



Investigating the value of a peer-to-peer mentoring experience

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ABSTRACT

Globalization of business skills has become critical as employers have a requirement for culturally adaptable marketing and business graduates who are “work ready” in either Australia or overseas. These students must have both discipline knowledge and soft skills including cultural competence. How students develop intercultural skills at university is discussed. Given that more than ninety percent of local university students do not participate in academic offshore experiences, a focus is on the internationalization-at-home activities that universities offer. This study looks at cross-cultural peer-to-peer mentoring. A paucity of research on the effect of these experiences further enhances the relevance of this topic. This research investigates whether Australian marketing and business students who undertake a cross-cultural peer-to-peer mentoring experience “at home” become more cross-culturally adaptable. A quasi experimental pre and post-test survey shows that this method of an “at home” cross-cultural experience has a significant effect on four of the cultural dimensions. They are Flexibility/Openness, Personal Autonomy, Perceptual Acuity and Fulfilment. This means that as a result of this study, the recommendation for future peer-to-peer mentoring experiences would be to specifically target these significant dimensions as part of the peer-to-peer mentoring agenda. The focus of their agenda on these dimensions would allow peer-to-peer mentors of different ethnicities and those mentors who are Australian born but who mentor students from different countries, to be confident that their work was directly attributable to increasing their mentees’ and their own cross-cultural adaptability. It shows that cross-cultural mentoring for marketing and other business students in an “at home” setting is an important part of preparing business and more specifically marketing students for the challenges of the global workplace.

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CHINESE ABSTRACT

由于雇主们需要那些在澳大拉西亚或海外均能“适应就业”的文化适应型毕业生，商业技能的全球化变得至关重要。本文讨论了学生如何通过参与交流、游学和实习等海外体验来培养跨文化技能。考虑到百分之九十以上的学生未参与这些国外体验，研究把重点放在大学提供的国内国际化活动，特别是跨文化的点对点指导。针对这些体验效果的少量研究进一步增强了这一主题的重要性。本研究调查了在国内进行跨文化指导体验的澳大利亚学生是否提高了跨文化适应能力。一项准实验性的测试之前和之后调查显示，这种“国内”方式的国际化体验可能不会对进行跨文化点对点指导体验的学生产生显著效果。市场营销部门和商学院通过该研究得出的主要经验包括：其如何定位自己以便在培养“适应就业”的学生方面保持竞争力，尤其是那些没有国际化体验的学生是否展现出跨文化技能，以及确定可能影响学生跨文化适应能力的“国内”的国际化体验。

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1. Introduction

Marketing graduates today are facing a demanding workplace where both discipline knowledge, soft skills and cultural competence (McArthur et al., 2017; Delpechitre and Baker, 2017;

Deloitte Access Economics: Soft skills for Business Success, 2017) are expected as part of the work ready tool kit. In this global and competitive economy, graduates need to exhibit core competencies such as digital marketing capabilities and technical skills such as data analysis and interpretation, technological capability, strategic and integrative thinking, a global perspective and an ethical, socially responsible outlook (Finch et al., 2016). In addition, the demand for key soft skills has increased including creative problem solving, cross-cultural communication and collaboration (Delpechitre and Baker 2017), flexibility, adaptability to change,

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self-awareness and self-management, and the ability to work in culturally diverse teams (Cooper et al., 2010; McArthur et al., 2017). Hunter (2004) agrees with these graduate competencies especially the need for them to possess global competence, which Hunter (2004, p. 79) defines as “having an open mind while actively seeking to understand cultural norms and expectations of others, leveraging this gained knowledge to interact, communicate and work effectively outside one’s environment”. More recently, Delpechitre and Baker (2017) defined cultural intelligence as the “ability to function and manage customer relationships in culturally diverse settings” identifying the need for graduates to be competent in a range of customer exchange and cultural settings.

In response to the globalisation of the business environment, universities must continually adapt and evolve to meet the demands of employers that graduates have more than just discipline specific skills by the time they join the workforce (Pefanis Schlee and Harich 2010; Greenacre et al., 2017). Businesses need employees who can work successfully across national boundaries, and across cultural regions and groups (Busteed 2015a; Finch et al., 2016; McMurray et al., 2016; Delpechitre and Baker 2017), so it is imperative that universities increase the relevance of higher education to employment (Dua, 2013; McMahan, Watson and Patton, 2014; Busteed, 2015a and b). Even if these students never work abroad, most will work in an increasingly multicultural domestic environment (Ismail et al., 2006) and will likely work for organisations with global or multicultural stakeholders, be they customers, suppliers, or co-workers. Employers will therefore be looking for employees who are capable of high levels of human interactions across cultural boundaries in responding to the needs of these stakeholders (Carnevale, 2008). The student of the future must be able to understand and communicate effectively with people of various cultural and national backgrounds (Hofstede, 1984). Therefore, the need for students to possess intercultural competence is essential to meet the demands of the business world (Yu, 2012).

Unfortunately, several studies reported that the business community is generally dissatisfied with the job that universities are doing in teaching these skills to graduates (McMurray et al., 2016). Busteed (2015b) reported findings of a survey conducted by Gallup and the World Innovation Summit for Educators that 1550 education experts from 149 countries expressed their dissatisfaction with the job that higher education institutions around the world were doing in educating students and preparing them for the global workforce.

To address these needs many universities are internationalising and globalising their curriculum (Knight, 2004; Scharoun, 2016; Castro et al., 2016). Excluding international academic mobility, efforts to internationalise the curriculum have included promoting national political and economic competitiveness, preserving languages and cultural heritages and facilitating critical and comparative thinking for life in a multicultural environment (Yershova et al., 2000, p. 67). Internationalisation is defined as “any systematic sustained effort aimed at making higher education more responsive to the requirements and challenges related to the globalisation of societies, economy and labour markets” (Kalvermark and van der Wende (1997, p. 19). Knight (2004, p.11) more specifically states that this process entails “integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education”.

In 2016 there were 1.3 million students enrolled in higher education in Australia, 520,000 of these were international students from 193 countries. (Australian Universities, 2018). There were 780,000 Australian students in higher education (Universities Australia, 2018). Of these only 30,000 (4%) of Australian students. Given only around 3% (<https://www.universitiesaustralia.edu.au/Media-and-Events/media-releases/More-Australian-students-see->

[the-value-of-study-abroad#.WxN7E0iFO](#) Universities Australia, 2018) of students enrol in a study abroad program such as exchange in another country for a semester or year, short term study tour or an intensive international internship, this study poses the research question: how do the more than 90% of Australian students who do not have an off-shore experience gain these cross-cultural skills that employers are looking for? The challenge for higher education is to connect inter-cultural learning and future careers for their students. This project aims to add to the literature on cross-cultural effects of a Peer-to-Peer (P2P) mentoring experience in a domestic/at home situation. This study will also enable universities to understand the effects of the cross-cultural interaction.

2. Marketing student employability

In a recent study of job advertisements for marketing graduate roles, the skills and knowledge required by employers and expected of graduates included digital marketing, project management, general marketing capabilities, and a range of relationship, interaction or sales capabilities (McArthur et al., 2017). In addition, soft skills in demand included communication skills on all platforms and media, and interpersonal skills, combined with personal attributes such as motivation, time management and a can-do attitude (McArthur et al., 2017). Where marketing roles require well developed relationship management, interaction and sales capabilities, we see increased demand for cultural intelligence (Delpichtre and Baker, 2017). However, there is a strain between a curriculum that educates students and a curriculum that develops students who are educated and also job ready (Dua, 2013). Gow and McDonald (2000) identified four factors that contributed to employability. Cross cultural competence was seen as critical in order for future graduates to be able to take part in an increasingly globalised workforce (Gow and McDonald, 2000; Stier, 2009). The other factors identified by Gow and McDonald (2000) as connected to future employability are data management and analysis, problem solving, communication and an entrepreneurial spirit.

To take a step back from employability at the graduate level, we also need to examine how we can develop capabilities at the student level. Not all students will have access to the international mobility programs that have been identified as a major factor in developing cross cultural or intercultural capabilities (Clarke et al., 2009; Potts, 2015). Building learning and experiential opportunities into the university experience has been suggested as ways of developing relevant attributes and capabilities for students (Kurpis and Hunter 2016) as a precursor to employability.

Although there has been research on the development of cultural competence and employability skills, particularly through study abroad or exchange opportunities (Clarke et al., 2009), there is less research on the different ways intercultural capabilities can be developed for less mobile students. The research into the impact of study abroad on cross-cultural capabilities suggests that interaction with others from different cultures may be beneficial (Clarke et al., 2009; Potts, 2015). Preparing marketing students for the challenges of the global workforce should be at the forefront of curriculum in all business education (Glenn, 2002). Today’s global workers should be aware of their cultural adaptability. They should be given sound instruction on these cross-cultural elements to be well equipped to interact and work in a culturally diverse workforce (Ferrel and Hirt, 2000; McPherson and Szul, 2008).

2.1. Cultural adaptability

The concept of culture is not new and has been examined in both the management and marketing literature (Hofstede, 1991;

Samaha et al., 2014). Culture can be defined as the 'collective programming of the mind which distinguishes the members of one group from those of another (Hofstede et al., 2010) which are exhibited as enduring personality characteristics that are normalised or standardised across the group (Inkeles and Levinson, 1969) and appear as norms of behaviour in art, morals, laws, customs and traditions (Ghemawat, 2007). More importantly for this study is cultural adaptability, and our ability to function effectively, relying on our skills in responding to the expectations around us. Resonating with increased interest in future graduate employability, Brislin and Yoshida (1994) argue that culture can be defined as any framework of expectations, and cultural adaptability is our ability to function effectively in an environment using our skill in recognising and responding appropriately to the values and expectations of those around us. Kim (1991, p. 268) takes this one step further and contends that cultural adaptability is "the individual's capacity to suspend or modify some of the old cultural ways, to learn and accommodate some of the new cultural ways, and to creatively find ways to manage the dynamics of cultural difference/unfamiliarity, intergroup posture, and the accompanying stress".

The acquisition of cross-cultural adaptability is part of the skills set of 'work readiness' for the global business world (Kelley and Meyers, 1995; Kim, 2005; Deardorff, 2009; Clifford and Montgomery, 2011; Finch et al., 2016). Much of the previous research has been in the cultural adaptability of the business manager, which is of interest in this study on business students. In this role the manager needs to be able to work effectively with many different colleagues, especially when working globally (Clark and Matze, 1999). Sison et al. (2012) state that there is evidence that the skills that employers seek in current graduates may result in these students being more open to new cultures and may also be more successful in future expatriate experiences.

2.2. University Interventions "at home" to increase students' intercultural skills

How do universities design interventions to help students develop their intercultural skills, knowledge and awareness through experiences situated in local contexts, often known as 'internationalisation at home' (Paige, 2003; Kimmel and Volet, 2012). Common internationalisation-at-home activities include program components in foreign languages, the incorporation of international issues in the curriculum and participation in international projects.

One of the strengths of Australian higher education is the diversity of the student population. This diversity provides the potential for students to interact with peers from different cultural and linguistic backgrounds. The challenge for universities and academics is how to harness the potential for total student interaction (Arkoudis et al., 2010). Ping (1999) (as cited in Soria et al., 2014) noted that on-campus interactions can provide encounters with students from different cultures and when these contacts reflect genuine human interaction they hold the potential to prepare students to engage in cross-cultural environments, which is exactly what universities are engaged to do. Interacting with international onshore students, the study of foreign languages, working in cross-cultural groups, having cross-cultural friends or family, cross-cultural friends or family, and cross-cultural peer-to-peer mentoring all contribute to the development of cross-cultural adaptability (Kimmel and Volet, 2012; Soria et al., 2014; Woods et al., 2013; Caligiuri and Tarique, 2012).

2.3. The Cross Cultural Adaptability Inventory (CCAI)

Instruments used since the 1980s assessed knowledge, skills, abilities and communication as part of developing intercultural

competence, but most of these were used on managers, expatriates and trainers. Looking into the cross-cultural adaptability literature it was found that it was grounded in the military, missionaries, diplomatic corps and the international business community (e.g. Kelley and Meyers, 1987). These people needed to adapt to whatever situation to which they were exposed. As these studies were done in the international business community, instruments that had previously been used were adapted and used in this new context.

The Cross-Cultural Adaptability Inventory (CCAI) is a 50 item test which was created by Kelley and Meyers (1987, 1995, 2003) in consultation with trainers, teachers, consultants and specialists. It is readily available online. It was designed and used solely as a self-selection measure for personal use. As it is available online, this is beneficial due to the cost, ease of use and administration (Rosenbusch, 2014). It measures emotional resilience, flexibility/openness, perceptual acuity and personal autonomy.

The CCAI was not developed to predict success or failure in cross-cultural interactions rather it measures individual potential for cross-cultural adaptability and therefore their readiness to adapt to working in companies with diverse employees, working in a different country or to working across countries, regions or globally as required (Kitsantas and Meyers, 2001; Kitsantas, 2004; Williams, 2005; Rosenbusch, 2014). Respondents will know their cross-cultural adaptability and be more self-aware (Kelley and Meyers, 1995).

The key concept of cross-cultural adaptability is based on a review of theoretical and research literature completed by Kelley and Meyers over time with regular updates (for example Kelley and Meyers, 1987, 1995, 2003) and measures four personality characteristics: *Emotional Resilience*, *Flexibility/Openness*, *Perceptual Acuity*, and *Personal Autonomy*.

The *Emotional Resilience* subscale assesses the degree to which a person can self-regulate his or her emotions, maintain emotional equilibrium amidst a new or changing environment, rebound from and deal constructively with the negative feelings which are a normal part of the cross-cultural experience.

The *Flexibility/Openness* subscale measures the extent to which people are open to different ways of thinking and interacting with diverse situations which are usually a part of the cross-cultural experience. In this construct, preparedness to learn from things and people different from oneself is likely to result in a change in flexibility/openness.

The third subscale, *Perceptual Acuity*, assesses the extent to which a person is attentive to, and accurately perceives verbal and nonverbal communication in interpersonal relationships with people from different cultures.

The last subscale, *Personal Autonomy*, measures the extent to which people make their own final decisions. This person has evolved a personal system of values and beliefs which he or she feels comfortable and confident enough to act on amidst diversity. In this construct personal identity and confidence in one's own values and beliefs result in a change in personal autonomy.

The CCAI has been used extensively in previous studies. For example, a study by Alon and Higgins (2005) used it as an instrument that showed some promise in predicting the ability of the test taker to adapt to different cultural settings and interact with people from other cultures. Another study used the CCAI to test one component of CQ (Cultural Intelligence), which was found to be related positively to cultural adaptation, an equivalent of Motivational CQ. The people with high Motivational CQ might expect to be successful in culturally diverse situations (Ang et al., 2007). A final study to discuss here, as there are so many more, was the one by Hoffman and Bateson (1997), that found that although the CCAI offered considerable relevance concerning expatriate success, Hoffman believed that the CCAI is too global for training purposes,

and sees the four scales to be more important for predicting adjustment.

2.4. Peer to peer mentoring

“Managers who are able to develop the necessary skills in their employees through effective coaching and mentoring are highly valued by an organisation” (Stone 2007, p. 1). Mullen (1994) as cited in Wanberg et al. (2003, p. 39) defines mentoring as: “a one-on-one relationship between a less experienced (protégé/mentee) and a more experienced person (mentor), and is prototypically intended to advance the personal and professional growth of the less experienced individual”.

Just like mentoring, P2P mentoring is defined as the type of mentorship which normally takes place between a person who has lived through a specific experience (the peer mentor) and a person who is new to such experience (the peer protégé/mentee) (Hall and Jaugietis, 2011).

In the field of higher education, P2P mentoring is used extensively for several reasons including:

- a. Advantages or benefits that are credited to traditional mentoring as discussed above. These could translate to P2P mentoring relationships, mostly when the peer mentor and mentee belonged to the same culture.
- b. The absence or lack of academic volunteers or university administrators, as well as the higher availability of student leaders to use as P2P mentors, normally first or second year students, from diverse cultures, to support, guide and instruct younger students.
- c. As programs of P2P mentoring require a low budget to administer or to develop, they have become a cheap alternative to support the students who are perceived as likely to withdraw or fail (Hall and Jaugietis, 2011).

To date, there have been numerous studies on the effects of P2P mentoring in higher education settings since their inception in the 1700s (for example Materniak, 1984 as cited in Colvin and Ashman, 2010; Jacobi, 1991; Noe, 1988; Allen et al., 1997, 1999; Kemlo, 2010; Santos and Reigadas, 2002; Wanberg et al., 2003; Sanchez et al., 2006; Hall and Jaugietis, 2011; Thomas, 2012; Chester et al., 2013; Deakin University, 2010; Freeman and Kelton, 2004; Leung and Bush, 2003; Macquarie University, 2010; Monash University, 2009; University of British Columbia, 2010; University of Melbourne, 2010; Gershenfeld, 2014).

P2P mentoring can also help new students to adapt to a new academic environment faster. The link between the mentee and the mentor tends to offer the mentee or protégé a sense of being connected to the larger community where they might feel otherwise lost (Thomas, 2012).

Several researchers have recognised that P2P mentoring helps with student adjustment (Santos and Reigadas, 2002; Sanchez et al., 2006), however few programs have addressed the dual goals of improving intercultural interactions and facilitating the transition to university. Both of these studies used ethnically matched peer mentoring, which made it difficult to determine whether it was the ethnic matching or the mentoring or some combination that mentees found useful. It is important to explore the effects of non-ethnically matched mentoring on the development of cross-cultural development (Woods et al., 2013).

P2P mentoring has been introduced into many Australian universities (e.g. Monash University, 2009; RMIT University, 2010), and internationally, (e.g. University of British Columbia, 2010). Universities have had much success for transitioning first year students, as well as academic mentoring for struggling students, and these situations have been regularly researched (RMIT, 2010; Kemlo, 2010).

All mentees involved, local and international have resulted in increased engagement with the university community. Additionally, both the mentors and the mentees have consistently displayed enhanced motivation and the desire to achieve with their educational programs (Kemlo, 2010).

Some research has been completed on this type of mentoring, however, it is clear from Tan and Yates (2011, p. 389) that many Asian students consider attending such places, or asking for such help as “loss of face” and therefore they do not willingly ask for help. For these international, mostly Asian students, they do not attend these sessions, and consequently, their results suffer, often from poor English skills (Tan and Yates, 2011). Australian students who attend and get help from older academic mentors who have already completed that course achieved higher results for their assessment pieces than if they did not attend (Astin, 2012). This mentoring experience takes place between students from different cultures, and this opportunity to develop some additional cross-cultural competencies in either the mentor or the mentee is possible but not extensively researched.

Cross cultural P2P mentoring includes intentional, ongoing, as well as mutually inspiring associations with someone who has a different ethnicity, race, gender, socioeconomic background, nationality or sexual orientation. A mentor who works across cultures guides the personal and intellectual development of the protégé/mentee over time (Arkoudis et al., 2010; Caligiuri and Tarique, 2012). The relationship of P2P mentoring in cross cultural environments is developed on the basis of virtues, values and vision. The determination of values which are held common, even across different cultures, tends to lead to the growth of understanding and trust between the mentee and the mentor. This previous research in educational settings has found that it may not be necessary that mentors come from similar social or cultural backgrounds as their protégés/mentees. However, they should take into consideration the implications of the differences between them. Because of the presence of complexity in cross-cultural mentoring relationships, the solution is that mentors also require certain abilities or attributes, involving selflessness, active listening skills, non-judgmental attitude, honesty, patience, persistence, and appreciation for diversity of protégés/mentees (Crutcher, 2007).

Woods et al. (2013) conducted a study in which they examined the effectiveness of mentoring on a temporary basis in developing cross-cultural friendships between learners at one of the universities in Australia. The results of this study found that the mentoring program has enhanced the cross-cultural interactions for protégés/mentees. Current research reports that it is extremely successful when it does occur (Bova, 2000; Johnson-Bailey et al., 2004; Packard et al., 2004; Ragins and Scandura, 1997; Budge, 2014).

There is some research on international students' experience of peer-to-peer mentoring schemes, with most studies researching a single country mentoring scheme and those with a Western education and values system, even though the students might have different countries of origin (Kram, 1983; Noe, 1988; Jacobi, 1989; Allen et al., 1997, 1999, 2004; Dreher and Ash, 1990; Scandura, 1998; Heilmann, 2012; Leong, 2007; Woods et al., 2013; Arkoudis et al., 2010; Caligiuri and Tarique, 2012; Mosey et al., 2012).

Although mentoring has been linked to benefits across a variety of settings (Kram, 1983; Heilmann, 2012) there is a need to study cross-race mentoring relationships in order to understand any unique attributes of these relationships and to enhance the generalisability of comparative analysis. As this diversity and lack of interaction is a feature of most business faculties in universities together with the rapid global expansion of education, there is the potential to create groups of disadvantaged students because of the lack of understanding of cross-cultural impacts (Mosey et al., 2012).

This project will investigate the cross-cultural effects of a peer-to-peer mentoring experience in a domestic/at home situation, using a quasi-experimental design to determine if mentoring and specifically cross cultural mentoring has any impact.

3. Research design and analysis

3.1. Research design

To develop an effective research design and to measure the manipulation effects on students cross-cultural adaptability, a quasi-experimental study was chosen to be conducted during the 2017, to test the effects of the experimental manipulations, a within subjects pre and post-test. Participants in this study were not randomly assigned so most likely there are other differences between conditions.

The population of interest for this study consisted of both SLAMs mentors and students from courses that were traditionally users of the SLAMs service. These courses were: Macro Economics, Micro Economics, Business Statistics, Basic Econometrics, Financial Markets, Business Finance, Marketing Research and Business to Business marketing. The total cohort for semester 1, 2017 consisted of approximately 203 mentors from a possible population of 4269 students.

3.2. Data collection

To measure the effects of the cross-cultural peer-to-peer mentoring experience on the respondents' cultural adaptability, the first survey was distributed in week 4 of the semester. This timing was chosen for two reasons. Firstly it was the first week that the SLAMs mentors were available for mentoring sessions after their invitation to join the SLAMs service (achievement of Distinction or High Distinction previously in the course in which they were to be mentors) and complete their training. The second reason was that by week 4, students in the other courses were approaching their first assessment piece/s and were starting to think about asking for help from the SLAMs mentors. Also, week 4 was after the census date thus limiting the likelihood that students would unenrol from the courses mentioned. The second survey was conducted in the final week of the semester (week 12), when mentoring from SLAMs students was finished so the effect of any cross cultural peer-to-peer mentoring could be captured in the data.

In semester 1, 2017, a total of 4269 surveys were distributed online in week 4, and 607 responses were received. The same 607 previous respondents received the survey in week 12 and 243 useable responses were received. Group One, $n = 122$ consisted of students who did NOT have a cross-cultural P2P mentoring experience (50.2%) and Group Two, $n = 121$ consisted of students who DID have a cross-cultural P2P mentoring experience (49.8%).

3.3. EFA

The 50 items of the Cross Cultural Adaptability Inventory were subjected to principal components analysis (PCA) using SPSS version 24 to explore any underlying factors associated with the CCAI for a sample of 243 undergraduate students who had undertaken a peer-to-peer mentoring experience at a major university in Australia. Prior to performing PCA, the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of 0.3 and above. The Kaiser–Meyer–Olkin value was 0.857, exceeding the recommended value of 0.6 (Kaiser, 1970, 1974) and Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix.

Principal components analysis revealed the presence of five components with eigenvalues exceeding 1, explaining 22.4, 8.9, 5.1, 4.4, and 3.5 of the variance, respectively. An inspection of the scree plot revealed a clear break after the fifth component. Using Catell's (1966) scree test, it was decided to retain the five components for further analysis. This was further supported by the corresponding criterion results of Parallel Analysis (Watkins, 2000) which showed only five components with eigenvalues exceeding the corresponding criterion values for a randomly generated data matrix of the same sample size (50 variables \times 243 respondents). Listwise deletion of cases was used with missing values (Zhao and Gallant, 2012). By running a separate analysis for each component to establish a single eigenvalue greater than one, convergent validity was verified. A five-factor solution for the CCAI cultural questions was extracted, explaining 44.4 per cent of the variances in the variables. The internal consistencies of the subscales were assessed with the use of Cronbach's α for each of the five components (0.80, 0.84, 0.66, 0.60 and 0.71). Only two factors exceeded the 0.70 criteria (Nunnally and Bernstein, 1994). To aid in the interpretation of these five components, oblimin rotation was performed. The rotated solution revealed the presence of simple structure (Thurstone, 1947), with all five components showing a number of strong loadings.

3.4. Analysis

A paired-samples t -test was conducted to compare whether there is an increase in the Emotional Resilience dimension. There was no significant difference in the scores for this question. In the pre-test ($M = 2.64$, $SD = 1.19$) and in the post test ($M = 2.60$, $SD = 1.17$) conditions; $t(243) = 0.66$, $p = 0.51$ (two-tailed). Specifically these results suggest that there is no significant difference in the Emotional Resilience dimension as a result of the P2P mentoring experience.

A paired-samples t -test was conducted to compare whether there is an increase in the Flexibility Openness dimension. There was a significant difference in the scores for this dimension. In the pre-test ($M = 2.88$, $SD = 1.32$) and in the post test ($M = 3.12$, $SD = 1.2$) conditions; $t(243) = -1.83$, $p = 0.004$ Specifically these results suggest that there is an increase in the Flexibility Openness dimension as a result of the P2P mentoring experience, and this result is significant.

A paired-samples t -test was conducted to compare whether there is an increase in the Personal Autonomy dimension. There was a significant difference in the scores for this dimension. In the pre-test ($M = 1.98$, $SD = 0.92$) and in the post test ($M = 2.07$, $SD = 0.98$) conditions; $t(243) = -1.220$, $p = 0.22$. Specifically these results suggest that there is no increase in the Personal Autonomy dimension as a result of the P2P mentoring experience, and this result is not significant.

A paired-samples t -test was conducted to compare whether there is an increase in the Perceptual Acuity dimension. There was a significant difference in the scores for this dimension. In the pre-test ($M = 3.01$, $SD = 1.1$) and in the post test ($M = 2.83$, $SD = 1.1$) conditions; $t(243) = 2.17$, $p = 0.03$. Specifically these results suggest that there is an increase in the Personal Autonomy dimension as a result of the P2P mentoring experience and these results are significant.

A paired-samples t -test was conducted to compare whether there is an increase in the Fulfilment dimension. There was a significant difference in the scores for this dimension. In the pre-test ($M = 5.61$, $SD = 0.82$) and in the post test ($M = 5.49$, $SD = 0.82$) conditions; $t(243) = 2.1$, $p = 0.04$. Specifically these results suggest that there is an increase in the Fulfilment dimension as a result of the p2p mentoring experience and these results are significant.

In summary, the Flexibility Openness, Personal Autonomy, Perceptual Acuity and Fulfilment dimensions were found to be significant. Emotional Resilience was found to be not significant. This means that as a result of this study, the recommendation for future P2P mentoring experiences for marketing and other business students, would be to specifically target these significant dimensions as part of the P2P mentoring agenda. The focus of their agenda on these dimensions would allow P2P mentors of different ethnicities and those mentors who are Australian born but who mentor students from different countries, to be confident that their work was directly attributable to increasing their mentees' and their own cross-cultural adaptability. More specifically, the willingness to learn from people and situations perceived as other or outside previous experience would appear to be a critical factor for marketing graduates seeking to understand and communicate with new markets and demonstrate cultural sensitivity in marketing activities (Quek and Ling, 2013). This would be supported by a graduates' ability to understand verbal and non-verbal cues in international communications and demonstrate the ability to apply these capabilities in their career.

In addition, the P2P mentoring service managers can understand that their service is an integral part of the solution to the emphasis on globally competent, adaptable and work ready graduates. It shows that cross-cultural mentoring in an "at home" setting is an important part of the future global readiness of graduates. Therefore more resources should be given to the P2P mentoring services and more mentors who are of different ethnicities should be encouraged to join and participate. There is also a wonderful resource in major global universities of international students entering the university system. They could be an exceptional source of future mentors. In addition, these international students can be encouraged to use this P2P mentoring service.

For marketing students who have participated, they will be able to show their future employers that in addition to their discipline specific skills for example: digital marketing, general marketing and project management and on top of their soft skills for example communication, interpersonal skills and personal attributes (McArthur et al. 2017) they can demonstrate to their future employers that this cross-cultural P2P mentoring experience has changed their Flexibility Openness, Personal Autonomy, Perceptual Acuity and Fulfilment as part of their cross-cultural adaptability. These graduates can indeed be confident that they have developed the skills to adapt to a globalised work environment.

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Supplementary materials

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References

- Allen, T.D., Poteet, M.L., Burroughs, S.M., 1997. The mentor's perspective: A qualitative inquiry and future research agenda. *Journal of Vocational Behavior* 51 (1), 70–89.
- Allen, T.D., Poteet, M.L., 1999. Developing effective mentoring relationships: Strategies from the mentor's viewpoint. *The Career Development Quarterly* 48 (1), 59–73.
- Allen, T.D., Eby, L.T., Poteet, M.L., Lentz, E., Lima, L., 2004. Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of applied psychology* 89 (1), 127.
- Alon, I., Higgins, J.M., 2005. Global leadership success through emotional and cultural intelligences. *Business Horizons* 48, 501–512.
- Ang, S., Van Dyne, L., Koh, C., Ng, K.Y., Templer, K.J., 2007. Cultural Intelligence: Its measurement and effects on cultural judgement and decision making, cultural adaptation, and task performance. *Management and Organization Review* 33, 335–371.
- Arkoudis, S., Yu, X., Baik, C., Chang, S., Lang, I., Watty, K., Borland, H., Pearce, A., Lang, J., 2010. Finding common ground: Enhancing interaction between domestic and international students – *Guide for academics*. Australian Learning and Teaching Council.
- Astin, A.W., 2012. *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. Rowman & Littlefield Publishers.
- BARTLETT, M., 1954. Significance test for sphericity of a normal n-variate distribution. *Journal of the Royal Statistical Society* 16, 296–298.
- Bova, B., 2000. Mentoring revisited: The black woman's experience. *Mentoring and Tutoring* 8 (1), 5–16.
- Brislin, R.W., Yoshida, T., 1994. *Improving intercultural interactions. Multicultural aspects of counseling series*. Sage, Thousand Oaks, CA.
- Budge, K., 2014. Finding Pockets of Agency. In: *Being "In and Out"*, pp. 69–78. Sense Publishers, Thurstone, L. L. (1947). The calibration of test items. *American Psychologist*, 2 (3), 103. Rotterdam.
- Busteed, B., 2015a. The magical elements of college linked to long-term success in work and life. *About Campus* 19 (6), 2–8.
- Busteed, B. (2015b). Is college worth it? That depends. Retrieved from <http://www.gallup.com/opinion/gallup/2015/04/college-worth-it-2015.html> accessed April 26 2017.
- Caligiuri, P., Tarique, I., 2012. Dynamic cross-cultural competencies and global leadership effectiveness. *Journal of World Business* 47 (4), 612–622.
- Carnevale, A.P., 2008. College for all? *Change: The magazine of higher learning* 40 (1), 22–31.
- Castro, P., Woodin, J., Lundgren, U., Byram, M., 2016. Student mobility and internationalisation in higher education: perspectives from practitioners. *Language and Intercultural Communication* 16 (3), 418–436.
- Chester, A., Burton, L.J., Xenos, S., Elgar, K., 2013. Peer mentoring: Supporting successful transition for first year undergraduate psychology students. *Australian Journal of Psychology* 65 (1), 30–37.
- Clark, B. D., & Matze, M. G. (1999). A core of global competence: Relational competence.
- Clarke (III), I., Flaherty, T.B., Wright, N.D., McMillan, R.M., 2009. Student Intercultural Proficiency From Study Abroad Programs. *Journal of Marketing Education* 31 (2), 173–181.
- Clifford, V., & Montgomery, C., (2011). *Research in internationalisation of the curriculum for global citizenship: where do we stand? Moving towards Internationalisation of the Curriculum for Global Citizenship in Higher Education*. Oxford Centre for Staff and Learning Development (OCSLD), Oxford. ISBN 978-187357681.
- Colvin, J.V., Ashman, M., 2010. Roles, Risks, and Benefits of Peer Mentoring Relationships in Higher Education. *Mentoring & Tutoring: Partnership in Learning* 18 (2), 121–134. doi:10.1080/13611261003678879.
- Cooper, L., Orrell, J., Bowden, M., 2010. *Work integrated learning: A guide to effective practice*. Routledge.
- Crutcher, B.N., 2007. Mentoring across cultures. *ACADEME-BULLETIN OF THE AAUP* 93 (4), 44.
- Deakin University. (2010). *Handbook for peer mentors: Peer mentoring program 2010*. Geelong: Author. Retrieved from <http://www.deakin.edu.au/hmnbs/Peer-Mentoring-Handbook202010.pdf>
- Deardorff, D.K (Ed.), 2009. *The SAGE Handbook of Intercultural Competence*. Sage, Thousand Oaks, CA.
- Deloitte Access Economics. *Soft Skills for Business Success*. May 2017.
- Delpichtre, D., Baker, D.S., 2017. Cross-Cultural Selling: Examining the Importance of Cultural Intelligence in Sales Education. *Journal Marketing Education* 39 (2), 94–108.
- Dreher, G.F., Ash, R.A., 1990. A comparative study of mentoring among men and women in managerial, professional, and technical positions. *Journal of applied psychology* 75 (5), 539.
- Dua, A. (2013). *Voice of the graduate*. McKinsey and Company. Retrieved from <http://mckinseysociety.com/voice-of-the-graduate/> accessed April 26 2017.
- Ferrel, O.C., Hirt, G., 2000. *Business: A changing world*. Tata McGraw-Hill Education.
- Finch, D.J., Peacock, M., Levallet, N., Foster, W., 2016. A dynamic capabilities view of employability: Exploring the drivers of competitive advantage for university graduates. *Education & Training* 58 (1).
- Freeman, M., & Kelton, J. (2004). Peer mentoring programs: Enhancing the learning experience in economics & business. *Synergy*, 20. Retrieved from <http://www.itl.ustd.edu.au/synergy/article.cfm?articleID=35>.
- Gershenfeld, S., 2014. A review of undergraduate mentoring programs. *Review of Educational Research* 84 (3), 365–391.
- Ghemawat, P., 2007. *Redefining global strategy: Crossing borders in a world where differences still matter*. Harvard Business Press.
- Glenn, J.M.L., 2002. *Beyond Our Doorstep: Preparing Students for an International Business Environment*. In *Business Education Forum* 56 (3), 9–12.
- Gow, K., McDonald, P., 2000. Attributes required of graduates for the future workplace. *Journal of Vocational Education and Training* 52 (3), 373–396.
- Greenacre, L., Freeman, L., Jaskari, M., Cadwallader, S., 2017. Editors' Corner: The "Work-Ready" Marketing Graduate. *Journal Marketing Education* 39 (2), 67–68.
- Hall, R., Jaugietis, Z., 2011. Developing peer mentoring through evaluation. *Innovative Higher Education* 36 (1), 41–52.
- Heilmann, S.G., 2012. A Measurement invariance study of a mentoring scale: Does protégé race matter. *Journal of Business and Behavioral Sciences* 24 (3), 4.
- Hoffman, K.D., Bateson, J.E.G., 1997. *Essentials of service marketing*. Dryden Press, Orlando, FL.

- Hofstede, G., 1984. Cultural dimensions in management and planning. *Asia Pacific journal of management* 1 (2), 81–99.
- Hofstede, G., 1991. *Cultures and organizations. Intercultural cooperation and its importance for survival. Software of the mind*. McGraw-Hill, London.
- Hofstede, G., Minkov, M., 2010. Long-versus short-term orientation: new perspectives. *Asia Pacific business review* 16 (4), 493–504.
- Hunter, W. (2004). *Knowledge, skills, attitudes and experiences necessary to become globally competent*. Unpublished dissertation, Lehigh University, Bethlehem, Pennsylvania.
- Inkeles, A., Levinson, D.J., 1969. National character: The study of modal personality and sociocultural systems. *The Handbook of Social Psychology* 4, 418–506.
- Ismail, B., Morgan, M., Hayes, K., 2006. Effect of short study abroad course on student openness to diversity. *Journal of Food Science Education* 5 (1), 15–18.
- Jacobi, M., 1991. Mentoring and undergraduate academic success: A literature review. *Journal of educational research* 61 (4), 505–532.
- Johnson Bailey, J., Cervero, R.M., 2004. Mentoring in black and white: the intricacies of cross-cultural mentoring. *Mentoring & Tutoring: Partnership in Learning* 12 (1), 7–21.
- Kaiser, H.F., 1970. A second generation little jiffy. *Psychometrika* 35 (4), 401–415.
- Kaiser, M.O., 1974. Kaiser-Meyer-Olkin measure for identity correlation matrix. *Journal of the Royal Statistical Society, 52.Royal Statistical Society* 16, 296–298.
- Kalvermark, T., van der Wende, M., 1997. National policies for internationalisation of higher education in Europe. *Hogskolverket Studies* 8S, 259–271.
- Kelley, C., Meyers, J., 1987. *Manual for CCAI-Cross-Cultural Adaptability Inventory*. Vangent, Arlington, VA.
- Kelley, C., Meyers, J., 1995. *Cross-cultural Adaptability Inventory Manual*. Vangent, Arlington, VA.
- Kelley, C., Meyers, J., 2003. *CCAI Sample Report*. Vangent Inc., Chicago.
- Kemlo, L., 2010. "STUDENTS HELPING STUDENTS TO ACHIEVE". THIS UNIQUE STUDENT LEARNING ADVISER MENTORS (SLAMS) PROGRAM PROVIDES FIRST YEAR HIGHER EDUCATION STUDENTS WITH A STRONG FOUNDATION SUPPORTING ACADEMIC SUCCESS. ICERI2010 Proceedings 4036–4044.
- Kim, Y.Y., 2005. Adapting to a new culture: An integrative communication theory. In: Gudykunst, W.B. (Ed.), *Theorizing about intercultural communication*. Sage, Thousand Oaks, CA, pp. 375–400.
- Kim, Y., 1991. "Intercultural communication competence: A systems-theoretic view. In: Ting-Toomey, S., Korzeny, F. (Eds.), *Cross-cultural interpersonal communication*. Sage Publications, Newbury Park, pp. 259–275.
- Kitsantas, A., Meyers, J., 2001. Studying Abroad: Does It Enhance College Student Cross-Cultural Awareness. *Education in Europe. Hogskolverket Studies* 8S, 259–271.
- Kitsantas, A., 2004. STUDYING ABROAD: THE ROLE OF COLLEGE STUDENTS' GOALS ON THE DEVELOPMENT OF CROSS-CULTURAL SKILLS AND GLOBAL UNDERSTANDING. *College Student Journal* 38 (3).
- Kurpis, L.H., Hunter, J., 2016. Developing Students' Cultural Intelligence through an Experiential Learning Activity. A Cross-Cultural Consumer Behaviour Interview. *Journal of Marketing Education*, 39, pp. 30–46 First Published June 22, 2016.
- Kimmel, K., Volet, S., 2012. University students' perceptions of and attitudes toward culturally diverse group work: Does context matter. *Journal of Studies in International Education* 16 (2), 157–181.
- Knight, J., 2004. Internationalisation remodeled: Definition, approaches, and rationales. *Journal of Studies in International Education* 8, 5–31.
- Kram, K., 1983. Phases of the Mentor Relationship. *Academy of Management Journal* 26 (4), 608–625.
- Leung, M.L., Bush, T., 2003. Student mentoring in higher education: Hong Kong Baptist University. *Mentoring & Tutoring: Partnership in Learning* 11, 271–286. doi:10.1080/1361126032000138319.
- Materniak, G., 1984. Student paraprofessionals in the learning skills center. *New Directions for Student Services* 1984 (27), 23–35.
- Macquarie University. (2010). Finding someone to help ... mentors in arts. Retrieved from http://www.arts.mq.edu.au/the_faculty/news_and_events/news/finding_someone_to_helpmentor_in_arts.
- McArthur, E., Kubacki, K., Pang, P., Alcaraz, C., 2017. The Employers' View of Work Ready Graduates: A Study of Advertisements for Marketing Jobs In Australia. *Journal of Marketing Education* 39 (2), 82–93.
- McMahon, M., Watson, M., Patton, W., 2014. Context-resonant systems perspectives in career theory. In: *Handbook of career development*. Springer, New York, NY, pp. 29–41.
- McMurray, S., Dutton, M., McQuaid, R., Richard, A., 2016. Employer demands from business graduates. *Education & Training* 58 (1), 112–132.
- McPherson, B., Szul, L.F., 2008. Business students must have cultural adaptability. *Journal of Organizational Culture, Communications and Conflict* 12 (2), 39.
- Monash University. (2009). *Peer mentor program*. Retrieved from <http://www.monash.edu.au/health-wellbeing/get-involved/peer-mentor-program.html>.
- Mosey, S., Wright, M., Clarysse, B., 2012. Transforming traditional university structures for the knowledge economy through multidisciplinary institutes. *Cambridge Journal of Economics* 36 (3), 587–607.
- Mullen, E.J., 1994. Framing the mentoring relationship as an information exchange. *Human Resource Management Review* 4, 257–281.
- Noe, R.A., 1988. An investigation of the determinants of successful assigned mentoring relationships. *Personnel psychology* 41 (3), 457–479.
- Packard, B.W.L., Walsh, L., Seidenberg, S., 2004. Will that be one mentor or two? A cross-sectional study of women's mentoring during college. *Mentoring & Tutoring: Partnership in Learning* 12 (1), 71–85.
- Paige, R.M., 2003. The American case: The University of Minnesota. *Journal of Studies in International Education* 7 (1), 52–63.
- Pefanis Schlee, R., Harich, K.R., 2010. Knowledge and skill requirements for marketing jobs in the 21st century. *Journal of Marketing Education* 32 (3), 341–352.
- Ping, C.J., 1999. An expanded international role for student affairs. *New Directions for Student Services* 86, 13–21.
- Potts, D., 2015. Understanding the early career benefits of learning abroad programs. *Journal of Studies in International Education* 19 (5), 441–459.
- Quek, G.C., Ling, P., 2013. McDonald's apology over a pig toy: A cultural territorial clash. *Australasian Marketing Journal (AMJ)* 21 (4), 228–233.
- Ragins, B.R., Scandura, T.A., 1997. The way we were: Gender and the termination of mentoring relationships. *Journal of Applied Psychology* 82 (6), 945–953.
- RMIT University (2010). *Mentors assisting the transition experience (MATE)*. Retrieved from <http://www.rmit.edu.au/browse;ID=meu9mja9iy8r1>.
- Rosenbusch, K. H., 2014. Integrated approach to building intercultural competence. *Learning and Performance Quarterly* 2 (3).
- Sanchez, R.J., Bauer, T.N., Paronto, M.E., 2006. Peer-mentoring freshmen: Implications for satisfaction, commitment, and retention to graduation. *Academy of Management Learning & Education* 5 (1), 25–37.
- Samaha, S.A., Beck, J.T., Palmatier, R.W., 2014. The role of culture in international relationship marketing. *Journal of Marketing* 78 (5), 78–98.
- Santos, S.J., Reigadas, E.T., 2002. Latinos in higher education: An evaluation of a university faculty mentoring program. *Journal of Hispanic Higher Education* 1 (1), 40–50.
- Scandura, T.A., 1998. Dysfunctional mentoring relationships and outcomes. *Journal of management* 24 (3), 449–467.
- Scharoun, L., 2016. Short-term study tours as a driver for increasing domestic student mobility in order to generate global work-ready students and cultural exchange in Asia-Pacific. *Perspectives in International Higher Education* 20 (2–3), 83–89.
- Sison, M., Brennan, L., 2012. Students as global citizens: strategies for mobilizing student abroad. *Journal of Marketing for Higher Education* 22 (2), 167–181.
- Soria, K.M., Triosi, J., 2014. Internationalization at home alternatives to study abroad: implications for students' development of global, international and intercultural competencies. *Journal of Studies in International Education* 18 (3), 1–11.
- Stier, J., 2009. Internationalisation, intercultural communication and intercultural competence. *Journal of intercultural communication* 11, 1–11.
- Stone, F.M., 2007. Coaching, counseling & mentoring: How to choose & use the right technique to boost employee performance. AMACOM Div American Mgmt Assn.
- Tan, J.B., Yates, S., 2011. Academic expectations as sources of stress in Asian students. *Social Psychology of Education* 14 (3), 389–407.
- Thomas, L., 2012. Building student engagement and belonging in Higher Education at a time of change. Paul Hamlyn Foundation 100.
- Thurstone, L. L. (1947). *Multiple factor analysis: A development and expansion of vectors of the mind*. Chicago: University of Chicago.
- Universities Australia (2018) <https://www.universitiesaustralia.edu.au/ArticleDocuments/169/Datasnapshot2018web.pdf.aspx>.
- University of British Columbia. (2010). *International peer program*. Retrieved from <http://www.students.ubc.ca/international/get-involved/international-peer-program/>.
- University of Melbourne (2010). *International student services: The University of Melbourne*. Retrieved from <http://www.services.unimelb.edu.au/international/February18th2018>.
- Wanberg, C.R., Welsh, E.T., Hezlett, S.A., 2003. Mentoring research: A review and dynamic process model. *Research in personnel and human resources management* 22, 39–124.
- Williams, T.R., 2005. Exploring the impact of study abroad on students' intercultural communication skills: Adaptability and sensitivity. *Journal of studies in international education* 9 (4), 356–371.
- Watkins, M.W., 2000. Monte Carlo PCA for parallel analysis [computer software]. State College, PA: Ed & Psych Associates 432–442.
- Woods, P., Poropat, A., Barker, M., Hills, R., Hibbins, R., Borbasi, S., 2013. Building friendship through a cross-cultural mentoring program. *International Journal of Intercultural Relations* 37 (5), 523–535.
- Yershova, Y., DeJaeghere, J., Mestenhauer, J., 2000. Thinking not a usual: Adding the intercultural perspective. *Journal of studies in international education* 4 (1), 39–78.
- Yu, H., 2012. Intercultural competence in technical communication: A working definition and review of assessment methods. *Technical Communication Quarterly* 21 (2), 168–186.
- Zhao, J., Gallant, D.J., 2012. Student evaluation of instruction in higher education: Exploring issues of validity and reliability. *Assessment & Evaluation in Higher Education* 37 (2), 227–235.