

How are task reflexivity and intercultural sensitivity related to the academic performance of MBA students?

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Higher Education in business school environments is increasingly focused on how to best equip students with the skills necessary for leadership in the global workplace. This paper examines the impact of two particularly important cognitive capabilities – task reflexivity and intercultural sensitivity, on academic performance in an MBA programme. It was hypothesised that in an intercultural learning environment, task reflexivity would be associated with higher academic performance, and that this relationship would be mediated via intercultural sensitivity. Questionnaire data from 77 MBA students was analysed alongside academic performance. Results demonstrated that task reflexivity was indirectly related to academic performance through intercultural sensitivity. Our findings suggest that engagement in task reflexivity enables students to develop greater levels of intercultural sensitivity, allowing them to reap the positive effects of diversity in their peer group for their own learning and performance. Limitations and practical implications of the research for professional practice are discussed.

Keywords: task reflexivity, intercultural sensitivity; academic performance, business schools, MBA students.

Introduction

The call for business schools worldwide to modify traditional Masters of Business Administration (MBA) curricula is rising (Boyatzis, 2008; Gonin et al., 2011). Today's MBA programmes must not only equip graduates with relevant functional business knowledge, skills and abilities (KSAs), but also facilitate the development of cognitive, metacognitive and interpersonal skills necessary for future business leaders in an increasingly international environment (Yu et al. 2005; Prestwich and Ho-Kim 2007). Research has concluded that a closer integration is needed between the contemporary needs of global businesses and content of MBA curricula, particularly with regards to the competencies of intercultural awareness and sensitivity (Milhauser and Rahschulte 2010). Indeed, the impact of globalisation means that intercultural competencies are imperative for working effectively with individuals from different national, ethnic or racial groups (Trompenaars and Hambden-Turner 2003). In a study of international business (IB) study-abroad programmes, Tuleja (2008) found that graduate students prioritised the need to develop their intercultural competencies and broaden their perspectives through such experiences. Similarly, Prestwich and Ho-Kim (2007) found that IB students were more concerned with developing business competencies such as cultural awareness and leadership, than they were about the specific functional skills relating to IB. Not surprisingly, cultural intelligence has also been shown to be an important predictor of individual effectiveness in the global workplace (Thomas and Inkson 2003). Thus, the rationale for the internationalisation of the curriculum in higher education focuses on preparing graduates to be both internationally knowledgeable as well as interculturally competent (Association of Universities and Colleges of Canada; cited in Knight 1999).

Given that Higher Education (HE) institutions are tasked with providing the raw materials necessary for future organisational leaders, exploring how HE can best prepare its graduates to operate effectively in a new age of global organisations, specifically with regards to the development of intercultural skills, is an issue that needs closer examination. The opportunity for developing such skills is embedded in an education context where an increasing number of international students are reported in business faculties across the world. In Australia, the UK, Canada and the USA for example, 18% of the total student population is made up of international students (IDP Education 2010; Institute of International Education Network 2010). This increasingly international mix of MBA students in particular has been identified as a key challenge for the business schools in the 21st century (Murgatroyd 2012; Turner 2009), especially for those who are teaching in multicultural classrooms (Strauss, 2007). Recent research on postgraduate students demonstrates vividly the challenge of modern MBA teaching and learning due to new dimensions of diversity (Woods et al. 2011). Individuals from diverse cultural backgrounds have differing learning styles, behavioural norms and interaction preferences, meaning that they often find it difficult to collaborate with culturally dissimilar others (van Knippenberg and Schippers 2007). Curricula, teaching means, methods and interventions that might have worked on MBA programmes in the 20th century need re-evaluating in light of the changing composition of the classroom (Boyatzis 2008). Therefore, at the same time as revisiting the content of MBA programmes to ensure topics concerning intercultural competence are addressed, the methods by which such competencies are developed must also be examined.

A key research question for the field of HE is therefore what enables MBA students to be more interculturally competent, and thus profit from their culturally diverse cohort of peers in terms of learning and performance? And in turn, how should

MBA programmes deliver such intercultural skills development (ISD) teaching? Some researchers have questioned whether ISD can be taught via more traditional formal methods (Tuleja 2008), such as weekly lectures and lecturer-led tutorials (Biggs and Tang 2007; Morton 2010), or whether instead such competencies emerge over time via informal learning processes such as immersion and experiential reflection (Chick 1990). Similarly, previous research that has focused on identifying and describing various aspects of ‘internationalisation in HE’ or ‘internationalising the student learning experience’ (for a review see Stone 2006a), has frequently cited concepts such as self-awareness, reflexivity, self-monitoring and cognitive adaptation as important components for developing ISD (e.g. Bennett 1986; Chen 1997; Nagata 2004). However, despite such theoretical and conceptual debates, there has been very little empirical examination of antecedents and consequences of ISD in the context of business school HE. There is a need to operationalise and test such theory in practice (Stone 2006a, 2006b), if we are to challenge traditional teaching, learning and assessment assumptions to focus more attention on the development of such competencies (Montgomery 2009).

In this paper, we draw upon literature from the field of organisational psychology to examine the potential role that the construct of task reflexivity can have in developing a specific cognitive dimension of ISD (intercultural sensitivity) in an intercultural learning environment; and in turn, how intercultural sensitivity might impact individual learning as assessed by academic performance. In doing so, the aim of the present study is to test a mediation model (see Figure 1) of the mechanism through which task reflexivity influences academic performance in the context of a culturally diverse MBA programme.

(Figure 1)

By examining whether task reflexivity enables individuals who are working in a culturally diverse environment to develop intercultural sensitivity, and in turn, attain higher levels of academic performance, we can begin to inform pedagogical understanding about how to develop aspects of ISD in the classroom, and thus help inform future MBA curricula on how to more closely address contemporary business needs.

Defining Reflexivity

Bandura's (1991) social cognitive theory of self-regulation posits that most human behaviour, given that it is purposive, is extensively regulated by the continuous process of self-influence. As human beings, we have the unique capability to reflect on the past and form beliefs about our prospective actions; an ability largely considered as one of our most essential assets (Porath and Bateman 2006). Self-reflective capabilities allow us to exercise a degree of control over our feelings, thoughts and actions, and instigate self-directed change. Through the exercise of forethought and reflection, people can set goals, form expectations about what they can achieve, and motivate themselves to take actions in a proactive anticipatory way (Bandura 1991). Such self-regulatory processes typically exist as 'internal conversations' in one's thought processes (Archer 2007). The notion of reflection is also inherent in many learning theories (e.g. Kolb 1984; Dewey 1989; Mezirow 1994), and its relevance to practice in HE has therefore been discussed by many scholars (e.g. Mälkki and Lindblom-Ylänne 2012)

Over the years, a confusing plethora of definitions of 'reflection' and 'reflexivity' have emerged in the literature. The terms are often used interchangeably in many different contexts and there remains little consensus over how to define and discriminate the two constructs (Holland 1999; Taylor 2007). For example, Moon

defines reflection in generic terms as *'a form of mental processing – like a form of thinking – that we may use to fulfill a purpose or to achieve some anticipated outcome'* (Moon 1999 p. 42). Reflexivity has also broadly been defined as *'the regular exercise of the mental ability, shared by all normal people, to consider themselves in relation to their (social) contexts and vice versa'* (Archer 2007 p.4). Based on these descriptions, it is difficult to disentangle the two constructs. However, a definition of reflexivity proposed by Danielewicz (2001 p.155-156) articulates a more focused conceptualisation, which implies that reflection is an inherent part of reflexivity. Danielewicz describes reflexivity as *'an act of self-conscious consideration that can lead people to a deepened understanding of themselves and others, not in the abstract, but in relation to specific social environments...[and] foster a more profound awareness...of how social contexts influence who people are and how they behave...It involves a person's active analysis of past situations, events, and products, with the inherent goals of critique and revision for the explicit purpose of achieving an understanding that can lead to change in thought or behaviour.'* Similarly, Rennie (2004 p.183) defines reflexivity as *'the ability to think about our thinking and our feeling, to have a feeling about a feeling, to have a desire about a desire, and that this self-awareness flows into action'*. Finally, and most recently, Maclean et al. (2012) view reflexivity as *'the capacity of an actor to construct practical understandings (workable, everyday models) of the location of self within a social system, to act accordingly (strategically and tactically), and to reflect further and refine understandings in response to events and the consequences of actions taken'* (Maclean et al. 2012, p.388).

The conceptualisations above imply that reflexivity is an intentional self-regulatory process which draws upon critical reflection and leads to action. This dual-process approach is consistent with Kolb's model of experiential learning (1984), which

implies that reflection and action are inherently related (also see Mälkki and Lindblom-Ylänne 2012). West (2000) also argues that reflexivity incorporates two underlying processes; reflection and action (also see Wiedow and Konradt 2010). The type of the action that follows reflection is dependent on the transformative learning that occurs through the restructuring of thoughts, meanings and perspectives during the reflection phase of reflexivity (Mezirow 2009). Subsequent action then follows, which could be in the form of revised perspectives, goals, strategies or behaviours, for example.

Further, there are many different types of reflexivity apparent in the literature. These include holistic reflexivity (Bleakley 1999), social reflexivity (West 2000), epistemic reflexivity (Bourdieu 1990), and personal reflexivity (Holland 1999); some of which involve applying the process of reflexivity in a specific realm or context. Given the HE context of the current study, here we focus specifically on *task* reflexivity. West (2000) refers to task reflexivity as the process of consciously reviewing objectives, strategies and processes at work, and making changes to these on the basis of discrepancies between current and anticipated circumstances. The process of reflecting on one's goals and objectives, and monitoring one's progress towards achieving them, facilitates action towards improved performance. Thus, task reflexivity forms the basis for learning and performance in the workplace (West 1996). Previous research examining the construct of task reflexivity in work teams has found that task reflexivity is the single best predictor of team effectiveness. In a longitudinal research study, Carter and West (1998) monitored the performance of 19 BBC TV production teams over a year and found that task reflexivity predicted both team effectiveness and creativity (as measured by audience viewing figures). However, far less empirical research into the task reflexivity-performance link has been conducted at the individual level of analysis, particularly in HE settings such as business schools. Indeed, inherent in Maclean et al.'s

(2012) definition above is the premise that reflexivity has a somewhat strategic tactical element, and could thus be geared towards improving individual learning and performance in the context of HE. Individuals high in task reflexivity will be motivated to reflect on their current ways of working, and in turn, will show a heightened awareness of their personal effectiveness in task-related activities. A key objective of this study was therefore to empirically explore whether task reflexivity has a positive impact on MBA student academic performance. Below we consider this notion in more detail.

Task Reflexivity and Academic Performance

The first aim of this study was to examine whether the degree to which students engage in task reflexivity is associated with their academic performance. Reflexivity is widely accepted as a key tenet for adult learning (Illeris 2007; Kolb 1984; Moon 2004; Zimmerman 2002), and is therefore explicitly captured in a number of learning theories. In Zimmerman's (2002) cyclical model of self-regulated learning, self-reflection is considered as a crucial phase for determining forethought and subsequent performance. During the self-reflection phase, learners must engage in self-evaluation, make causal attributions regarding their current performance, and then react appropriately; taking action to adapt their work strategies or personal goals for example. Similarly in Kolb's (1984) Experiential Learning Cycle, reflective observations of concrete experiences are assimilated into abstract concepts which form the basis for subsequent action.

Task reflexivity is particularly useful in complex work environments as it helps individuals to recognise whether the way in which they are currently working corresponds with emerging challenges and external conditions (Gurtner et al. 2007). Indeed, the context of an MBA programme could be considered a highly demanding task environment, given the rigorous academic requirements. We therefore expect that

task reflexivity will be of particular value for individual learning in this context, which will be reflected in higher academic performance. Individuals who are able to build awareness about their work environment via task reflexivity, and thus gain a deeper understanding about the effectiveness of their work strategies and learning processes whilst studying on their MBA programme are more likely to recognise areas that need attention and development, and implement improvement plans accordingly (Tjosvold et al. 2004). Given that task reflexivity allows one to identify discrepancies between where one is currently performing and where one should be, we expect that those students who report higher levels of task reflexivity mid-way through an MBA module will go on to attain higher academic performance in that module. Conversely, based on the reasoning above, those who report lower levels task reflexivity than their peers are less likely to perform as well.

But how is academic performance defined in the context of HE? Student performance in academic institutions is typically based on how they perform on various forms of summative assessment, including examinations, presentations, and coursework (Race and Page 2001). Given their frequent use as criterion variables, individual grades on these assessments therefore represent a dominant measure of academic performance in existing empirical research (e.g. Kuncel et al. 2005; Poropat 2009; Uppal and Mishra 2013). While grade point average (GPA) or overall attainment at graduation scores are often used as the main outcome measure (e.g. Richardson 1995), attainment on particular assessments, such as midterm examinations, are also commonly treated as measures of higher educational attainment (e.g. Pekrun et al. 2009; Uppal and Mishra 2013). Although concerns have been raised about the reliability and validity of such measures, due to factors such as grade inflation, range restriction, and across-nation comparability (e.g. LeBreton et al. 2003, Soh 2011), student grades remain a useful

measure of academic performance, particularly when the most broadly based grade is taken (Pekrun et al. 2009). In the present study, we therefore took overall performance on a particular MBA module as a proxy measure of academic performance.

Based on the reasoning provided above, we aimed to explore whether task reflexivity was positively associated with the overall grade attained on an MBA module. This leads to the first hypothesis:

Hypothesis 1: *Task reflexivity will be positively related to academic performance.*

The Mediating Role of Intercultural Sensitivity

The second aim of this paper is to examine more closely *how* the relationship between task reflexivity and academic performance manifests in the context of a culturally diverse MBA programme; with the consideration of intercultural sensitivity as a potential mediating mechanism. Indeed, to our knowledge, no empirical research exists that has examined the processes through which task reflexivity impacts academic performance, particularly in education environments characterised by high intercultural diversity. Predicting academic performance in highly intercultural learning contexts such as MBA programmes may not simply be a matter of enhancing individual task reflexivity amongst the learners. Other factors, such as the development of an empathetic standpoint between learners from different cultures, may have an important mediating influence. Therefore the mechanisms through which task reflexivity might influence academic performance warrant further exploration (Bhauk and Brislin 1992.) Indeed, we propose that part of the reason why task reflexivity promotes academic performance on an MBA programme is that it enables individuals to develop greater levels of intercultural sensitivity towards the diverse set of peers they are working alongside. We therefore expect that intercultural sensitivity will mediate the relationship

between task reflexivity and academic performance in such intercultural environments.

Before providing theoretical rationale for this proposition, we firstly define what is meant by intercultural sensitivity and how this can be conceptualised alongside task reflexivity in the context of the present study.

Intercultural sensitivity is a specific cognitive capability (Bennet 1993; Landis and Bhagat 1996) that captures the degree to which an individual takes an active interest in other peoples' cultural backgrounds, perspectives, needs, and how they express themselves (Brinkmann 2001; Van Der Zee and Brinkmann 2004). Intercultural sensitivity has a social orientation, with individuals high in intercultural sensitivity being more able to assimilate their behaviour to norms of a new cultural context. They are also better attuned to the importance of cultural differences, and are more sensitive and empathetic to the perspectives and views held by people from other cultures (Bhawuk and Brislin 1992). Given that intercultural sensitivity is associated with intercultural effectiveness and success (e.g. Arthur and Bennet 1995; Hawkes and Kealey 1981; Ruben 1976), it is an important competence for MBA students to develop. Indeed, Thomas and Inkson (2003) postulate that the culturally intelligent manager needs to be mindful of how their behaviour and actions impact those around them, and pay attention to cues in the cross-cultural situations they encounter. So how does intercultural sensitivity develop?

Bennett's (1993) developmental model of intercultural sensitivity proposes six stages of personal growth relating to how individuals experience cultural differences. The model is comprised of three ethnocentric stages (denial, defence, minimisation), focusing on an individual's cognitive reality of their own culture, followed by three ethnorelative stages (acceptance, adaptation, integration), focusing on how one's own culture is experienced in relation to other cultures; with the end goal of successfully

acquiring an international perspective. Based on the assumptions of Bennett's model, the successful development of intercultural sensitivity lies in building an awareness of one's own culture, recognising cultural patterns, and learning about patterns of differentiation in other cultures. Reflexivity is therefore a prerequisite for the development of intercultural sensitivity, and thus individuals who are low in reflective thinking are unlikely to become more interculturally sensitive when working in a culturally diverse setting. We expect that in order for the intercultural sensitivity to be activated and exercised, individual learners need first to engage in reflection on their task and understand how their objectives, strategies, processes and methods are positioned in relation to others. When exposed to an intercultural task environment, non-reflective individuals are unlikely to see the need to neither adapt or change their task processes to better align them with culturally dissimilar others, nor recognise the learning potential of working more effectively in intercultural groups. Conversely, highly-reflective individuals who have a good awareness of their task environment are more likely to take action to develop intercultural sensitivity; recognising that task performance could be improved through the consideration of alternative cultural perspectives and more effective intercultural interactions. Jokikokko (2009) argues that reflective processes (namely; reflection, critical reflection, and critical self-reflection) are key antecedents of intercultural learning. In the current study, we therefore propose that in a HE task environment comprised of culturally diverse MBA students, the development of intercultural sensitivity is triggered by the process of task reflexivity, and in turn, intercultural sensitivity will be of benefit for student learning (as assessed by academic performance; see figure 2). This proposition will now be discussed in more detail.

(Figure 2)

Firstly, in line with others (see Mezirow 1994; Taylor 1994) we propose that task reflexivity will directly facilitate the transformative learning necessary for intercultural sensitivity to develop. As has already been outlined (see hypothesis 1), task reflexivity improves individual awareness of their task-related goals, work methods and strategies. Such individuals are likely to show a heightened concern towards improving and adapting task processes, thus prompting them to actively observe and engage with their peer group to seek new ideas and viable alternatives for more effective work strategies. Culturally diverse peer groups, which are increasingly present in today's globalised MBA programmes, offer particularly rich pools of unique resources, thus providing a prime environment for transformative intercultural learning to occur (van Knippenberg and Schippers 2007). Through exposure to such cultural diversity, highly reflective individuals are more likely to build awareness about unique cultural tendencies, as well as how their own task approaches and techniques differ from members of other cultural groups; and will thus become more attuned to the alternative work-related approaches and values of their diverse peer group. Indeed, Jokikokko (2009) posits that the influence of other people is pivotal for intercultural learning to occur, and thus task reflexivity needs to be exercised in an intercultural environment in order for intercultural sensitivity to develop.

By reflecting on task-related interactions in their culturally diverse peer group, we posit that individuals high on task reflexivity are more likely to take action orientated towards developing intercultural sensitivity to improve these interactions; thus modifying their behaviour to take a more active interest in other peoples' cultural backgrounds, perspectives, needs, and work approaches. Therefore, in order for intercultural sensitivity to emerge, the individual in question needs to have adopted a reflective mind frame in order to understand how, how well, and how differently a task

or assignment may develop as a result of more effective interaction with peers from other cultures. In line with previous research (e.g. Bennett 1993; Jokikokko 2009, Mezirow 1994; Taylor 1994), we thus propose that in an intercultural task environment, task reflexivity is a prerequisite for the development of intercultural sensitivity.

In turn, we expect intercultural sensitivity to be positively related to academic performance via improvements in work-related processes in a complex intercultural task environment. Intercultural sensitivity enables individuals to empathise with culturally different peers, more accurately interpret verbal and non-verbal behaviour, and understand others' needs and perspectives. It also improves an individual's social interactions with culturally different peers, reducing ethnocentrism, and enhancing positive interpersonal processes such as cooperation, trust and information sharing. Individuals high on intercultural sensitivity are therefore more likely to work effectively in multicultural groups, allowing them to access the wider pool of KSAs present in a diverse student cohort and gain new knowledge and novel perspectives. They are also more likely to encourage participation and information elaboration from minority group members, thus helping to uncover previously hidden information from within the diverse cohort (Phillips et al. 2006). As a result, we expect such individuals to experience higher levels of learning, as reflected in their academic attainment. Taken together, the theoretical arguments proposed above lead to our second hypothesis;

Hypothesis 2: In an intercultural learning environment, intercultural sensitivity mediates the positive relationship between task reflexivity and academic performance.

Method

Research Setting

To test our hypotheses, we used a cross-sectional research design to collect self-report questionnaire data from MBA students and correlate this with academic performance. Questionnaire data were collected between October and January 2011 from a cohort of MBA students based at a university in the United Kingdom (UK), in which more than 90% of the students were from outside of the UK, thus representing a broad range of nationalities and cultural backgrounds. As we expect the hypothesised relationships to unfold in an intercultural task environment, it was important to select a sample with high levels of cultural diversity and a context in which students were required to work closely together. As is outlined below, the design of the MBA module at hand involved regular intercultural group activities and therefore provided an opportune work environment for individuals high in task reflexivity to potentially develop and exercise intercultural sensitivity through their interactions with culturally dissimilar co-learners.

Participants and Procedure

The students were participating in a ten week module on the topic of organisational behaviour, which in part required them to work intensively in small intercultural groups. The teaching and learning approach adopted on this module followed traditional methods that are prevalent in HE and favoured by university administrators (Biggs and Tang 2007; Morton 2010). Namely these included a series of nine weekly lectures (incorporating class discussions and short activities), each of which was followed by a tutorial requiring students to engage in group activities overseen by the lecturer. Students were randomly allocated into small intercultural groups (four or five members) by programme administrators at the outset of the module, and had to work together to produce a 3000 word group assignment which contributed 40% towards their final module mark. The remaining 60% of the module was assessed

via a closed-book examination. Overall, the teaching and learning approach was closely aligned with the pedagogical culture of the wider institution, and students experienced similar teaching and learning methods in other modules on the MBA programme. Indeed, we checked how students were performing in their studies more generally, and a paired samples t-test demonstrated that there was no significant difference in student performance on the module at hand ($M = 67.05$, $SD = 6.09$), compared to another module that ran concurrently ($M = 65.07$, $SD = 15.03$); $t(73) = 1.25$, $p = 0.22$. The assessment methods on this module were therefore typical of the overall MBA programme providing the context of the study.

The students were invited to complete a questionnaire at the mid-point of the module. Of the 116 students invited, 77 (66.3%) returned usable questionnaires. The average participant was 30 years old ($SD 5.58$), and 71% of the sample was male.

Measures

All questionnaire measures were based on existing scales from the organisational psychology literature, and were adapted where necessary to reflect the HE context.

Task reflexivity was measured using an eight-item scale adapted from Swift and West (1998). Responses were measured on a 5-point Likert scale (1 = *definitely false*, to 5 = *definitely true*). Respondents were asked to think about the items in relation to their work whilst on the MBA programme. In keeping with the dual-process perspective on task reflexivity, scale items captured aspects of both reflection and action (see Appendix I). The scale demonstrated satisfactory internal consistency ($\alpha = .81$).

Intercultural sensitivity was measured using a ten-item scale from the Intercultural Readiness Check (IRC; Brinkmann 2001). Based on existing data from more than 13,000 respondents, the IRC is a valid and reliable questionnaire that assesses

various intercultural competences, including intercultural sensitivity ($\alpha = .82$). Items tapped into the degree to which an individual tends to question the values and norms of their own culture, takes an active interest in others, their cultural background, needs and perspectives, and pays attention to nonverbal signals or emotions behind other people's words (see Appendix I).

Finally, a measure of academic performance was based on the overall grade of each participant at the end of the ten week MBA module in organisational behaviour. Performance data were obtained in January 2012, and were based on a composite percentage score of each participant's marks on the examination and group assignment. The group assignment was completed in week seven, and the examination in week ten. Thus, the academic performance measure used in this study reflected summative assessment at two time points. This has been deemed preferable over using grades from just one assessment point (Bloxham and Boyd 2007; Pekrun et al. 2009) due to concerns relating to grade inflation, disrupted rank ordering, non-normal distribution, and range restriction (see LeBreton et al. 2003; Soh 2011). Both elements of assessment were designed to assess a student's deep level learning and critical understanding of the module topics (Gibbs 1992; Marton and Säljö 1976). The marking criteria that were used to grade the work were explained in advance and were aligned with the intended learning outcomes of the module, which incorporated enacting verbs such as 'explain', 'apply' and 'critically analyse' (Biggs and Tang 2007; Biggs 2012). Constructive alignment was also ensured through encouraging students to actively participate in critical discussions during the lectures (Biggs 2012). Further, mock examination papers were discussed throughout the module, enabling students to write practice answers and receive formative feedback from both peers and the lecturers. The module leader also prepared model answers to each examination question, which were aligned with the

marking criteria and used to assess the papers against the intended learning outcomes (Biggs 2012).

The group assignment required students' to jointly produce a report examining approaches to work motivation, in which they needed to apply motivation theory to a specific job, propose practical changes to improve motivation, and critically evaluate these changes. The closed-book examination comprised two parts; a case study analysis (50%), and two short essay questions from a choice of six (25% each). In both the examination and group assignment, students were required to demonstrate relevant discussion, analysis and critical evaluation that were theoretically driven using a range of theories, concepts and empirical evidence from the module. Further, through the use of a group contribution form (which was signed by all group members), institutional assessment policies allowed for individual marks on the group assignment to be adjusted according to individual contribution. All work was blind-marked meaning that it was not possible for assessors to identify individual student's work. Further, 20% was second-marked and an external examiner from outside the institution moderated and approved a random sample of work to ensure fairness and consistency. Finally, an examination board was held at the end of the semester to approve each student's academic performance on the module.

Results

The data were analysed using a series of hierarchical and mediated regressions in PASW Version 18 using PROCESS (Hayes 2012). Descriptive statistics and a Pearson's correlation matrix are reported in table 1.

(Table 1)

To test hypothesis 1, we used hierarchical regression to establish whether there was a positive association between task reflexivity and academic performance. In considering control variables, preliminary data analysis revealed that neither sex nor age was significantly related to any of variables of interest. Given the small sample size, these control variables were excluded from further analysis in order to conserve statistical power (Stewart and Barrick 2000). Results of the hierarchical regression demonstrated that task reflexivity was not directly related to academic performance ($\beta = .71, p = .35$ *ns*), and therefore hypothesis 1 was rejected.

Hypotheses 2 was examined using mediation regression analysis, whereby the ultimate aim was to establish whether task reflexivity influences academic performance through its effect on intercultural sensitivity. The causal steps approach to mediation regression analysis (Baron and Kenny 1986; Kenny, Kashy and Bolger 1998; Sobel 1982) would suggest that because there is no relationship between X (task reflexivity) and Y (academic performance) in hypotheses 1, indirect effects (M ; intercultural sensitivity) should not be explored. However, while this popular conventional approach has been widely applied over the years, an increasingly body of literature has called a number of its assumptions into question, arguing that the focus on the significance between X and Y is unjustified and can actually impair theory development and testing, particularly with small samples (for further reading see Fritz and MacKinnon 2007; Rucker et al. 2011; Shrout and Bolger 2002). Indeed, developments in statistical theory have provided alternative approaches to testing mediation using bootstrap methods (Efron and Tibshirani 1993), thus making it possible for X to be indirectly related to Y through M (Hayes 2009). Bootstrapping is increasingly advocated as the preferred method for testing indirect effects in simple mediation models (Preacher and Hayes 2004, 2008). Unlike the causal steps approach, it does not require large sample sizes,

nor does it assume normal distribution of mediation effects (Cheung and Lau 2008; MacKinnon et al. 2002). It is therefore now commonplace for researchers to pursue the examination of indirect effects in the absence of significant direct effects that would have been required by the casual steps approach (Cerin and MacKinnon 2009; Shrout and Bolger 2002; Zhao, Lynch and Chen, 2010). Thus, to test for the significance of the mediation effect specified in hypothesis 2, we used the bias-corrected (BC) bootstrap method recommended by Preacher and Hayes (2008) to analyse whether intercultural sensitivity fully mediated the relationship between task reflexivity and academic performance.

A bootstrap analysis revealed that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero ($CI = 0.26, 2.69$), which indicated a significant indirect effect of intercultural sensitivity on the relationship between task reflexivity and academic performance (MacKinnon et al. 2002; Preacher and Hayes 2004). In other words, in the intercultural task environment of the current study, the relationship between task reflexivity and academic performance of MBA students was fully mediated by their levels of intercultural sensitivity (see Figure 3). Hypothesis 2 was therefore accepted.

(Figure 3)

Discussion

This study focused on examining the relationship between task reflexivity and academic performance in an intercultural learning environment, specifically in relation to the mediating effect of intercultural sensitivity. The findings demonstrated that intercultural sensitivity fully mediated this relationship, meaning that task reflexivity and academic performance were indirectly related through intercultural sensitivity.

However, counter to expectations, no direct relationship was found between task reflexivity and academic performance. In the following section, we discuss these findings in relation to the existing literature, before considering the study limitations, a future research agenda and the practical implications for MBA programmes.

The main finding from this study was that in an intercultural learning environment, intercultural sensitivity fully mediated the relationship between task reflexivity and MBA student academic performance. As was discussed earlier in this paper, task reflexivity is likely to be particularly beneficial in more culturally diverse work contexts such as MBA programmes, as this intercultural exposure enables individuals to cognitively reflect upon and explore the different perspectives, viewpoints and working styles evident in task-related interactions. Given their heightened awareness of their work context, individuals high in task reflexivity will be particularly effective in observing culturally dissimilar peers and recognising how cultural differences influence task-related processes. Thus they are more likely to take action to better cooperate with their peer group by exercising intercultural sensitivity. In turn, intercultural sensitivity enables these students to capitalise on the additional resources and KSAs that their intercultural peer group offers (van Knippenberg and Schippers 2007), thus benefiting their individual learning and subsequent academic attainment. These findings concur with existing theorising that posits reflexive capabilities as a prerequisite for developing intercultural competence (e.g. Bennett 1986; Jokikokko 2009; Mezirow 1994; Nagata 2006; Taylor 1994) which in turn, is a key predictor of both individual effectiveness (Thomas and Inkson 2003) and group performance (Matveev and Milter 2004). Our findings therefore begin to inform the question of *how* the relationship between task reflexivity and academic performance manifests in the context of a culturally diverse MBA programme, thus bringing together

discussions of reflexivity and intercultural learning, which until now have to some extent remained incongruent.

Surprisingly, task reflexivity did not directly predict academic performance in this study. Although the relationship was in the expected direction, this finding was possibly due to the nature of the academic performance outcome measure, which did not directly incorporate criteria relating to reflection. Further, given that questionnaire data was collected during the first semester, before the students had received any feedback from summative assessments on the programme, topics of task reflexivity will have been limited to the work they had carried out during the first few weeks of study. One might therefore speculate that the direct relationship between task reflexivity and performance could become more pronounced later on in the MBA programme. Finally, recent research at the team level suggests that the relationship between task reflexivity and outcomes can depend on the specific nature of the task environment (Schipper West and Dawson 2013). Some research has also found curvilinear relationships between task reflexivity and innovation; whereby under certain conditions, too much or too little reflexivity can be detrimental to performance (e.g. Schippers, Rook, and van de Velde 2010). Therefore, the nature of the direct relationship between task reflexivity and academic performance is not clear cut and further research with larger samples is needed to explore how this might be contingent on different approaches to assessment and alternative measures of performance in HE (Soh 2011).

Based on our findings, we propose that there is a need to revisit existing methods of learning and development in MBA programmes, and make both task reflexivity and intercultural sensitivity a more inherent and formalised part of the learning experience. Langer (1997) argues that traditional methods of learning can produce 'mindless' behaviour because they tend to suggest that there is only one answer

to a problem or a single correct way to tackle a task. However, the increasing multicultural composition of modern day business schools means that learning and teaching methodologies need to adapt in order to harvest the positive impact of cultural diversity amongst students (Boyatzis 2008). Teaching practitioners should be aware that the ability to engage in higher-order metacognitive processes such as task reflexivity enables students to work with and learn from culturally dissimilar peers more effectively. It should not simply be assumed that delivering HE in a multicultural setting will be sufficient to produce positive learning and performance outcomes. More needs to be done to develop task reflexivity and intercultural sensitivity from the outset of an MBA programme and the assumption that such cognitive capabilities are too difficult to develop and assess needs to be challenged (Stone 2006a, 2006b). The question therefore to ask is how can task reflexivity be purposefully embedded into MBA curricula to facilitate the development of intercultural sensitivity?

A predominant approach to design curricula for the cognitive development of learners in any education setting is Bloom's taxonomy of intellectual behaviour (Bloom 1956), which suggests that students can achieve higher order thinking and learning by progressively moving from lower to higher levels of cognitive skill. Task reflexivity is characterised by a learner's ability to synthesise, analyse and evaluate information about the task context around them, not only from their own perspective but also from the perspective of their peers. In other words, it is important for students to exercise and enhance task reflexivity in order to relate their own personal understanding of concepts, theories and norms to the wider task environment that exists in their intercultural classroom. However, it is not immediately apparent how Bloom's taxonomy can be applied to *create* such a transformational learning experience. The revised Bloom's Taxonomy (see Anderson et al. 2000) added an extra layer to the taxonomy, that of

‘creating’, to meet the needs of modern societies for creativity. However, the idea of progressively developing adult learners in a linear and prescribed way is still very much a ‘traditional’ notion of learning, in the sense that learners do not really think about the ways they learn in their own context; either their learning preferences, the cultural context in which they study or the context in which they will apply their knowledge. We need to start thinking of the metacognitive domain as much as we think of the cognitive, in order to allow students become truly self-directed learners. Task reflexivity, we suggest, is just one of the ways we could achieve such higher order thinking abilities. Based on our findings, we therefore suggest that programmes like MBAs need to carefully consider how to embed higher order thinking skills in their curricula and in particular how to enable learners to capitalise on the rich intercultural experiences of the peer group through exercising intercultural sensitivity.

An example of how to achieve this can be based on the context of the current study, in which MBA students were required to work in small intercultural groups to produce a group assignment on the topic of organisational behaviour. Successful assignments were those in which group members could reconcile their culturally divergent thinking, knowledge and experiences, and work together interdependently to produce a coherent and comprehensive academic report. However, some groups experienced difficulties in reaching a shared consensus over how to address problems and tasks. In the learning design, one could structure activities to purposely facilitate task reflexivity aimed at building intercultural sensitivity amongst team members, such as reflective logs that invite self-directed, experiential learning (e.g. Krajewski 2011; Turner 2009). Further, when assessing group members’ different understandings of the team task, learners could be encouraged to question *why* group members hold different understandings and *how* this could be explained by aspects concerning cultural

diversity. Similarly, at the evaluating stage, culturally diverse groups could be prompted to examine *how else* information could be evaluated; again encouraging team members to explicitly recognise their different ideas and incompatible perspectives and reach an agreement on a solution to a problem – a process referred to as ‘constructive controversy’ (Johnson and Johnson 1979). Thus, the content of task reflexivity becomes explicitly focused on the intercultural interactions between the learners and how these impact work-related processes and outcomes. By gaining new knowledge and experiences through task reflexivity that is overtly embedded in the learning design, learners can build self-awareness about work processes and how these are influenced by their own culture, which in turn will enable the development of intercultural sensitivity (Bennett 1993). As discussed, such capabilities are of critical importance in the increasingly globalised workplace, particularly in leadership roles which require managers to operate effectively across cultural boundaries.

Limitations and Future Research

There are a number of limitations to this study that should be acknowledged, along with many avenues for future research. Firstly, the validity of the measures of task reflexivity and intercultural sensitivity should be further scrutinised in the specific context of HE, given that they originate from the field of organisational psychology and have therefore been developed in the context of business. The fact that all of the MBA students who participated in the study had previous business-related work experience before entering the programme somewhat alleviated this concern. However, further validation is necessary. Similarly, to our knowledge, this is the first quantitative attempt to operationalise the construct of individual task reflexivity, and the measures available to us were limited. Indeed, the task reflexivity scale was adapted from an existing team-level measure (Carter and West 1998), and therefore its application at the individual

level should be further scrutinised. The relatively small sample size in the current study also limited the statistical power of the data analysis and restricted us from conducting an accurate confirmatory factor analysis on the variables of interest. Therefore, larger samples in future research will help to provide construct validation for the application of these constructs in the context of HE.

We propose that future research should begin by testing the theoretical model presented here with samples of students across different MBA programmes using a longitudinal research design. Indeed, in the current study data were only collected from one MBA programme, and the unique aspects of this particular programme and assessment approach may partly explain the results. Programmes incorporating more contemporary forms of assessment (e.g. reflective logbooks, critical incident essays, collaborative blogs) should be considered, as one might expect the relationship between task reflexivity and academic performance to be stronger under such conditions. Overall, larger and more diverse samples will not only enhance statistical power but will also provide clearer evidence for the validity and causality of the relationships between the variables explored here.

Given that reflexivity is often considered as a western individualistic construct (Alvesson and Sköldbberg 2000), it could also be argued that national and/or cultural background may have an influence on a student's predisposition towards task reflexivity. Future research could therefore examine antecedents of task reflexivity using Hofstede's (1991) Framework of Assessing Cultures, which posits that individuals who identify themselves as being from individualistic cultures (e.g. Western Europe, United States) are more focused on individual achievement, whereas those who identify themselves as being from collectivistic cultures (e.g. India, China) have a greater concern for the success of their wider work group. Cultural background could

therefore be examined as a potential antecedent of task reflexivity in order to better understand how individual metacognitions and task-related interactions may vary as a function of culture. Other types of reflexivity, such social reflexivity (West 2000) or personal reflexivity (Holland 1999), might also be explored in conjunction with task reflexivity as a means of examining discriminant and incremental validity and establishing a clearer conceptual roadmap for reflexivity researchers.

Further, in examining the impact of task reflexivity and intercultural sensitivity, different outcome measures could be considered, beyond academic performance, such as creativity, participation and student engagement for example, since these, as well, can be essential capabilities regarding future work performance¹. Qualitative research methods could also be employed to gather observational data allowing for a deeper examination of the intricate mechanisms underlying the task reflexivity – intercultural sensitivity relationship; looking more closely at student behaviour, intercultural interactions and group processes. This could include more objective measures of task reflexivity, by qualitatively coding behaviours in student meetings or analysing extracts in reflective diaries for example; rather than relying solely on self-reported survey responses that may be prone to response bias. Finally, given that academic performance has been shown to be an important predictor of subsequent job performance (Kuncel et al. 2004; Poropat 2009), future research could consider whether task reflexivity and intercultural sensitivity are related to performance of MBA alumni in the workplace.

Conclusion

¹ We thank one of the anonymous reviewers for this suggestion

To conclude, this paper has provided new insight into the role that task reflexivity plays in the development of intercultural sensitivity, which in turn can impact academic performance in the intercultural learning context of an MBA programme. It is suggested that task reflexivity has the potential to enable intercultural sensitivity, and as a result, facilitate dialogue and thinking which crosses cultural boundaries and provides a more enriched learning environment. In order to properly embed the development of such metacognitive capabilities into MBA curricula and other business school programmes, there is a need for the integration of appropriate learning designs that effectively promote both cognitive and metacognitive skills in ways that do not distract from academic learning, but rather support it.

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Table 1. Means, standard deviations and correlation matrix for latent variables

	Mean	SD	1	2	3
1. Task reflexivity	3.68	.46			
2. Intercultural sensitivity	5.26	1.80	.33*		
3. Academic performance	67.0	6.09	.12	.33*	

Note: * $p < 0.05$; ** $p < 0.01$.

Figure 1. Mediation of the relationship between task reflexivity and academic performance by intercultural sensitivity

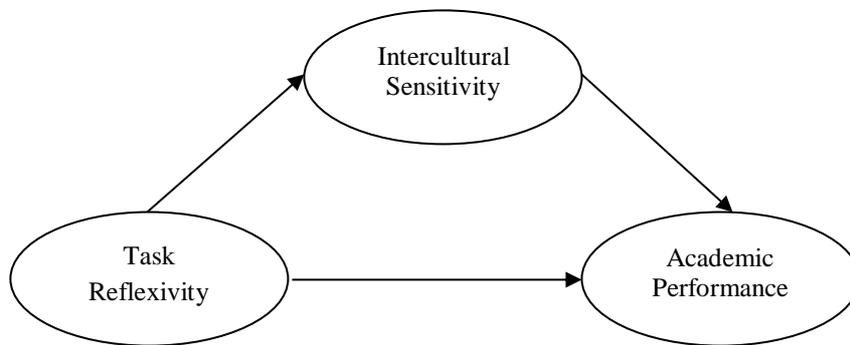


Figure 2. Conceptual reasoning for the mediated relationship between task reflexivity and academic performance by intercultural sensitivity

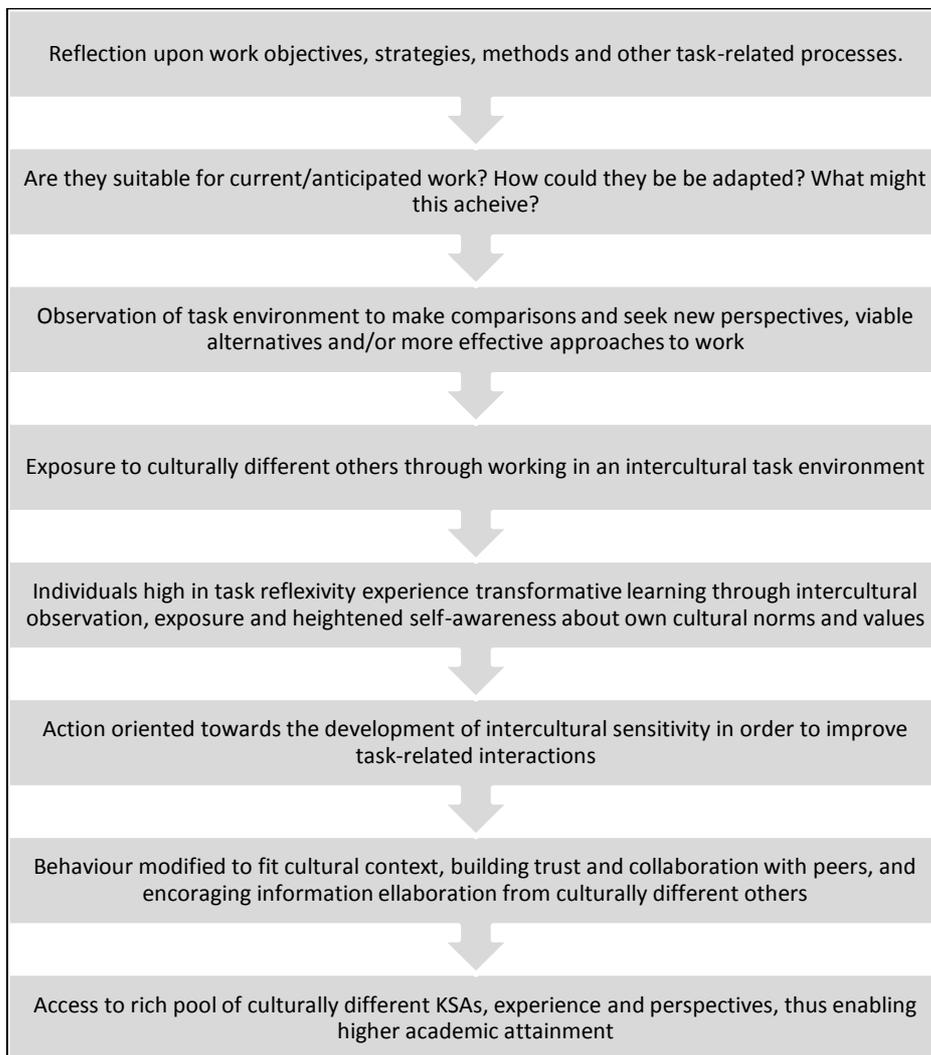
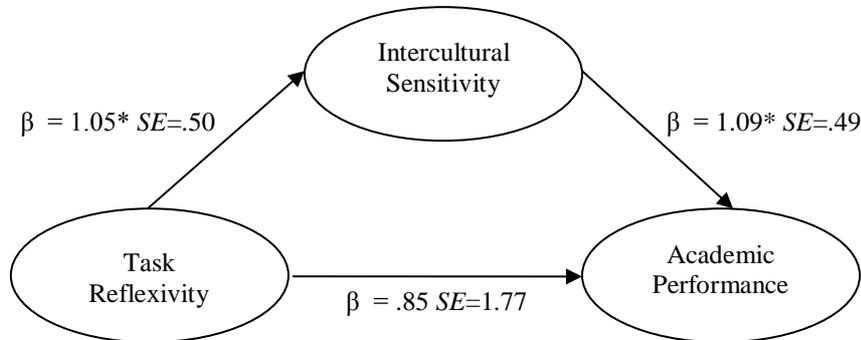


Figure 3. Results of the mediated relationship between task reflexivity and academic performance by intercultural sensitivity



Note: Path values represent unstandardised regression coefficients. * $p < 0.05$; ** $p < 0.01$.

Appendix I. Questionnaire Measures

Task Reflexivity

Please rate the extent to which the following statements are true (1 = definitely false; 5 = definitely true)

While working on this module in the MBA programme...

I often review my work objectives (*reflection*)

I often reflect upon whether I am working effectively (*reflection*)

I often review the methods I use to get the job done (*reflection*)

I modify my work objectives in the light of changing circumstances at work (*action*)

I rarely change my work strategies (*action*) (R)

I often review how well I communicate information with colleagues on work-related issues (*reflection*)

I often review my approach to getting the job done (*reflection*)

I rarely change the methods and information I use to make decisions at work (*action*)

(R)

R = Reverse scored item

Source: Adapted from Carter, S.M., and M.A. West. 1998. Reflexivity, effectiveness and mental health in BBC-TV Production Teams. *Small Group Research* 5: 583-601.

Intercultural Sensitivity (example items from the 10-item scale)

To what extent do the following statements apply to you? (1 = totally not; 5 = completely)

...tends to question the norms and values of own culture

...considers different interpretations on an event

...picks up the emotional signals behind people's words

...looks for signs of inattention in listeners

...tends to examine own values

Source: Brinkmann, U. 2001. The intercultural readiness check. Laren, *The Netherlands: Internal Publication*, Intercultural Business Improvement.