Research has demonstrated that such attitudes, when activated, can have powerful effects on behavior, showing that human action can often be initiated automatically (e.g., Swanson, Swanson, & Greenwald, 2001). Examples of such automated action include, the fact that implicitly activated achievement goals elicit higher levels of job performance (Shantz & Latham, 2009), and implicitly activating imagery related to business (e.g., briefcases) leads to diminished cooperation in economic games (Kay, Wheeler, Bargh, & Ross, 2004).
The consideration of automatic processes has led scholars to posit dual process models of attitudes (e.g., Fazio, 1990; Petty, & Cacioppo, 1986; Wilson, Lindsey, & Schooler, 2000). Such models highlight the difference between automatic versus controlled information processing. For example, it has been suggested that there are two distinct processes or modes by which attitudes can influence behavior (e.g., the Motivation and Opportunity as Determinants model (MODE); Fazio, 1990). The MODE model suggests that when the individual is highly motivated and capable of thinking in a controlled manner, behavior is held to be thoughtfully planned, based on one’s attitudes toward the behavior. However, where motivation or opportunity for controlled information processing is lacking, attitudes are held to impact on behavior in a more automatic manner. For attitudes to guide behavior in this spontaneous manner, attitudes must be automatically activated in the presence of the attitude object. Attitudes will fail to predict behavior when the behavior is enacted under conditions that do not lead to deliberative processing of the attitude or its automatic activation.

The distinction between automatic and controlled information processing highlights the importance of automatically activated attitudes. However, despite their potential application, implicit measures have received relatively modest attention within the organizational literatures, largely owing to the fact that they are more difficult to measure (Uhlmann et al., 2012). However, there has been a recent surge in the number of studies using implicit measures to understand a number of phenomenon, including traits (e.g., Johnson, Tolentino, Rodopman, & Cho, 2010; Johnson, & Saboe, 2011), attitudes (e.g., Johnson & Lord, 2010), and values (e.g., Reynolds, Leavitt, & Decelles, 2010). Leadership researchers have also realized the potential that implicit attitudes can have on the leadership process. Implicit measures may help determine a person’s unconscious attitude towards their leader. Use of implicit measures may, in fact, be critical to our understanding of leadership as such measures are particularly informative when participants are unwilling to admit their attitudes to others, or even to themselves (Uhlmann et al., 2012). As such implicit measures have been shown to resist
attempts at deliberate faking (e.g., LeBreton, Barksdale, Robin, & James, 2007). This makes implicit attitudes especially useful in situations where evaluation apprehension is likely, such as measuring satisfaction with one’s job or supervisor in a study sponsored by the organization (Leavitt, Fong, & Greenwald, 2011).

Leavitt et al. (2011) has demonstrated the use of implicit measures of various facets of job satisfaction, demonstrating that such methods can be applied to leadership. The study examined how implicit attitudes regarding the organization, supervisor, and coworkers combined with explicit job satisfaction measures to predict job performance. Interestingly the results showed that implicit satisfaction with one’s organization and coworkers predicted both job performance and OCB, respectively, above that explained by explicit attitudes. However, contrary to the authors’ predictions, implicit attitudes towards one’s supervisor did not predict these outcomes (Leavitt et al., 2011). These results are somewhat surprising given the strong links between leadership attitudes and performance outcomes. Whether or not this is indicative of a differential effect of implicit and explicit leadership attitudes is uncertain given this is the only study to measure leadership in this way.

Future work should continue to consider implicit attitudes towards leadership, how they impact employee outcomes, and to what extent they differ from explicit measures of leadership attitude. Future research can also move beyond implicit measures of supervisor satisfaction to look at implicit attitudes towards different aspects of leadership. For example, research could examine implicit attitudes towards one’s leader-follower relationship and how this compares with explicit relationship attitude. Research in the interpersonal relationships area has developed ways of measuring implicit attitude specific to aspects of romantic relationships (e.g., Baccus, Baldwin, & Packer, 2004; Banse & Kowalick, 2007; LeBel & Gawronski, 2009; Zayas & Shoda, 2005). Such measures could be adapted to focus on capturing implicit attitudes towards the leader-follower relationship.
As well as playing a moderating role in the link between explicit attitudes and behaviors, attitude strength also influences the impact of implicit attitudes. As mentioned previously, the more accessible an attitude is in memory (an indication of attitude strength) the greater impact that attitude will have on automatic activation of that attitude and thus will be more likely to guide the effects of implicit attitudes. Indeed, when measuring implicit attitudes one is assessing attitude accessibility. Research also suggests that the importance of one’s attitude moderates the relationship between implicit and explicit attitudes (Karpinski, Steinman, & Hilton, 2005). This again highlights the advantage of considering facets of leadership attitudes, such as importance, in order to better predict when leadership will influence behavior.

4. Attitude function

The previous sections have highlighted the fact that attitudes are a multifaceted phenomenon and considering their complexities is important in understanding when they will be more or less impactful on information processing and behavior. However, it is also important to understand that individuals hold attitudes for a variety of reasons. Individuals, for example, may support a sports team in order to fit in with one’s relatives and friends supporting the same team. In contrast, attitudes toward abortion might be based on the value an individual places on freedom of choice or the sanctity of life. Such differences in the motivational bases of attitudes relates to the needs or functions that are fulfilled by holding certain attitudes. Thus, the functional approach to attitudes posits that attitudes fulfil psychological needs for the individual (Olson & Zanna, 1993). Similarly leadership research has tried to understand how leaders fulfil the basic needs of their followers (e.g., Hetland, Hetland, Schou, Andreassen, Pallesen, & Notelaers, 2011). Such work tends to focus on the basic psychological needs for autonomy, competence, and relatedness (Kovjanic, Schuh, Jonas, Quaquebeke, & Dick, 2012). Theories of attitude function, however, address the issue of ‘why’ individuals hold the attitudes they do. Attitude function has gained prominence in the attitude
literature due to interest in understanding the reasons people hold particular attitudes and the implications of holding attitudes that fulfil different functions. Seminal theories of attitude function were developed several decades ago, but are still hugely influential (Katz, 1960; Smith, Bruner, & White, 1956). Shavitt (1990) grouped the attitude functions proposed in these theories into three distinct categories: utilitarian, social identity, and self-esteem maintenance.

The utilitarian function focuses on the role of attitudes in maintaining rewards. As such, utilitarian attitudes operate in a way that maximizes the rewards and minimizes the punishments obtained from objects in one's environment. Part of this process involves summarizing the outcomes intrinsically associated with objects and guiding behavior that obtains the benefits associated with the objects (Katz, 1960). For example, a person’s attitude toward a mobile phone might be based on the intrinsic rewards (e.g., increased amount of applications) and punishments (e.g., reduced battery life) obtained from such products. These attitudes are likely to guide behaviors that maximize the phone’s rewards and minimize its punishments (e.g., carry a spare battery charger). This utilitarian function is highly relevant to research related to leadership attitudes. A follower may well hold an attitude about their leader in order to maximize their own interest and rewards received from the leader. Indeed, this type of function would be highly expected with regards to leadership as leaders will almost certainly hold the power to reward and punish their followers (e.g., Judge & Piccolo, 2004; Podsakoff, Bommer, Podsakoff, & MacKenzie, 2006). Leadership attitudes that fulfil a utilitarian function should guide follower behavior in ways that lead to rewards and decrease the likelihood of punishments.

Another attitude function that may be particularly pertinent to the study of leadership is the social-identity function that may be fulfilled by certain attitudes. Attitudes that have a social-identity function (Shavitt, 1990) help individuals identify with people whom they like and to distance themselves from people whom they dislike. This function may help explain how some followers come to form attitudes about their leader. In some cases, particular leader
attitudes may form based on other employees in the work group and a desire to fit in with other people in the group. LMX research, for example, has emphasized the existence of leader in-groups and out-groups that develop in work teams (Dansereau, Cashman, & Graen, 1973). Followers may base their attitudes towards the leader on the attitudes of one of these sub-groups, perhaps based on which group they identify with. Thus, the negativity or positivity of attitudes toward leadership may depend on whether the attitude fulfils social-adjustive concerns. In other words, it may be seen as popular to dislike or like ones leader as holding this attitude might help one be accepted and adjust in a group whose members have similar views of the leader; perhaps fulfilling a need to belong.

One of the best examples of the use of social identity function in leadership is the *social identity theory of leadership* which has been developed principally by Hogg, van Knippenberg and colleagues (Hogg, 2001; Hogg & van Knippenberg, 2003; Hogg, van Knippenberg & Rast, 2012; for empirical overviews see Ellemers, de Gilder, & Haslam, 2004). This is a social cognitive approach that proposes that effective leaders are highly group prototypical, i.e., they embody the desirable characteristics and behaviors of group members and therefore are in a position to influence group members. Prototypical leaders are more central and important to self-definition than non-prototypical leaders because they embody group norms and are more likely to favor the in-group and promote the well-being of the group. Numerous studies have shown that prototypical leaders are perceived as more desirable and effective than non-prototypical leaders (see Hogg et al., 2012, for a review). Of relevance here is that the approach shows the importance of identifying with a leader who represents the desirable aspects of the team. Through this identification processes, team members feel a sense of worth, higher self-esteem and positive well-being.

Some people develop attitudes based on their values, which are abstract ideas that people consider to be important guiding principles in their life (Schwartz, 1996). One function that attitudes can fulfil is a value expressive function (Katz, 1960) and this function exists
when people adopt a particular attitude in order to be consistent with specific values. The importance of values has been examined in leadership research. Research, for example, has shown that individuals' prefer leaders with whom they perceive they share similar attributes and values (e.g., Ehrhart & Klein, 2001). Jung and Avolio (2000) suggested that when follower's values are congruent with the transformational leader's values, they are expected to shift motivation from focusing on self-interests to considering the more collective interests of the group or organization. The authors demonstrated that transformational leadership had both direct and indirect effects on performance mediated, in part, through followers' value congruence. Other research has demonstrated that the quality of LMX is influenced by congruity between leader and member values (Ashkanasy & O'Connor, 1997). Specifically the results showed that LMX quality is higher when leaders and members share achievement and obedience values. The importance of values in understanding the leadership process supports the idea that leadership attitudes may serve a value expressive function.

Recent research has also focused on when macro-contextual factors have an impact on attitude–value links (Boer & Fischer, 2013). The authors showed, using meta-analytic techniques that cultural factors influenced the link between values and attitudes; showing that collectivism was associated with stronger attitude–value links for conservation values, individualism was associated with stronger attitude–value links for self-transcendence (vs. self-enhancement) values. Specifically, the findings show that self-transcendence-motivated (values that promote the welfare and the acceptance of close and distant others as equal) attitudes were more consistently guided by self-transcendence values with increasing societal individualism. The authors suggest that such individualistic societies emphasize context independence and personal values are more consistently linked to social attitudes with increasing context independence. In contrast, in more collectivistic settings, social attitudes are more consistently driven by conservation values compared to individualistic societies. These findings may have important implications for the study of cross-cultural leadership, which aims to understand
cultural differences and potential barriers to effective leadership (e.g., Javidan, Dorfman, De Luque, & House, 2006). Understanding how cultural values might impact the function of leadership attitudes can help to understand how leadership might differ across cultures and how, for example, leadership persuasive appeals should vary depending on the context. The initial research of Boer and Fischer (2013) seems to suggest that in individualistic cultures individuals show more cognitive consistency between their values and social attitudes, compared to collectivistic cultures (e.g., Suh, 2002). This suggests that leadership in this context might require a greater appreciation for the individual follower’s values and how these might impact on the development of leadership attitudes. In contrast, leaders in more collectivist cultures may need to appreciate societal norms and how these may guide followers’ leadership attitudes.

The final function that attitudes can serve, according to the classification of Shavitt (1990), refers to self-esteem maintenance. This function is served by attitudes that defend the self against internal conflict. For instance, a poor squash player might grow to dislike the game because it threatens his or her self-esteem. In the context of leadership attitudes this function may motivate followers to develop particular attitudes about their leader in a bid to protect their self-esteem. For example, attitudes that perform this function, it is argued, meet individuals’ need to enhance or to maintain self-worth. To ascribe inferior status to another group may give individuals some sense of superiority. This has clear links to recent research related to LMX, which highlights that the subjective ratings by individuals of their LMX compared to the LMXs of coworkers (labelled ‘LMX social comparison’) explain unique and meaningful variance in outcomes beyond LMX and the actual standing of those individuals in the LMX distribution (Vidyarthi, Liden, Anand, Erdogan, & Ghosh, 2010). This comparison process may be influenced by the function that leadership attitudes fulfil. For example, a follower who has an LMX attitude that is motivated by self-esteem maintenance may choose to engage in a downward social comparison (e.g., Major, Testa, & Blysma, 1991), choosing to
compare their relationship with a co-worker who is worse off in order to maintain feelings of self-esteem. Another example of how the self-esteem maintenance function may influence leadership perception is that a follower who is performing badly may develop an unfavorable attitude towards their leader in order to attribute their poor performance to a lack of leadership support.

The challenge for researchers in applying attitude functions to leadership (or indeed to any attitude object) lies in being able to determine what function an attitude serves. Knowing this information can help provide a clearer understanding of how and why an attitude is motivating the individual and guiding behavior. Furthermore, knowledge of attitude function would inform a leader as to the form of persuasion that is necessary to change follower attitudes. For example, if a follower’s attitudes towards leadership are ostensibly motivated by utilitarian concern then leaders should appeal to the rewards and punishments that they can provide and make salient the behaviors that will maximize these rewards and minimize the punishments. Conversely followers whose leadership attitudes are fulfilling a social-identity function may respond better to group-based appeals. Thus, research on attitude function theory suggests that attitude change may occur through the closer match between an appeal and the attitude’s primary function (Shavitt, 1990; Maio & Olson, 1995). At the heart of this theory is the study of the motivational basis for an attitude and the need to understand how it can be changed (Eagly & Chaiken, 1993).

The functions described above relate to the motives underlying the attitudes of an individual. At the heart of the functional approach is the central idea that people might like or dislike an attitude object with equal intensity but for completely different reasons. Attempts to change one's attitude might require different methods or appeals, depending on the function being served. In other words, the functional approach posits the notion that attitude change occurs when message and motive match (Katz 1960). Specifically attitude functional research has examined the effects of functionally matched messages (vs. not matched) on message
persuasiveness (e.g., Petty, Wheeler, & Bizer, 2000). This research shows that appeals about objects that predominantly engage a utilitarian function are more persuasive if they describe the object’s features, whereas persuasive appeals about objects that predominantly engage a social identity function will be more effective if they focus on what the object communicates to others (Shavitt, 1990). This has substantial implications for understanding leadership and leaders attempts to persuade followers and change their attitudes. For instance a leadership attitude serving a utilitarian function is based upon principles of expected reward. As such leaders may have more influence over followers by focusing on addressing utilitarian needs such as highlighting the rewards associated with certain behaviors. A person holding an attitude toward a leader serving the value-expressive function, will likely be persuaded by appeals that tap into the underlying values that individual holds.

5. Theoretical, methodological and practical implications.

The aim of this review was to provide a theoretical basis for the examination of leadership perceptions within the framework of attitude theory. Given the size of the attitude literature we limited the scope of the review to some of the main themes within this body of work could inform our understanding of leadership perceptions. Specifically, we focused on how the content, structure and function of attitudes could apply to the formation of leadership perceptions and its impact on work outcomes. In our content analysis we highlighted that the majority of theories measure leadership perception as a cognitive evaluation, indicating a follower’s thoughts about their leader. Far fewer items related to followers affective feelings towards their leader, whilst the behavioral component was seldom measured at all. Thus, our analysis suggests that the affective and behavioral components of leadership attitudes are being overlooked. This finding is particularly interesting with respect to the behavioral component as many leadership measures specifically aim to measure the leader’s style of behavior. The components of leadership attitudes are important because, as demonstrated in the review, each component may have differential influences on outcomes.
As well as considering the attitudinal content that forms the basis of attitudes, this review also emphasized that attitudes are comprised of an array of properties that determine the extent that attitudes impact information processing, resist counter-persuasion, persist over time and guide behavior. Paying attention to these facets, that determine the strength of an attitude, can extend understanding of when leadership perceptions are likely to influence work outcomes; elucidating some of the processes that might underly these effects. Whereas attitude content and structure speaks to the value of understanding the basis of leadership perceptions (in terms of ‘what and when’), considering attitude function emphasizes the underlying motives (in terms of ‘why’) that leadership perception fulfil. Leadership attitudes can realise various needs of followers and provide an opportunity for researchers to pay greater attention to how these attitudes are influenced both internally (e.g., by the persons values) and externally (e.g., by the social context).

Taken together the concepts of attitude content, structure and function provide a useful theoretical framework for leadership researchers to explore the nuances of leadership perceptions and how these relate to outcomes. We contend that doing so has myriad theoretical, methodological, and practical implications. On this basis of this review we discuss some of these implications below.

5.1 Theoretical implications

An overarching theme of this review is that it highlights the benefits of moving from a leader-centric approach towards examining leadership perceptions to an approach that considers leader perceptions as a property of both the leader and follower. A leader-centric approach assumes that leadership measurement accurately reflects the behaviors and styles of the leaders themselves. Over the years scholars have emphasized that using follower reports of leader behavior suggests that behavioral ratings reflect not only recall of actual behaviors, but such perception are also influenced by many extraneous factors (e.g. Schriesheim & Kerr, 1974; Schriesheim, Kinicki & Schriesheim, 1979). Schriesheim et al. (1979), for example,
showed the effects of leniency on follower ratings of leader behavior. Leniency refers to the tendency that persons describing someone they know and like are much more likely to attribute positive traits to them than negative traits. Recently, scholars have suggested that followers perceptions of leader behavior are also influenced by inferences based on semantic memory, which may vary between individuals (Hansbrough, Lord, & Schyns, 2014). Similarly by considering leader perceptions as attitudes, this review has shown that such perception can be influenced by a host of attitudinal processes that may not accurately reflect leader behavior. Attitudes are, for instance, shaped by various content and motivations that influences information processing and the stability of such attitudes. Thus, this review shows that leadership perceptions are a property of both the leader’s behavior and the follower’s subjective interpretation of that behavior. Acknowledging the role of follower-centric processes in the formation and maintenance of leadership perceptions allows a consideration of a wide range of factors that can affect this interpretative process. We propose drawing upon an attitudes framework offers many insights into how these interpretation processes occurs.

Arguably the most important outcome of this review is that it proposes the need to consider leadership perceptions not only as an evaluation in terms of its valance and extremity (e.g., positive vs. negative, low vs. high), but to conceptualize it as a multi-faced attitude comprising of various dimensions. Considering the multi-dimensional nature of leadership perceptions gives insights into important features (such as, attitude importance and ambivalence) that can be hugely influential in determining the impact of such perceptions.

Further, we propose that the application of an attitudes framework can provide a unifying approach to understanding the divergent leadership perspectives. As the content analyses of the leadership measures showed there is considerable variation both within and between different measures to the extent that they contain different attitudinal components. The use of an attitudes framework (specifically examining the tripartite components) gives an opportunity to assess the content of different leadership measures and why they might have
different impacts with outcomes. A development of this logic is that the attitudes framework provides a basis for the development of future measures of leadership perceptions that contain all three attitudinal components (affect, cognition, and behavior).

While the role of content and structure examines the underlying architecture of leadership perceptions, the role of attitude functions focuses on the motivational processes that underlie leadership perceptions. More specifically, this highlights the reasons why people hold leadership perceptions, how these perceptions relate to their personal identities and ultimately how they impact upon outcomes. Of specific note, is the role of the social identity function that emphasizes that leadership perceptions are influenced by the social context determining the extent to which followers assimilate their attitudes to the group prototype (Hogg, 2001; Hogg et al., 2012). This highlights the broader benefits of adopting an attitude perceptive in enabling a wider appreciation of leadership perceptions that are not just affected by the follower-leader dyad but are socially construed within the wider social context. Thus, this allows for a cross-level (i.e., individual, follower-leader dyad, team-level) analysis of leadership perceptions.

The use of an attitudes framework also has the potential to contribute to understanding the difference in leadership perceptions when assessed from the follower and leader perspectives (Sin, Nahrgang, Morgeson, 2009; Zhou & Schriesheim, 2009, 2010). It might be the case, for example, that follower-leader congruence of leadership perceptions might be higher for different attitudinal components. For example, leader and follower perceptions that are both based on affect may be more convergent than when they are based on different attitudinal components. In this context it is important to consider methodologically how such studies are conducted as this might also contribute to incongruent perceptions from a follower and leader. Follower ratings of leadership perceptions typically focus on evaluating various aspects of the leader’s behavior while the leader’s perceptions, by contrast, typically measure the leader’s perceptions of their own behavior. Thus, in many cases follower and leader perspectives might be assessing different attitudinal components. For example, consider the
following item from the MLQ (MLQ, Bass & Avolio, 1995), which assesses transformational leadership: ‘Spends time teaching and coaching’. When this item is completed by the follower it assesses the cognitive component of the attitude but when completed by the leader (‘I spend time teaching and coaching’) it assesses the behavioral components of the attitude. Therefore, in many leadership measures changing the focus of the items (from the follower to the leader perspectives) also changes the attitudinal component that is assessed and this might contribute towards low levels of congruence in ratings. This point was highlighted recently by Schriesheim and Liu (2013), who demonstrated, using content assessment, that many of the LMX-7 (Graen & Uhl-Bien, 1995) items measures different components of an attitude when rated by the leader, compared to when it is rated by the follower.

So far we have said relatively little about how different leadership styles are related to attitudes. We believe that research in attitudes is informative in this respect. According to the principle of compatibility attitudes predict behaviors to the extent that the attitude and behavior correspond in their action, target, context and time (Ajzen, 1988; Ajzen & Fishbein, 2005; see also Fisher, 1980; Hulin, 1991). Operationalizing the attitude and behavior at the same level of specificity is therefore thought to increase the strength of the relationship between attitudes and behaviors. Indeed, Kraus (1995) showed in a meta-analysis that the correlation between attitudes and behaviors was larger when the principle of compatibility was followed than when it was not ($r = .62$ vs. $r = .29$). Relatedly, general job attitudes were found to increase their predictive validity the more the outcome was defined in broader and more inclusive ways (e.g., in-role performance vs. individual effectiveness or people’s tendency to contribute desirable inputs toward their work role) (Harrison et al., 2006). This might be taken to suggest that generic attitudes towards leadership (e.g., leader satisfaction) should have higher predictive validity when follower behavior is measured in more general terms (e.g., individual effectiveness), while specific attitudes towards leadership (e.g., LMX, ethical leadership, authentic leadership) should be more predictive of specific follower behaviors (e.g.,
cooperative, ethical, and voice behaviors). Integrating research in attitudes with research in leadership might therefore aid in identifying which leadership style is most predictive for certain types of follower behaviors but also respond to calls to develop more clearly defined and empirically distinct aspects of leadership (e.g., van Knippenberg & Sitkin, 2013). Future research might, therefore, categorize existing leadership scales and outcomes in terms of action, target, context and time or develop new measures that take into account such a categorization.

5.2 Methodological implications

As discussed above, this review identifies many theoretical benefits associated with the integration of attitude theory and leadership perceptions. Such cross-fertilisation is only possible with careful alignment of measurement and methodological approaches if attitude-based approaches to leadership are to be successfully utilized. Some of the applications suggested can be easily incorporated into the typical design of leadership research, whereas others would require the use of methodological approaches that are less typical in this context. Each section of this review has associated methodological implications that will be discussed separately below.

5.2.1 Attitude content

As Tables 1 and 2 demonstrate, current measures of different leadership perceptions are based to varying degrees on affect, cognition and behavior. These scales were not designed to measure certain types of attitudes and it is therefore unsurprising that many of the scales represent a mixture of different content. As the content of one’s attitude can be a powerful determinant of future behavior it would be useful to have clear distinctions between affective, cognitive and behavioral components of leadership attitudes. Thus future research should aim to develop scales that tap into the different components that make up a given leadership attitude. Specifically it would be useful to measure affective, cognitive and behavioral components of each leadership attitude. For example, when measuring LMX knowing a
follower’s affective, cognitive and behavioral attitude could potentially increase the predictive validity of the attitude. Such information would allow researchers to determine which attitudinal component is most predictive, for who, and when. This approach would also contribute to research investigating the consistency between these different bases of the attitude and how this impacts on subsequent behavior. As discussed previously, to some extent this rationale has been applied to a limited extent within LMX research with the development of the LMX-MDM measure that explicitly measures an affective dimension (Liden & Maslyn, 1998). However, to date, little attention has been paid to potential differences between these variables and many studies aggregate the scale to an overall score. Therefore, it is unclear whether the affective dimension of the LMX-MDM has differential effects to the cognitive and behavioral dimensions (such as work performance, Martin, Guillaume, Thomas, Lee, & Epitropaki, 2015).

5.22 Attitude structure

Measures of leadership perception focus on the valence and extremity of leadership attitudes. This is because researchers are interested in the extent that followers view their leader as ‘transformational’, ‘servant’ or ‘authentic’. Such measures fail to account for other dimensions of an attitude, related to attitude strength, that have been show to influence the impact of an attitude. As can be seen in Table 3, some of the features related to attitude strength reflect inherently subjective perceptions of the attitude-holder. Attitude strength dimensions that rely on subjective judgements are well suited to measurement in surveys. Krosnick and Abelson (1991) suggest that five attitude strength dimensions are suitable measures for surveys: extremity, intensity, certainty, importance and knowledge.

As well as utilizing the survey design, attitude strength research has often used experimental methods to test hypotheses related to attitude strength (e.g., Maio et al., 1996; Martin & Hewstone, 2008). Indeed, attitude research more generally often uses such designs to develop and test theoretical propositions. Experimental research in the domain of leadership is far from the norm, however, this type of design is increasing in popularity (e.g., Hoyt, &
Blascovich, 2010; Thiel, Connelly, & Griffith, 2012). Integrating leadership perception into an attitudes framework can serve to encourage researchers to utilize a variety of research designs including experimental approaches.

Other attitude strength dimensions may be harder to measure subjectively as they reflect the content and structure of representations stored in long-term memory. Attitude accessibility signifies the nature of the relation between an object’s representation and its evaluation stored in memory, which controls the speed and ease with which the attitude comes to mind upon encountering the object. As discussed previously, Leavitt et al. (2011) measured implicit leadership attitudes utilizing the most widespread tool for capturing implicit attitudes; the Implicit Association Test (IAT), developed by Greenwald, McGhee and Schwartz (1998). The IAT focuses on response latencies as an indicator for the relative associative strength between the two pairs of concepts (Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005). Leavitt et al. (2011) used this method to measure the strength of association between the participant’s leader and positive valence. This approach represents a very general implicit leader attitude, however, and it would be interesting to see more research that examines this particular aspect of leadership such as the quality of the relationship. In a related literature, implicit measures have been adapted for the study of close relationships (e.g., Banse & Kowalick, 2007; Zayas & Shoda, 2005). Such research designs could be easily adapted to research in attitudes on leadership and leader-follower relationships.

5.23 Attitude function

Attitude function can represent a methodological challenge for the study of leadership as one of the most common measures, developed by Shavitt (1990), involves an open-ended, thought listing approach, where participants are asked to list their thoughts associated with an attitude object. These thoughts are then coded to assess the functions they reflected (see Shavitt, 1990). Thoughts related to the utilitarian category, for example, include references to rewards or punishments associated with the object. Social identity thoughts include references
to others' attitudes toward the leader, what the attitude symbolizes, and what the attitude communicates to others.

Scholars have also developed an inventory to measure attitude function; the Attitude Function Inventory (AFI, Herek, 1987). The AFI provides a direct measure of the different functions in relation to an attitude object and includes items for various categories of attitude function (Experiential-Schematic, Defensive, Value-Expressive and Social-Expressive). This inventory represents a more convenient way for leadership scholar to assess the function of leadership attitudes as this scale can be included in survey based design.

5.3 Practical implications

The integration of attitude theory to the leadership domain also highlights important implications for leader training and development. To date, the predominant approach to leadership development programmes has been to develop leader's skills and meta-competencies based on the assumption that this will enhance leadership effectiveness (Day, 2001). Yet, the implications of our review suggest a note of caution is merited. We argue that the loci and mechanisms underlying effective leadership (and thus leadership development) reside in both followers and leaders. This is because any improvements in leadership style must have a corresponding impact upon the underlying structure and content of followers’ attitudes and evaluations of the leader’s style in order for leader development to be effective and shape followers’ behavior. In other words, leadership development is as much about follower attitude change as it is leader behavioral change.

To complicate matters further, our review suggests that once formed, followers’ attitudes tend to relatively stable in that they persist over time and resist change, particularly if they are strong attitudes. Leaders need to be aware that followers are likely to detect and interpret behavioral information in a biased manner that helps maintain their current attitude (Maio & Thomas, 2007). On a more optimistic note, however, our review suggests some mechanisms that may aid follower attitude change. For example, attitude-discrepant behavior
displayed by leaders needs to be made highly salient and accessible to followers and formally recognized by the performance appraisal systems. In addition, attempts to influence follower’s attitudes are likely to be more successful to the extent that they match the underlying content and motivational basis (i.e., function) of the attitude. It is important to note that these attempts to influence are likely to be more effective to the extent that they target the social expressive attitudes of the wider work group, and thus are consistent with the social identity of the work group (Hogg et al., 2012). Taken together, our review implies that a better understanding of how to manage and change followers’ attitudes, especially how to strengthen favorable attitudes and weaken unfavorable attitudes, should be an important foci for leadership development programs.

5.4 Conclusion

We started this review with the claim that leadership perceptions are synonymous with attitudes and that this perspective can provide an enhanced understanding of the leadership process and therefore advance theory in this area. Based on this, we used an attitude framework to understand leadership perceptions in a number of ways. First, our content analyses showed that current leadership measures vary considerably with respect to measuring the three components of attitudes (affect, cognition and behavior). We propose that leadership perceptions should include all three attitudinal components to adequately assess the concept. Second, that the different components of attitudes might have a differential impact on work-related outcomes. We propose that because current leadership measures vary with respect to their measurement of the attitudinal components, this might explain differences in findings between these measures. Third, that the properties of an attitude (content, structure and function) can provide new insights into the leadership process. We propose that the examination of these properties encourages a move away from viewing leadership perceptions as a leader-centric property to one that considers both the leader’s behavior and the follower’s subjective interpretation of that behavior. Fourth, there are many benefits from the application
of the attitudes framework in terms of potential methodological advances. We propose that these methodological developments encourage the utilization of a more multi-method approach to measuring leadership perceptions and a wider use of research designs. Fifth, the review emphasized that there are many practical benefits from viewing leadership perceptions as an attitude. We propose that this knowledge encourages a move away from focusing on developing leaders’ leadership skills and meta-competencies to also include an understanding of how followers form attitudes about their behaviors and how these perceptions can be changed. In conclusion, we propose that there are many potential benefits from applying an attitudes framework to understanding leadership perceptions and we hope our review has demonstrated some of these and that this will help to encourage further research in this area.
References


personality associated with perceptions of LMX? An empirical study. *Leadership &

Boer, D., & Fischer, R. (2013). How and when do personal values guide our attitudes and
sociality? Explaining cross-cultural variability in attitude-value linkages. *Psychological
Bulletin, 139*, 1113-1147.

interest, Social Identification, and Value Relevance. *Journal of Personality and Social
Psychology, 68*, 61-80.

Longitudinal effects of transformational leader behavior on employee cynicism about
organizational change. *Journal of Organizational Behavior, 26*, 733-753.

Bono, J. E., & Judge, T. A. (2003). Self-concordance at work: Toward understanding the
motivational effects of transformational leaders. *Academy of Management Journal, 46*,
554-571.


in selective exposure to information. *Journal of Experimental Social Psychology, 43*,
611-617.

Psychology, 35*, 307–311.


research on selective exposure to information. *Journal of Personality and Social Psychology, 80*, 557-571.


Lee, A., Martin, R., Thomas, G., & Guillaume, Y. (Under Review). Leader-Member Exchange (LMX) and attitude importance: An integration.


member relationship (LMX) research: Future prospects and directions. *International

Advance online publication.*

and attitude change: The Source-Context-Elaboration model. *Advances in Experimental

Mattson, R. E., Paldino, D., & Johnson, M. D. (2007). The increased construct validity and
clinical utility of assessing relationship quality using separate positive and negative

of health-related behaviors with the theory of planned behavior: A meta-analysis. *Health
Psychology Review, 5*, 97-144.


Millar, M. G., & Tesser, A. (1992). The role of beliefs and feelings in guiding behavior: The
mismatch model. In L. Martin & A. Tesser (Eds.), *Construction of social judgment* (pp.

exchanges: Exploring how personality and performance influence leader and member
relationships over time. *Organizational Behavior and Human Decision Processes, 108*,
256-266.


Table 1: Content Analysis of Popular Scales Measuring Leadership Perceptions

<table>
<thead>
<tr>
<th>Leadership Theory</th>
<th>Measurement scale</th>
<th>Example Items</th>
<th>Number of Affective Items</th>
<th>Number of Cognitive Items</th>
<th>Number of Behavioral Items</th>
</tr>
</thead>
</table>
| LMX               | LMX-7 (Graen & Uhl-Bien, 1995)                                                     | 1. How well does your leader understand your job problems and needs?  
2. How well does your leader recognize your potential?                                                                                               | 0                         | 6                         | 1                         |
| LMX               | LMX-MDM (Liden and Maslyn 1998)                                                    | 1. I like my supervisor very much as a person (Affect Dimension)  
2. I admire my supervisor’s professional skills (Professional Respect Dimension)                                                               | 6                         | 3                         | 3                         |
| Transformational  | TLI (Podsakoff, MacKenzie, Moorman & Fetter 1990).                                 | 1. Has a clear understanding of where we are going  
2. Provides a good model to follow                                                                                                               | 5                         | 17                        | 0                         |
| Transformational  | Subsets of MLQ (Avolio & Bass, 1999).                                              | 1. Talks about his/her most important values and beliefs  
2. Talks optimistically about the future                                                                                                          | 4                         | 16                        | 0                         |
| Transactional     | Subset of MLQ (Avolio & Bass, 1999).                                               | 1. Makes clear what one can expect to receive when performance goals are achieved  
2. Keeps track of all mistakes                                                                                                                  | 0                         | 9                         | 0                         |
| Authentic         | Authentic Leadership Questionnaire – Walumbwa, Avolio, Gardner, Wernsing.           | 1. Seeks feedback to improve their interactions with others  
2. Knows when it is time to re-evaluate their position on important issues                                                                        | 0                         | 16                        | 0                         |
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Item</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic</td>
<td>My leader openly shares information with others</td>
<td>1. My leader openly shares information with others</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>My leader objectively analyzes relevant data before making a decision</td>
<td>2. My leader objectively analyzes relevant data before making a decision</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Ethical</td>
<td>Can be trusted</td>
<td>1. Can be trusted</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Sets an example of how to do things the right way in terms of ethics</td>
<td>2. Sets an example of how to do things the right way in terms of ethics</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Servant</td>
<td>This person is one I would turn to if I had a personal trauma</td>
<td>1. This person is one I would turn to if I had a personal trauma</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>This person sacrifices his/her own interests to meet my needs</td>
<td>2. This person sacrifices his/her own interests to meet my needs</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Servant</td>
<td>My manager is always interested in helping people in our community</td>
<td>1. My manager is always interested in helping people in our community</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>I am encouraged by my manager to volunteer in the community.</td>
<td>2. I am encouraged by my manager to volunteer in the community.</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Abusive</td>
<td>Breaks promises he/she makes</td>
<td>1. Breaks promises he/she makes</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Is rude to me</td>
<td>2. Is rude to me</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Around when needed</td>
<td>1. Around when needed</td>
<td>7</td>
</tr>
<tr>
<td>with</td>
<td>Tells me where I stand</td>
<td>2. Tells me where I stand</td>
<td>11</td>
</tr>
<tr>
<td>Supervision</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>How capable is the person you are evaluating as a leader</td>
<td>1. How capable is the person you are evaluating as a leader</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>To what extent is the overall functioning of the person you evaluate</td>
<td>2. To what extent is the overall functioning of the person you evaluate</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>satisfactory</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>
Table 2: ANOVA Results for the Content of Leadership Items

<table>
<thead>
<tr>
<th>Items</th>
<th>Mco^1</th>
<th>Maff^2</th>
<th>Mbeh^3</th>
<th>1-2 (95%CI)</th>
<th>1-3 (95%CI)</th>
<th>2-3 (95%CI)</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMX1*</td>
<td>4.14</td>
<td>2.50</td>
<td>1.96</td>
<td>1.64 (.68, 2.61)</td>
<td>2.18 (1.41, 2.95)</td>
<td>.54 (-.22, 1.29)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>LMX2</td>
<td>4.50</td>
<td>2.32</td>
<td>1.68</td>
<td>2.18 (1.49, 2.86)</td>
<td>2.82 (2.30, 3.34)</td>
<td>.64 (.04, 1.24)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>LMX3</td>
<td>4.25</td>
<td>2.36</td>
<td>1.86</td>
<td>1.89 (1.26, 2.53)</td>
<td>2.39 (1.69, 3.09)</td>
<td>.50 (-.14, 1.14)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>LMX4</td>
<td>3.68</td>
<td>2.00</td>
<td>2.57</td>
<td>1.68 (.925, 2.43)</td>
<td>1.11 (.09, 2.12)</td>
<td>-.57 (-1.23,.08)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>LMX5</td>
<td>3.46</td>
<td>2.36</td>
<td>2.39</td>
<td>1.11 (.19, 2.02)</td>
<td>1.07 (.09, 2.04)</td>
<td>-.04 (-.76,.68)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>LMX6</td>
<td>3.00</td>
<td>2.61</td>
<td>3.57</td>
<td>.39 (-.27, 1.06)</td>
<td>-.57(-1.63,.49)</td>
<td>-.96 (-1.89,.04)</td>
<td>Not Clear</td>
</tr>
<tr>
<td>LMX7</td>
<td>4.29</td>
<td>2.39</td>
<td>2.14</td>
<td>1.89 (1.16, 2.63)</td>
<td>2.14 (1.39, 2.89)</td>
<td>.25 (-.32,.82)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>MDM-AFF1**</td>
<td>2.14</td>
<td>4.75</td>
<td>1.57</td>
<td>-2.61 (-3.33,-1.89)</td>
<td>.57 (.02, 1.12)</td>
<td>3.18 (2.63, 3.73)</td>
<td>Affect</td>
</tr>
<tr>
<td>MDM-AFF2</td>
<td>3.07</td>
<td>4.11</td>
<td>1.71</td>
<td>-1.04 (-2.02,-.05)</td>
<td>1.36 (.58, 2.13)</td>
<td>2.39 (1.75, 3.04)</td>
<td>Affect</td>
</tr>
<tr>
<td>MDM-AFF3</td>
<td>2.82</td>
<td>4.39</td>
<td>2.07</td>
<td>-1.57 (-2.41,-.73)</td>
<td>.75 (-.03, 1.53)</td>
<td>2.32 (1.59, 3.05)</td>
<td>Affect</td>
</tr>
<tr>
<td>MDM-LOY1</td>
<td>3.71</td>
<td>2.07</td>
<td>2.46</td>
<td>1.64 (.78, 2.50)</td>
<td>1.25 (.10, 2.39)</td>
<td>-0.39 (-1.01,.23)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>MDM-LOY2</td>
<td>3.36</td>
<td>2.39</td>
<td>2.86</td>
<td>.96 (.08, 1.85)</td>
<td>.50 (.73, 1.73)</td>
<td>-.46 (-1.29,.36)</td>
<td>Not Clear</td>
</tr>
<tr>
<td>MDM-LOY3</td>
<td>3.61</td>
<td>2.36</td>
<td>2.82</td>
<td>1.25 (.39, 2.11)</td>
<td>.79 (-.36, 1.93)</td>
<td>-.46 (-1.28,.35)</td>
<td>Not Clear</td>
</tr>
<tr>
<td>MDM-CON1</td>
<td>2.25</td>
<td>1.93</td>
<td>4.64</td>
<td>.32 (-.28,.92)</td>
<td>-2.34 (-3.14,-1.64)</td>
<td>-2.71 (-3.42,-2.01)</td>
<td>Behavior</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>---------------</td>
<td>---------------</td>
<td>---------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td>SD</td>
<td>SD</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDM-CON2</td>
<td>1.96</td>
<td>2.00</td>
<td>4.71</td>
<td>-0.04 (-0.61, 0.54)</td>
<td>-2.75 (-3.42, -2.08)</td>
<td>-2.71 (-3.35, -2.08)</td>
<td>Behavior</td>
</tr>
<tr>
<td>MDM-CON3</td>
<td>2.25</td>
<td>1.86</td>
<td>4.61</td>
<td>0.39 (-0.16, 0.95)</td>
<td>-2.36 (-3.03, -1.69)</td>
<td>-2.75 (-3.31, -2.19)</td>
<td>Behavior</td>
</tr>
<tr>
<td>MDM-RES1</td>
<td>4.21</td>
<td>2.82</td>
<td>1.82</td>
<td>1.39 (0.54, 2.25)</td>
<td>2.39 (1.63, 3.16)</td>
<td>1.00 (0.28, 1.72)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>MDM-RES2</td>
<td>3.86</td>
<td>3.36</td>
<td>1.71</td>
<td>0.50 (-0.49, 1.49)</td>
<td>2.14 (1.50, 2.78)</td>
<td>1.64 (1.05, 2.23)</td>
<td>Not Clear</td>
</tr>
<tr>
<td>MDM-RES3</td>
<td>3.46</td>
<td>3.86</td>
<td>1.54</td>
<td>-0.39 (-1.35, 0.57)</td>
<td>1.93 (1.31, 2.54)</td>
<td>2.32 (1.78, 2.86)</td>
<td>Not Clear</td>
</tr>
<tr>
<td>TL1***</td>
<td>3.96</td>
<td>1.61</td>
<td>2.32</td>
<td>2.36 (1.71, 3.01)</td>
<td>1.64 (0.59, 2.69)</td>
<td>-0.71 (-1.22, -0.21)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL2</td>
<td>4.00</td>
<td>2.21</td>
<td>1.93</td>
<td>1.79 (1.01, 2.56)</td>
<td>2.07 (1.18, 2.97)</td>
<td>0.29 (-0.44, 1.01)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL3</td>
<td>4.61</td>
<td>1.79</td>
<td>1.57</td>
<td>2.82 (2.34, 3.31)</td>
<td>3.04 (2.57, 3.50)</td>
<td>0.21 (-0.19, 0.61)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL4</td>
<td>4.21</td>
<td>2.25</td>
<td>1.86</td>
<td>1.96 (1.25, 2.68)</td>
<td>2.36 (1.59, 3.13)</td>
<td>0.39 (-0.23, 1.01)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL5</td>
<td>4.00</td>
<td>1.82</td>
<td>2.36</td>
<td>2.18 (1.53, 2.83)</td>
<td>1.64 (0.65, 2.63)</td>
<td>-0.54 (-1.19, 0.12)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL6</td>
<td>4.25</td>
<td>2.25</td>
<td>2.21</td>
<td>2.00 (1.35, 2.65)</td>
<td>2.04 (1.19, 2.89)</td>
<td>0.04 (-0.53, 0.59)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL7</td>
<td>3.96</td>
<td>2.00</td>
<td>2.61</td>
<td>1.96 (1.35, 2.58)</td>
<td>1.36 (0.29, 2.42)</td>
<td>-0.61 (-1.33, 0.11)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL8</td>
<td>3.96</td>
<td>1.82</td>
<td>2.71</td>
<td>2.14 (1.56, 2.73)</td>
<td>1.25 (0.15, 2.34)</td>
<td>-0.89 (-1.54, -0.25)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL9</td>
<td>3.86</td>
<td>2.39</td>
<td>2.54</td>
<td>1.46 (0.63, 2.30)</td>
<td>1.32 (0.34, 2.30)</td>
<td>-0.14 (-0.90, 0.62)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL10</td>
<td>3.79</td>
<td>2.18</td>
<td>2.61</td>
<td>1.61 (0.84, 2.38)</td>
<td>1.18 (0.09, 2.26)</td>
<td>-0.43 (-1.19, 0.33)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL11</td>
<td>4.04</td>
<td>2.29</td>
<td>2.43</td>
<td>1.75 (0.98, 2.52)</td>
<td>1.61 (0.65, 2.57)</td>
<td>-0.14 (-0.82, 0.54)</td>
<td>Cognitive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td>TL12</td>
<td>4.32</td>
<td>2.07</td>
<td>2.07</td>
<td>2.25 (1.56, 2.94)</td>
<td>2.25 (1.49, 3.00)</td>
<td>.00 (-.54, .54)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL13</td>
<td>4.21</td>
<td>2.07</td>
<td>2.25</td>
<td>2.14 (1.44, 2.85)</td>
<td>1.96 (1.20, 2.73)</td>
<td>-.18 (-.81, .46)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL14</td>
<td>4.14</td>
<td>1.96</td>
<td>2.21</td>
<td>2.18 (1.58, 2.78)</td>
<td>1.93 (1.05, 2.81)</td>
<td>-.25 (-.82, .32)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL15</td>
<td>3.29</td>
<td>3.21</td>
<td>2.36</td>
<td>.07 (.91, 1.06)</td>
<td>.93 (.07, 1.79)</td>
<td>.86 (.15, 1.56)</td>
<td>Not Clear</td>
</tr>
<tr>
<td>TL16</td>
<td>3.46</td>
<td>3.61</td>
<td>2.11</td>
<td>-.14 (-1.15, .87)</td>
<td>1.36 (.65, 2.07)</td>
<td>1.50 (.89, 2.10)</td>
<td>Not Clear</td>
</tr>
<tr>
<td>TL17</td>
<td>3.54</td>
<td>2.96</td>
<td>2.68</td>
<td>.57 (-.21, 1.36)</td>
<td>.86 (-.16, 1.88)</td>
<td>.29 (-.56, 1.13)</td>
<td>Not Clear</td>
</tr>
<tr>
<td>TL18</td>
<td>3.46</td>
<td>3.21</td>
<td>2.18</td>
<td>.25 (-.69, 1.19)</td>
<td>1.29 (.42, 2.15)</td>
<td>1.04 (.33, 1.74)</td>
<td>Not Clear</td>
</tr>
<tr>
<td>TL19</td>
<td>4.43</td>
<td>2.07</td>
<td>2.25</td>
<td>2.36 (1.83, 2.89)</td>
<td>2.18 (1.46, 2.89)</td>
<td>-.18 (-.59, .23)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL20</td>
<td>4.57</td>
<td>1.86</td>
<td>2.36</td>
<td>2.71 (2.24, 3.19)</td>
<td>2.21 (1.57, 2.86)</td>
<td>-2.71 (-3.19, -2.24)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL21</td>
<td>4.25</td>
<td>1.96</td>
<td>2.36</td>
<td>2.29 (1.61, 2.96)</td>
<td>1.89 (1.17, 2.62)</td>
<td>-39 (-1.02, .24)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>TL22</td>
<td>4.18</td>
<td>2.75</td>
<td>2.39</td>
<td>1.43 (.63, 2.23)</td>
<td>1.79 (1.08, 2.49)</td>
<td>.36 (-.42, 1.13)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ1****</td>
<td>4.11</td>
<td>2.04</td>
<td>2.54</td>
<td>2.07 (1.42, 2.72)</td>
<td>1.57 (.59, 2.55)</td>
<td>-.50 (-.99, -.01)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ2</td>
<td>4.11</td>
<td>1.89</td>
<td>2.43</td>
<td>2.21 (1.61, 2.82)</td>
<td>1.68 (.72, 2.63)</td>
<td>-.54 (-1.14, .07)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ3</td>
<td>4.36</td>
<td>1.93</td>
<td>2.57</td>
<td>2.43 (1.81, 3.05)</td>
<td>1.79 (.91, 2.67)</td>
<td>-.64 (-1.28, -.01)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ4</td>
<td>4.18</td>
<td>1.96</td>
<td>2.54</td>
<td>2.21 (1.55, 2.88)</td>
<td>1.64 (.66, 2.63)</td>
<td>-.57 (-1.27, .12)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ5</td>
<td>4.29</td>
<td>1.89</td>
<td>2.54</td>
<td>2.39 (1.87, 2.91)</td>
<td>1.75 (.86, 2.64)</td>
<td>-.64 (-1.29, .01)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ6</td>
<td>4.07</td>
<td>2.11</td>
<td>2.54</td>
<td>1.96 (1.36, 2.57)</td>
<td>1.54 (.58, 2.49)</td>
<td>-.43 (-1.07, .21)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>ALQ7</td>
<td>4.36</td>
<td>1.96</td>
<td>2.25</td>
<td>2.39 (1.75, 3.04)</td>
<td>2.11 (1.40, 2.81)</td>
<td>-.29 (-.82, .25)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ8</td>
<td>4.07</td>
<td>2.00</td>
<td>2.54</td>
<td>2.07 (1.41, 2.73)</td>
<td>1.54 (.58, 2.49)</td>
<td>-.54 (-1.15, .08)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ9</td>
<td>4.32</td>
<td>2.00</td>
<td>2.25</td>
<td>2.32 (1.75, 2.89)</td>
<td>2.07 (1.36, 2.79)</td>
<td>-.25 (-.78, .28)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ10</td>
<td>3.96</td>
<td>2.07</td>
<td>2.82</td>
<td>1.89 (1.26, 2.53)</td>
<td>1.14 (.17, 2.11)</td>
<td>-.75 (-1.39, -1.1)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ11</td>
<td>4.11</td>
<td>2.21</td>
<td>2.29</td>
<td>1.89 (1.09, 2.69)</td>
<td>1.82 (.99, 2.65)</td>
<td>-.07 (-.62, .48)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ12</td>
<td>4.43</td>
<td>1.61</td>
<td>2.18</td>
<td>2.82 (2.27, 3.37)</td>
<td>2.25 (1.42, 3.09)</td>
<td>-.57 (-1.07, -0.7)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ13</td>
<td>4.43</td>
<td>2.14</td>
<td>1.93</td>
<td>2.29 (1.71, 2.86)</td>
<td>2.50 (1.83, 3.17)</td>
<td>.21 (-.34, .77)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ14</td>
<td>4.29</td>
<td>2.04</td>
<td>2.54</td>
<td>2.25 (1.60, 2.89)</td>
<td>1.75 (.86, 2.64)</td>
<td>-.50 (-1.15, .15)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ15</td>
<td>4.21</td>
<td>2.29</td>
<td>2.07</td>
<td>1.93 (1.09, 2.76)</td>
<td>2.14 (1.45, 2.84)</td>
<td>.21 (-.29, .72)</td>
<td>Cognitive</td>
</tr>
<tr>
<td>ALQ16</td>
<td>4.00</td>
<td>2.18</td>
<td>2.71</td>
<td>1.82 (1.19, 2.45)</td>
<td>1.29 (.30, 2.27)</td>
<td>-.54 (-1.21, .14)</td>
<td>Cognitive</td>
</tr>
</tbody>
</table>

N= 28 Raters. All Scale items can be found in appendix 1

*LMX = LMX-7 (Graen & Uhl-Bien, 1995)

**LMX-MDM (AFF = Affect, LOY = Loyalty, CON = Contribution, RES = Professional Respect; Liden & Maslyn, 1998)

***Transformational Leadership Inventory (Podsakoff et al. 1990)

****Authentic Leadership Questionnaire (Neider, & Schriesheim, 2011).

Note. Mean difference is significant if the 95% confidence interval does not include zero.
Table 3: Definitions and Measurement of the Different Facets of Attitude Strength

<table>
<thead>
<tr>
<th>Attitude Dimension</th>
<th>Definition</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremity</td>
<td>Attitudes are typically conceptualized as lying on a continuum from very positive through neutral to very negative. Attitudes that lie toward either end of this continuum are considered to be extreme (see Abelson, 1995).</td>
<td>Extremity has usually been derived from reports of attitudes on rating scales</td>
</tr>
<tr>
<td>Intensity</td>
<td>Attitude intensity reflects the strength of the emotional reaction provoked by the attitude object in an individual.</td>
<td>It has typically been measured using self-reports of the intensity of feelings a person says he or she has about the object (e.g. Cantril, 1946; Stouffer et al., 1950).</td>
</tr>
<tr>
<td>Certainty</td>
<td>Attitude certainty reflects the degree of confidence a person attaches to an attitude.</td>
<td>Attitude certainty is typically measured by asking how certain or how confident people are about their attitudes, or how sure they are that their attitudes are valid, accurate, or correct.</td>
</tr>
<tr>
<td>Importance</td>
<td>Attitude importance denotes the level of psychological significance a person ascribes to an attitude (Boninger, Krosnick, Berent, &amp; Fabrigar, 1995).</td>
<td>Because this construct is, by definition, a perception of an attitude, it has typically been measured by asking a person to indicate how personally important an object is to him or her or the extent to which he or she personally cares about the object.</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Knowledge refers to amount of information</td>
<td>Knowledge has been measured in several</td>
</tr>
</tbody>
</table>
about an attitude object that is stored in memory, ranging in volume from very large to none at all (Wood, 1982; Wood, Rhodes, & Biek, 1995).

<p>| Accessibility | Attitude accessibility signifies how easily or quickly an attitude can be retrieved from memory (Fazio, 1995). The speed of retrieval is presumed to indicate the strength of the link in memory between the representation of the object and the evaluation of it. | Accessibility has typically been measured by measuring the length of time it takes a person to report his or her attitude. Sometimes accessibility is measured by asking people to subjectively rate how quickly their attitudes come to mind when they think of the object. |
| Direct Experience | Direct experience refers to the degree to which one has participated in behavioral activities related to an object and the amount of direct contact one has had with it. | This construct is often measured using self-reports of such behavioral experiences (Regan &amp; Fazio, 1977; Schuman &amp; Presser, 1981). |
| Ambivalence | Ambivalence refers to the degree to which a person holds both favorable and unfavorable evaluations of an attitude object. Thus, ambivalence is the degree of evaluative conflict in a person’s responses to an object, with maximum ambivalence occurring when favorable and unfavorable responses are both strong (Thompson, Zanna, &amp; Griffin, 1995). | Ambivalence has often been measured by asking people to report the degree to which they subjectively experience feelings of internal conflict. Ambivalence has also been measured by asking people to separately rate the extent of their positive and negative evaluations of an object, which can then be used to calculate ambivalence (Priester &amp; |
| Structural Consistency | Structural consistency refers to the extent to which attitude-relevant information has the same evaluative implications (e.g., all positive or all negative) versus contradictory evaluative implications (e.g., both positive and negative; see Chaiken, Pomerantz, &amp; Giner-Sorolla, 1995). Thus it share many similarities with ambivalence. Three types of structural consistency have been studied: affective-cognitive consistency: the evaluative conflict between one’s beliefs about the attitude object and one’s emotional reactions to the object; evaluative-cognitive consistency: the evaluative conflict between the global evaluation of the object and beliefs about the object; and evaluative-affective consistency: evaluative conflict between the global evaluation of the object and affective responses to the object. | Usually, the three elements have been measured separately and then integrated mathematically to yield quantitative assessments of each type of consistency. |
| Latitudes of Rejection and Non-commitment | Operationally defined as the width of an individual’s latitude of rejection (Sherif &amp; Hovland, 1961). The more attitudinal positions an individual finds objectionable, the more well-defined the individual’s attitude is, and therefore the more likely it is that the individual will behave consistently with that | Typically measured by giving subjects statements ranging across an attitude dimension and asking them to indicate which are acceptable or unacceptable (Sherif, Sherif, &amp; Nebergall, 1965). |</p>
<table>
<thead>
<tr>
<th><strong>Interest in Relevant Information</strong></th>
<th>Interest refer to the extent to which an individual is motivated to gather information about an attitude object.</th>
<th>Typically measured by self-reports of interest in or attention to such information (Bradburn &amp; Caplovitz, 1965; Kendall, 1954).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elaboration</strong></td>
<td>Some attitudes are formed as a consequence of detailed, highly elaborative thought processes. Others are formed through more superficial, cue-driven processes that require relatively little thought (see Petty, Hauhtvedt, &amp; Smith, 1995).</td>
<td>The extent of prior elaboration about an attitude object has been gauged by asking people how much they have thought about the object previously.</td>
</tr>
</tbody>
</table>
Appendix 1 – Items from leadership scales included in table 2

**LMX-7 (Graen & Uhl-Bien, 1995)**

LMX1: Do you know where you stand with your leader . . . do you usually know how satisfied your leader is with what you do? (rated: Rarely to Very Often)

LMX2: How well does your leader understand your job problems and needs? (rated: Not a Bit to A Great Deal)

LMX3: How well does your leader recognize your potential? (rated: Not at All to Fully)

LMX4: Regardless of how much formal authority he/she has built into his/her position, what are the chances that your leader would use his/her power to help you solve problems in your work? (rated: None to Very High)

LMX5: Again, regardless of the amount of formal authority your leader has, what are the chances that he/she would “bail you out,” at his/her expense? (rated: None to Very High)

LMX6: I have enough confidence in my leader that I would defend and justify his/her decision if he/she were not present to do so? (rated: Strongly Disagree to Strongly Agree)

LMX7: How would you characterize your working relationship with your leader? (rated: extremely ineffective to extremely effective)

**LMX-MDM (Liden & Maslyn, 1998)**

**Affect Dimension**

MDM-AFF1: I like my supervisor very much as a person

MDM-AFF2: My supervisor is the kind of person one would like to have as a friend

MDM-AFF3: My supervisor is a lot of fun to work with

**Loyalty Dimension**

MDM-LOY1: My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question

MDM-LOY2: My supervisor would come to my defense if I were ‘attacked’ by others

MDM-LOY3: My supervisor would defend me to others in the organization if I made an honest mistake

**Contribution Dimension**

MDM-CON1: I am willing to apply extra efforts, beyond those normally required, to further the interests of my work group

MDM-CON2: I do work for my supervisor that goes beyond what is specified in my job description
MDM-CON3: I do not mind working my hardest for my supervisor

**Professional Respect Dimension**

MDM-RES1: I respect my supervisor’s knowledge of and competence on the job

MDM-RES2: I am impressed with my supervisor’s knowledge of his/her job

MDM-RES3: I admire my supervisor’s professional skills

**Transformational Leadership Inventory (Podsakoff et al. 1990)**

TL1: My supervisor is always seeking new opportunities for the unit/department/organization

TL2: My supervisor paints an interesting picture of the future for our group

TL3: My supervisor has a clear understanding of where we are going

TL4: My supervisor is able to get others committed to his/her dream of the future

TL5: My supervisor leads by “doing” rather than simply “telling”

TL6: My supervisor provides a good model to follow

TL7: My supervisor leads by example

TL8: My supervisor fosters collaboration among work groups

TL9: My supervisor encourages employees to be “team players”

TL10: My supervisor gets the group to work together for the same goal

TL11: My supervisor develops a team attitude and spirit among his/her employees

TL12: My supervisor shows that he/she expects a lot from us

TL13: My supervisor insists on only the best performance

TL14: My supervisor will not settle for second best

TL15: My supervisor acts without considering my feelings

TL16: My supervisor shows respect for my personal feelings

TL17: My supervisor behaves in a manner that is thoughtful of my personal needs

TL18: My supervisor treats me without considering my personal feelings

TL19: My supervisor has provided me with new ways of looking at things which used to puzzle me

TL20: My supervisor has ideas that have forced me to rethink some of my own ideas that I have never questioned before.

TL21: My supervisor has stimulated me to think about old problems in new ways
TL22: My supervisor inspires others with his/her plans for the future

**Authentic Leadership Questionnaire (Neider, & Schriesheim, 2011).**

ALQ1: My leader solicits feedback for improving his/her dealings with others
ALQ2: My leader clearly states what he/she means
ALQ3: My leader shows consistency between his/her beliefs and actions
ALQ4: My leader asks for ideas that challenge his/her core beliefs
ALQ5: My leader describes accurately the way that others view his/her abilities
ALQ6: My leader admits mistakes when they occur
ALQ7: My leader uses his/her core beliefs to make decisions
ALQ8: My leader carefully listens to alternative perspectives before reaching a conclusion
ALQ9: My leader shows that he/she understands his/her strengths and weaknesses
ALQ10: My leader openly shares information with others
ALQ11: My leader resists pressures on him/her to do things contrary to his/her beliefs
ALQ12: My leader objectively analyzes relevant data before making a decision
ALQ13: My leader is clearly aware of the impact he/she has on others
ALQ14: My leader expresses his/her ideas and thoughts clearly to others
ALQ15: My leader is guided in his/her actions by internal moral standards
ALQ16: My leader encourages others to voice opposing points of view.