The role of perceived threat in Anglo-Australian attitudes to international students

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The Role of Perceived Threat in Anglo-Australian Attitudes to International Students

Katarzyna Koska

A report submitted in Partial Fulfilment of the Requirements for the Award of

Bachelor of Arts (Psychology) Honours

Faculty of Computing, Health and Science

Edith Cowan University

Submitted (October, 2010)

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Abstract

This study examined the relationship between intergroup threat and negative attitudes among Anglo-Australians ($N = 110$) toward international students. The Integrated Threat Theory (ITT) was reviewed and four types of threat were discussed that have been shown to be influential determinants of negative attitudes, namely: realistic threat, symbolic threat, intergroup anxiety and negative stereotypes. In addition, the importance of intergroup contact as a separate predictor of attitudes was investigated. Results provided partial support for the ITT, identifying only two threats as significant and unique predictors of attitudes toward international students. Consistent with the hypothesis, realistic threat was significantly and negatively associated with attitudes, however, contrary to the hypothesis symbolic threat failed to account for any significant proportion of variance in attitudes. Negative stereotypes also emerged as a strong predictor of attitudes toward international students. Unlike hypothesised, intergroup contact did not reveal a direct association with negative attitudes, however it was suggested that its relationship with attitudes might be indirect, via threats. The findings are discussed in terms of practical implications for policy, media and community organisations.

Name: Katarzyna Koska

Supervisor: Dr Justine Dandy
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I would like to express my respect and gratitude to my supervisor, Dr Justine Dandy, who has provided me with constant support and guidance, valuable advice, and encouragement throughout the entire research process. I have benefited greatly from her constructive feedback, critical approach to my work, inspiring approach to science, and excitement about results. I would also like to thank my partner, Mike Lomman, who always extended his help, put the time and energy to read and re-read my work, engaged in lively discussions, and did everything he could to encourage, comfort and support me when things didn’t look that bright. Finally, I would like to acknowledge and thank the study participants for their time and contributions.
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The Role of Perceived Threat in Anglo-Australian Attitudes to International Students

In recent years there has been a significant increase in the number of international students in Australia. In 2009, there were 491,565 overseas students enrolled at various Australian educational institutions, an increase of 13.3% compared with 2008 figures (Australian Education International, 2010). The majority of international students in 2009 came from the Asian continent (66.1%), mainly from China and India, followed by the Republic of Korea and Malaysia (AEI, 2010). Like many western countries, the Australian economy benefits significantly from the international education ‘industry’, which has grown to become the third largest single export sector in Australia to generate approximately $AU18 billion revenue in 2009 (Department of Foreign Affairs and Trade, 2010; Dessoff, 2009). The additional income from international students’ fees has also enabled many universities to invest in their facilities to accommodate the increasing numbers of students and also to generate further revenue by means of using those facilities for non-educational services (Neri & Ville, 2006). Beyond the financial benefits, the presence of international students has enriched the Australian university landscape and made significant social and cultural contributions to local communities, promoting diversity and building lasting relationships at personal, business, community, and government levels (Graycar, 2010). However, recent violent attacks against international students in Melbourne (Roach, 2010) have raised concerns about community attitudes to international students, particularly those who are ‘visibly’ different from the dominant, Anglo-Australian culture (Babacan, et al., 2010).

Whilst discrimination against international students is not a new phenomenon (Bochner, 2006), it has become an issue of renewed attention in Australia. Researchers at the University of Western Sydney found that one in five overseas born respondents experienced some level of racism in Australian educational settings, but compared with
all respondents, the Indian and Sri Lankan international students experienced the highest rate of racial discrimination in educational, workplace and public contexts (Graycar, 2010). The survey also indicated that as many as 86% of the Australian population perceived that racism is prevalent in Australia (Graycar, 2010). Similarly, in their survey on racist attitudes in Australia, Dunn, Forrest, Burnley and McDonald (2004) found that the majority of Australians recognised racism as a problem. Additionally, approximately 12% identified themselves as prejudiced with separatist and supremacist beliefs, which highlights serious concerns about inter-cultural relations tensions in Australian society (Dunn et al., 2004). The survey also found a strong positive association between racist attitudes and demographic characteristics, such as age, non-tertiary education, and men, to a lower degree. Interestingly, the study also revealed a heightened level of Islamophobia - intolerance toward Muslim and Arab-Australian groups - but also continuation of intolerance against Asian, Indigenous and Jewish Australians (Dunn et al., 2004). In particular, those who spoke Languages Other Than English (LOTE) or were of Indigenous background were at double the risk for experiencing racism, compared to non-indigenous and non-LOTE individuals (Dunn et al., 2004). Much of the data collected in recent years on racism in Australia reveals the extent of intolerant attitudes within Australian society (Dunn et al., 2004).

International Students

International students are usually defined as sojourners, or temporary immigrants as they do not have permanent residency or Australian citizenship and they reside in the country based on student visa arrangements (Bochner, 2006; Gollan & Wright, 2008). As with other immigrant groups, they encounter many challenges after arrival in their new host society, especially in terms of their cultural adaptation (Russell, Thomson & Rosenthal, 2008). The distress and difficulties experienced in adjusting to the new social, cultural, linguistic and academic environments, especially where a
student's home culture is considerably different from the local culture, can have an impact on their general satisfaction and well-being (Khawaja & Dempsey, 2008; Neri & Ville, 2006). Factors that may contribute to international students' adjustment problems, psychological and academic distress include absence of cultural-fit between home and host customs and practices, changes and barriers in communication and language, lowered sense or lack of connectedness or belonging, few meaningful relationships with local students, loneliness and alienation, and racism and discrimination (Gollan & Wright, 2008; Khawaja & Dempsey, 2008).

In their paper on global student mobility in the Asia-Pacific, Kell and Vogl (2008) make reference to the expectations placed upon international students to conform to Australian customs, norms, and beliefs, and to become the 'same' as the host nationals. However, that is where the 'sameness' ends, because they are perceived as 'other' and treated as foreigners, often in a differential and discriminatory manner (Kell & Vogl, 2008). Cultural generalisations, myths and stereotypes, particularly in relation to students of Asian origin, also contribute to the negative attitudes and exclusionary practices towards international students (Kell & Vogl, 2008).

Studies conducted in the major international education-providing countries such as the UK, the US, Australia and New Zealand indicate that despite the growing multicultural character of university campuses and thus greater opportunity for developing inter-cultural friendships, there is unfortunately little unfacilitated socialising and genuine cross-cultural engagement between domestic and international students (Summers & Volet, 2008). In their UK study, Harrison and Peacock (2010) found that factors such as communication barriers, fear of offending or being misunderstood, anxiety about the patterns of social interaction, making a cultural faux pas, and being perceived as racist or 'stupid', were major obstacles to initiating contact between international and home students. Research in both Australia and New Zealand
has shown that social interactions and close inter-cultural friendships were infrequent between host and international students (Volet & Ang, 1998; Ward et al., 2005). The New Zealand study also indicated that perceptions of overseas students were generally neutral to moderately positive; however, as the international student population was increasing, there was a reduction in intercultural interaction and an increased perception of threat and competition, as well as negative stereotyping, higher intergroup anxiety and more negative attitudes toward overseas students (Ward et al., 2005).

**Integrated Threat Theory**

From a social psychological perspective, international students can be conceptualised as an out-group. Like other minority groups in Australia, they are often perceived as different from the in-group, or local students, due to their language, appearance, religion, cultural practices or their temporary residency in Australia (Richardson, 2007). Based on those and other identifying criteria, they are often subject to categorisation by the local students and treated as a homogenous out-group of international students (Richardson, 2007).

According to social psychological theory, group categorisation, particularly intergroup distinctions, allows people to organise their understanding of the social world, defines their sense of group membership and forms the basis of their social identity (Brewer, 2007). This is achieved by means of social comparisons, whereby in-group characteristics and outcomes are evaluated as better or superior to those of out-groups, and the in-group / out-group distinction is accentuated (Brewer, 2007). In particular, members who strongly identify with their in-group are more likely to devalue, derogate and react negatively toward out-groups in situations of perceived threat directed toward their group (Corenblum & Stephan, 2001; Stephan, Ybarra, Martinez, Schwarzwald, & Tur-Kaspa, 1998). Research indicates that perceived fear and perceived threat posed by out-groups are closely related to negative out-group
attitudes and bias (Riek, Mania, & Gaertner, 2006; Stephan, Renfro, Esses, Stephan, & Martin, 2005). This research largely draws upon the Integrated Threat Theory, which proposes four categories of threat that affect attitudes towards out-groups: realistic threat, symbolic threat, negative stereotypes, and intergroup anxiety (Stephan et al., 2005).

Integrated Threat Theory, as synthesised by Stephan and Stephan, unifies several social psychological theoretical approaches (Riek, et al., 2006). These include: (a) Realistic Group Conflict Theory, which considers the role of threat and competition over finite resources as a determinant of out-group attitudes; and (b) Symbolic Racist Theory, which views prejudice in terms of conflicting values and beliefs, and was developed to explain the anti-Black attitudes of Whites (Riek, et al., 2006). Threat has also been perceived in terms of ‘zero-sum beliefs’, a belief that resources are limited, and the more is obtained by immigrants, the less is available for in-group nationals (Ward & Masgoret, 2008). Integrated Threat Theory has undergone many modifications and variations of its original version are currently being adopted for research. For instance, Gonzalez, Verkuyten, Weesie and Poppe, (2008) did not include intergroup anxiety in their research on prejudice towards Muslims, and Tausch, Hewstone and Roy (2009) excluded negative stereotypes as a predictor from their study on Hindu-Muslim relationships.

Realistic Threat

Realistic threats pertain to the perceived intergroup competition for scarce resources, such as political power, economic assets, health, education, employment opportunities, and social status (Schweitzer, Perkoulidis, Krome, Ludlow, & Ryan, 2005). These include any perceived threats to the welfare or the very existence of the in-group, or threats to the physical and material well-being of the in-group and its members (Stephan, Diaz-Loving, & Duran, 2000). In a study investigating the different
types of threat as predictors of prejudice in the context of relationships between Hindus and Muslims in India, Tausch et al. (2009) found that realistic threat was an important predictor of prejudice among Muslims, who, as a minority group in India, suffer economic inequalities and competition from the Hindus community. The importance of realistic threats as predictors of negative attitudes was also observed in a US study of Black and White students’ attitudes toward the other group (Stephan et al., 2002). The research found a strong association between White students’ perceptions of threat to their power and wealth, in particular through policies such as affirmative action, and in disliking and racial attitudes toward Black students (Stephan et al., 2002). Further support for the relationship between realistic threats and negative out-group attitudes was provided by a study conducted by Maddux, Galinsky, Cuddy and Polifroni (2008). Their results indicated that certain characteristics such as hardworking, intelligent, or ambitious, that are typically attributed to Asian Americans, created a perception of competition and threat for perceived limited resources valued by the Anglo-American students, such as job opportunities, leading to negative attitudes and emotions toward Asian American students (Maddux et al., 2008). In contrast, Ward et al. (2005) noted that in their New Zealand sample, perception of realistic threat from international students was relatively low. New Zealand students did not perceive their foreign peers as a source of competition over existing resources. However, less favourable attitudes toward international students were observed as their numbers rose, and this was also associated with increased perception of competition and the belief that foreign student gains were at local students’ expense (Ward et al., 2005).

Symbolic Threat

Symbolic threat concerns intergroup differences in values, norms, beliefs, morals, standards, and threats to the in-group’s general worldview (Schweitzer et al., 2005). These threats stem from conviction in the moral ‘rightness’ or ‘correctness’ of
the in-group’s cultural values, standards, and belief systems (Stephan et al., 1998) Out-groups that hold or display opposing views to that of the in-group may be perceived as threatening the in-groups’ belief system and way of life, leading to antagonism and fear of a new culture dominating the in-groups’ national and cultural identity (van der Noll, Poppe, & Verkuyten, 2010). Consistent with this proposition, Schweitzer et al. (2005) demonstrated that Australians’ prejudicial attitudes toward refugees were related to their perceptions of symbolic threat. That is, those Australians who reported more prejudicial attitudes toward refugees, expressed more perceived threat regarding Australian values and culture posed by refugees (Schweitzer et al., 2005).

In their qualitative study on UK students’ perception of threat and xenophobic attitudes toward international students, Harrison and Peacock (2010) found that UK students perceived their group identity, and their societal and academic norms were threatened by international students. In particular, home nationals were resentful about foreign peers’ use of languages other than English in public and always ‘sticking together’, which was perceived as excluding home students from participation. The main themes for symbolic threat that emerged from the study pertained to fears of being ‘swamped’ by unfamiliar cultures, international students’ breach of shared behavioural norms and their rejection of alcohol use (Harrison & Peacock, 2010). Very similar outcomes were reported in the Ward et al. (2005) study assessing New Zealand students’ attitudes toward foreign students. Their research found that negative attitudes toward international students were associated largely with perceived symbolic threats.

Perceptions of threat were particularly strong in response to cultural and linguistic survey items, with a significant proportion of participants agreeing that foreign students ought to speak English as opposed to their native language; and that instead of maintaining their customs they should be adopting New Zealand behaviours and way of life (Ward et al., 2005). Similar results were obtained in a US study
conducted at a Southwestern University, which revealed that the strongest predictors of prejudiced attitudes toward international students were realistic and symbolic threats (Charles-Toussaint & Crowson, 2010). Perceived threat to the beliefs, values and culture of the host student population was related to more negative attitudes toward international students (Charles-Toussaint & Crowson, 2010).

**Intergroup Anxiety**

Intergroup anxiety is a threat that arises in response to uncertainty about how to interact with an out-group and fears of negative outcomes, such as feelings of uneasiness, rejection, disapproval or embarrassment, which may contribute to negative attitudes (Riek et al., 2006). Anxiety in intergroup relations is experienced more strongly when there is a history of intergroup conflict, antagonism, lack of personal contact or knowledge about the other group, difference in group status, or conviction of own group’s superiority (Stephan et al., 1998). A US study examining attitudes of Americans and Mexicans toward one another revealed that those American participants who were anxious about interacting with Mexicans were more likely to be prejudiced toward them (Stephan et al., 2000). But interestingly the Mexican participants’ attitudes toward Americans were also strongly associated with intergroup anxiety (Stephan et al., 2000). This finding was surprising because intergroup anxiety and concerns about intercultural interactions are typically observed among dominant groups that are economically and politically powerful (Stephan et al., 2000). Bizman and Yinon (2001) also employed the framework of the Integrated Threat Theory to investigate native Israelis prejudicial attitudes toward Russian immigrants, as a function of in-group identification. The results revealed that intergroup anxiety was mostly influential in predicting prejudice in Israeli low in-group identifiers, but not in members that had strong in-group identification (Bizman & Yinon, 2001).
The significant role of intergroup anxiety in forming attitudes toward out-groups was demonstrated in experimental research conducted by Stephan et al. (2005), which involved exposing US students to either low or high anxiety situation to examine their feelings and reactions to a hypothetical large influx of students from East Timor enrolling at their university. Interview reports and reactions from domestic students and academic staff regarding a previous contingent of the East Timorese students were presented to the students to manipulate intergroup anxiety (Stephan et al., 2005). The findings showed that students primed with negative out-group descriptions experienced high levels of intergroup anxiety, developed more negative attitudes toward the international students and were less willing to interact with them compared with students in the low anxiety condition who read about the positive inter-cultural interactions with the exchange students (Stephan et al., 2005).

The idea that anxiety about interacting with out-groups has negative effects on intergroup relations was also confirmed in a study conducted by Harrison and Peacock (2010) in the UK, who observed that host students associated interaction with international students with strong, even paralysing feelings of anxiety. Fears about unintentionally offending or misunderstanding foreign students due to linguistic and cross-cultural communication barriers produced high levels of anxiety and had negative implications for intergroup interactions (Harrison & Peacock, 2010). Encounters were often perceived as very challenging and requiring arduous effort and adaptations to ensure effective communication, which was not viewed by the host students as worthwhile, and it hindered positive intergroup outcomes (Harrison & Peacock, 2010). Similar results were obtained with US students, who reported feelings of frustration, discomfort and impatience in intercultural encounters, especially due to accented speech and culturally distinct communication styles (Spencer-Rodgers & McGovern, 2002).
Negative Stereotypes

The concept of negative out-group stereotypes, the fourth component of the Integrated Threat Theory, refers to perceptions of threat by creating expectations about the negative behaviours and interactions that can be anticipated from out-group members (Riek et al., 2006). Because negative stereotypes typically occur in conjunction with negative emotions, such as fear or anger, they increase the negative out-group attitudes (Riek et al., 2006). Out-group stereotypes usually include threat-laden traits such as being aggressive, untrustworthy, manipulative, hostile, violent, or arrogant (Corenblum & Stephan, 2001; Stephan et al., 2005). Such negative stereotypic beliefs about out-group members cause apprehension and wariness about interacting with them, and this unpleasant expectation is associated with more negative attitudes toward out-groups (Corenblum & Stephan, 2001; Stephan et al., 2005).

Stereotypes of international students usually focus on negative attributes that portray them as culturally maladjusted, naive, confused, passive, withdrawn or unintelligent and these characterisations can have a negative impact on host students’ evaluations (Spencer-Rodgers & McGovern, 2002). In addition, domestic students commonly perceive international students as a relatively homogenous out-group, despite the diverse international student population on campuses in terms of race, ethnicity, linguistics, religion, or nationality (Spencer-Rodgers, 2001). For instance, UK domestic students viewed their international peers of Asian and African origin as homogenous collections of individuals and tended to label all students from East and South East Asia as ‘Chinese’ (Harrison & Peacock, 2010). There was a lack of individuation and non-stereotypical cultural knowledge about Asian groups, which were subjected to negative stereotyping typified by negative cultural traits of collectivism (such as unfriendly, excluding and alien), excessive preoccupation with education, and poor English language skills (Harrison & Peacock, 2010). These stereotypes were seen as being
unattractive and culturally distant to the domestic students and evoked greater
differentiation between the student groups (Harrison & Peacock, 2010). They also
contributed to the construction of international students as ‘other’ and thus hindered
intercultural and social contact (Harrison & Peacock, 2010).

However, a New Zealand study showed that stereotypes about international
students are not necessarily always negative (Ward et al., 2005). Findings indicated that
host students mostly associated their international peers with neutral or positive
stereotypes, such as intelligent and hardworking. Nonetheless, a higher proportion of
international student enrolments in tertiary institutions was also associated with an
increase in negative stereotyping, lowered levels of contact, and more negative attitudes
toward them (Ward et al., 2005).

Intergroup Contact

The extent to which the four threats of Integrated Threat Theory are linked to
negative attitudes has also shown to be dependent on a number of factors, such as
strength of in-group identification, group status inequalities, history of intergroup
conflict, and intergroup contact (Corenblum & Stephan, 2001). Social psychological
research suggests that more frequent and positive intergroup contact leads to improved
knowledge, mutual understanding and de-categorisation of out-groups, reducing the
perception of threat, anxiety, uncertainty and negative stereotypes among the in-group,
and thus moderating negative out-group attitudes (Gonzalez et al., 2008; Spencer-
Rodgers & McGovern, 2002; Tausch et al., 2009). However, the relationship of
intergroup contact and attitudes is complex and research has shown its bi-directional
nature (Pettigrew, 2009). This suggests that contact can lead to improved inter-cultural
relations, but it also indicates that tolerant individuals are more inclined to interact with
out-group members, while more prejudiced people avoid inter-cultural contact
(Pettigrew, 2009). The bi-directional character of contact was confirmed in a
longitudinal study conducted at the University of California, Los Angeles campus, which examined the effects of exposure to roommates of different ethnic out-groups on intergroup attitudes (Van Laar, Levin, Sinclair, & Sidanius, 2005). The findings revealed that inter-ethnic friendships were associated with a reduction in prejudice, and initial in-group bias and intergroup anxiety were related to fewer intergroup friendships (Van Laar et al., 2005). This indicates that intergroup contact may be effective in changing negative attitudes, but negative attitudes can also affect intergroup contact.

In their meta-analytic investigation of over 500 studies, Pettigrew and Tropp (2006) found that greater intergroup exposure and familiarity with out-group members lessened in-groups’ feelings of anxiety, threat, and thus prejudicial attitudes toward them. Moreover, the analysis showed that successful intergroup contact typically enhanced liking for out-group members and extended these positive outcomes beyond the immediate contact situation, producing more favourable attitudes toward the entire out-group, including members not previously involved in the contact process (Pettigrew & Tropp, 2006). The reduction of prejudicial attitudes was even more pronounced when Allport’s optimal conditions, considered to promote positive contact outcomes (such as equal status, common goals, co-operative environment, support of authorities, intimacy, cross-group friendships), were present in the intergroup situations (Pettigrew & Tropp, 2006). In particular, institutional support and structured programs designed to enhance positive interactions produced beneficial contact-attitude outcomes (Pettigrew & Tropp, 2006).

The meta-analysis provided extensive support for intergroup contact being strongly associated with improved intergroup attitudes, among both majority and minority groups (Pettigrew & Tropp, 2006). However, the study focused mainly on positive intergroup encounters, and the authors acknowledged that the nature, or quality, of the interactions also plays a role in enhancing or reducing the positive effects of
contact (Pettigrew & Tropp, 2006). For instance, an examination of Americans' and Mexicans' attitudes toward one another revealed that both quality and amount of contact influenced the perceptions of threat and attitudes toward Mexicans (Stephan et al., 2000). Namely, Americans perceived less threat from Mexicans when the amount of intergroup contact was greater and they also reported more liking and positive attitudes toward Mexicans when the quality of contact was favourable (Stephan et al., 2000). In another study, quantity of contact between Muslim immigrants and Dutch adolescents was found to be directly associated with negative stereotypes and prejudice toward Muslims (Gonzalez et al., 2008). Namely, adolescents who had more frequent contact with Muslims reported more favourable attitudes toward the out-group, and were less likely to negative stereotype Muslim immigrants (Gonzalez et al., 2008). Finally, in their correlational study with Native Canadians, Corenblum and Stephan (2001) found that negative intergroup contact, characterised by unpleasant intergroup interactions, was directly related to anti-White attitudes and associated with realistic threat and intergroup anxiety, which in turn predicted negative attitudes. White Canadians' experience of negative contact was related to all four threats and also directly to negative attitudes toward Native Canadians (Corenblum & Stephan, 2001).

Charles-Toussaint and Crowson (2010) point out that increased and positive intercultural contact may not necessarily lead to improved intergroup attitudes in students high in social dominance orientation, for whom personal power and superiority are of more significance than equality or social harmony. Despite these qualifications, multiple studies conducted to date suggest that frequent intergroup contact may increase liking and tolerance toward out-groups and give rise to more positive attitudes toward them (Gonzalez et al., 2008; Pettigrew & Tropp, 2006; Van Laar et al., 2005).
The Proposed Study

Whilst there is some debate about the motivations behind the recent attacks on international students in Australia, some have argued that the government has been in denial about systematic international student safety problems (Nyland, Forbes-Mewett, & Marginson, 2010). Only upon the intervention of the Indian and Chinese governments in 2009, following a number of assaults on international students, did Australian officials publicly acknowledge the existence of a safety issue, as well as acknowledged that there was a racial element in some of those assaults (Attorney-General’s Department, 2010; Nyland et al., 2010).

Findings show that foreign students in Australia, especially those who most differ from the Anglo-Celtic norm, continue to experience racism and discriminatory attitudes in various settings in the form of verbal abuse, physical intimidation or violence (Babacan et al., 2010; Graycar, 2010). It is possible that these discriminatory attitudes are a result of perceived threat among members of the dominant, Anglo-Australian culture. International students may be seen as taking local students’ places in universities and TAFE colleges, taking Australian jobs, affecting the Australian lifestyle, creating a threatening sub-culture or pose other types of threat as defined by Integrated Threat Theory. In addition, because the relation between the types of threats and attitudes has been shown to vary across intergroup contexts, and studies differ in the reported threat variables that best predict attitudes (Gonzalez et al., 2008), there is a need to test the Integrated Threat Theory in a range of contexts and with diverse target groups in order to further establish its validity and usefulness. Therefore, the proposed research aims to utilise the Integrated Threat Theory to examine the role of perceived threat in Australians’ attitudes to international students.

The attitudes and perceived threat posed by international students will vary across Australian society, however Anglo-Australian students are members of the in-
group dominant culture and are therefore likely to experience levels of inter-cultural and economic concerns that are somewhat similar to the general population. Additionally, given that universities are places where the presence of foreign students is typically experienced and competition for university places and resources may be strong, the use of Anglo-Australian students as a research population sample has external validity. As such, this project intends to examine the attitudes of Australians toward international students within the micro context of the academic environment.

The proposed research is designed to address three objectives: (1) to explore Anglo-Australians’ attitudes toward international students; (2) to examine the influence of perceived threat, as defined by Integrated Threat Theory, on attitudes toward foreign students; and (3) to determine the effects of intergroup contact on Anglo-Australians’ attitudes toward international students.

Based on the findings of previous research, it is expected that realistic and symbolic threats will be the best predictors of negative attitudes toward international students. Additionally, in accordance with the literature on intergroup contact, it is also predicted that more frequent contact with international students will account for a significant proportion of variance in attitudes toward international students, beyond that already explained by realistic and symbolic threats.

**Method**

**Research Design**

The research involved a cross-sectional online survey design examining the relationship between five predictor variables: four threats (realistic, symbolic, intergroup anxiety and negative stereotypes), intergroup contact; and attitudes toward international students. The five predictors comprised the independent variables in this study, whilst the dependent variable was the attitude of Anglo-Australians toward foreign students.
Participants

A total of 145 participants volunteered to participate in the study, however, only 110 of those respondents completed their questionnaires successfully. The sample consisted of 80 female and 30 male students, mainly born in Australia (76.4%), followed by those born in the British Isles (19%), United States (2%) and South Africa (2%), and finally New Zealand (0.9%). Participants’ ages ranged from 16 to 70 years and were distributed as follows: 16-20 (19%), 21-25 (15%), 26-30 (9%), 31-35 (16%), 36-40 (12%), 41-45 (11%), 46-50 (6%), 51-55 (8%), 56-60 (4%), and 61-70 (1%). Seventy-two percent of participants were undergraduate students and the remaining 28% were postgraduate students.

Materials

Each participant was provided with a Participant Information Letter (Appendix A) and a Consent Form (Appendix B), the latter being a part of the online survey. Respondents used the ECU web-based Qualtrics software to complete the questionnaire (Appendix C), which contained demographic information and eight measures assessing participants’ perceptions of threat from foreign students, the level of intergroup contact, and their attitudes toward international students. The demographic section requested some information about the respondent’s gender, age group, residential postcode, country of birth, and level of studies currently undertaken (under- or postgraduate). Only participants who identified themselves as Australian students, of British cultural origin (e.g., English, Scottish, Welsh), who spoke only English at home and whose parents communicated only in English, were able to complete the questionnaire. A non-affirmative response to any of those questions resulted in an automatic termination of the survey.

The questionnaire items were predominantly adapted from Ward et al. (2005) but also sourced from other studies that measured attitudes or assessed the role of
threats in attitude formation, including Spencer-Rodgers (2001) and Dandy and Pe-Pua (2010). Based on Spencer-Rodgers (2001) approach, composite scores for all scales were computed by averaging items within each scale.

Criterion Variables

Attitude Scales. Three measures were used to assess the participants' attitude toward international students. The first measure used 12 attitudinal statements derived from Ward et al. (2005). Participants rated the degree to which they felt the statements reflected their reactions towards international students in Australia. Responses were obtained using a 7-point scale ranging from strongly disagree (1) to strongly agree (7). Higher scores corresponded to more positive attitudes toward international students. Five items were reverse coded. For this scale Ward et al (2005) reported Cronbach's alpha coefficient at .90, whilst in current study the internal reliability alpha coefficient was .92.

The second measure involved a single-item that was adapted from Ward et al. (2005) and aimed to identify participants' level of tolerance toward increasing numbers of international students. Responses to the following question: 'The 500,000 international students enrolled in Australia in 2009 was?' were answered using a 7-point scale ranging from much too low (1) to much too high (7). The third measure employed the feeling thermometer-type scale, which has been used in the past to assess global attitudes toward various groups, including immigrants and sojourners (Dandy & Pe-Pua, 2010; Spencer-Rodgers, 2001; Ward et al., 2005). Participants were asked to rate their favourability toward international students and toward Australian students, separately, on a 100-point thermometer scale, ranging from 0 – extremely unfavourable to 100 – extremely favourable.
**Predictor Variables**

*Realistic Threat Scale.* The realistic threat measure, adapted from Ward et al. (2005), consisted of 17 items that were rated on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). High scores indicate greater perceived realistic threat from international students. Ward et al. (2005) reported Cronbach’s alpha for the New Zealand sample at .86. In the current study there was also high internal reliability, with Cronbach’s alpha at .96.

*Symbolic Threat Scale.* The symbolic threat measure, derived from Ward et al. (2005), consisted of five items, which were answered on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). High scores were indicative of feeling more threatened. The composite score was computed based on the average of the five items. Cronbach’s alpha coefficient in Ward et al. (2005) was .81 and the same alpha value was obtained in this study.

*Intergroup Anxiety Scale.* The intergroup anxiety measure consisted of six items, adapted from Ward et al. (2005), examining how participants would feel when asked to imagine they were interacting with international students. The respondents rated their reactions using a 7-point scale from *not at all* awkward (1) to *extremely* awkward (7), with higher scores suggesting an elevated level of anxiety during intergroup interaction. Two items were reverse coded. Ward et al. (2005) reported Cronbach’s alpha coefficient of .78. The same internal reliability coefficient (Cronbach’s alpha) was yielded for this scale in the current study (.78).

*Negative Stereotypes Scale.* Stereotypes were measured using 15 pairs of bipolar trait adjectives, taken from Ward et al. (2005), which were classified as positive or negative. Responses were given on a 7-point scale to assess participants’ perceptions of stereotypical traits most associated with international students. Sample items included: *friendly* (1) – *unfriendly* (7) and *hard-working* (1) – *lazy* (7). High scores were
associated with more negative stereotype assessments of international students. Items were reverse coded where required. The reported Cronbach’s alpha coefficient in Ward et al. (2005) was .89, whilst current study yielded alpha coefficient at .93.

*Intergroup Contact Scale.* Social contact measure was adapted from Spencer-Rodgers (2001) and consisted of four items that assessed how often Australian students interact with sojourners. The first three items were rated on a 7-point scale ranging from *never* (1) to *all the time* (7) and included the following questions: (1) ‘How often do you do things socially with international students?’ (2) ‘How often do you study or do other class work with international students?’ (3) ‘How often do you talk to and converse with international students?’ The fourth question was also rated on a 7-point scale but asked respondents to indicate how many of their friends were international students, ranging from *none* (1) to *10 or more* (7). Cronbach’s alpha coefficient for the four-item scale in Spencer-Rodgers (2001) was .78. Internal consistency (Cronbach’s alpha) for this scale in current study was .88.

Finally, a general question asking participants which nationalities of international students they were mainly thinking of when completing the questionnaire was included, providing six nationality options, based on data obtained from AEI (2009). A free text field to specify other international student group(s) was also included.

**Procedure**

Participants were predominantly recruited via an email invitation to complete an online, voluntary and anonymous survey. The invitation and the accompanying Participant Information Letter (Appendix A) included a weblink to the questionnaire. The invitation to participate was sent by a third party to several Edith Cowan University distribution lists. These included the School of Psychology, School of Law and Justice, and the Graduate Research School google group. In addition, the online survey was
advertised on the ECU School of Psychology and Social Science current projects web page.

Following the acceptance of the online Consent Form (Appendix B) by selecting the ‘I Agree’ button, respondents proceeded with the questionnaire. Number of questions per screen did not exceed two, unless responses involved one item, at which point there was room to include three questions on the screen. Once the next button was selected, participants could not return to the previous screen to change their response. The survey took approximately 10 minutes to complete and ended with a note thanking the respondents for participation. The researcher and supervisor’s contact details were provided which allowed the participants to seek further clarification or discuss the questionnaire.

Results

The obtained sample size provides an adequate level of power (assuming a medium effect size) based on Green’s (1991) rule of thumb for determining sample sizes that suggests no fewer than 104 participants plus the number of independent variables (N > 104 + m) for testing individual predictors.

Controlling for Demographic Variables

To determine the effect of age on attitudes toward international students, a series of between groups ANOVAs was conducted for three attitudinal scales and four age groups. A significant ANOVA was only observed for the single item assessing respondents’ tolerance to high numbers of international students, \( F(3, 106) = 3.10, p = .030 \). Tukey’s HSD (using an \( \alpha \) of .05) further revealed that participants aged between 16 and 30 years of age were more inclined to rate the number of foreign students as too high (\( M = 4.62, SD = 1.05 \)) compared to participants aged between 31 and 40 years (\( M = 3.94, SD = 1.09 \)). No other significant differences were observed involving age. A series of between groups ANOVA tests was also conducted but revealed no influence of
age on participants’ perceptions of realistic and symbolic threat $F(3, 106) = 2.14, p = .099$ and $F(3, 106) = .86, p = .466$, respectively. Age was also unrelated to the sample’s perceptions of intergroup anxiety, $F(3, 106) = 1.90, p = .134$, and negative stereotypes, $F(3, 106) = 1.49, p = .220$.

It was observed that men, in general, held a somewhat more positive attitude toward international students ($M = 5.24, SD = .85$) than females ($M = 5.13, SD = 1.21$) on the 12-item attitude scale but the score differences were not significant, $t(108) = -.47, p = .639$. Male respondents also provided more favourable evaluations of international students ($M = 72.73, SD = 17.65$) compared to females ($M = 72.01, SD = 24.07$) on the feeling thermometer, but again the difference was not significant $t(108) = -.15, p = .881$. Finally, no significant gender differences were observed in the assessment of the number of international students in Australia, $t(108) = -.51, p = .614$.

Undergraduate and postgraduate respondents did not differ significantly in their attitudes toward foreign students, as measured by the feeling thermometer $t(108) = .65, p = .520$; the 12-item attitude scale $t(108) = 1.17, p = .245$; or the one item assessing opinions about the number of international students $t(108) = -.06, p = .954$. Overall, there were no significant course or gender differences in participants’ attitudes toward international students. However, results need to be treated with caution due to the small proportion of males and postgraduate participants.

**Attitude Scales and Predictor Variables - Summary Statistics**

Inspection of the mean scores and standard deviations of the 12-item attitudinal scale revealed that participants’ attitudes toward international students were rather positive, on average ($M = 5.16, SD = 1.12$), and above the scale midpoint of 4. The single item measure assessing participants’ attitudes toward the number of international students in Australia ($M = 4.41, SD = 1.15$) revealed that over half of respondents (56.4%) thought the number was about right; 32.8% believed it was in the high to much
too high range, and only 10.9% believed the numbers were in the low to much too low range. Attitudes measured by the feeling thermometer showed that respondents held an overall positive evaluation of international students ($M = 72.21$, $SD = 22.43$), and although the mean score obtained for Australian students in-group was slightly higher ($M = 76.54$, $SD = 16.39$), the difference was not significant, $t(109) = -1.95, p = .053$.

Participants' perceptions of threat from international students' presence in Australia were moderately low, all falling below the neutral midpoint of the scales (see Table 1). The level of contact with foreign students was low; 48.2% of respondents reported that they do not engage socially with their international peers at all, 45.5% do not have any foreign students as friends, and 20% never converse or talk to international students.

Table 1

<table>
<thead>
<tr>
<th>Scale</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intergroup Anxiety</td>
<td>2.93</td>
<td>1.00</td>
</tr>
<tr>
<td>Negative Stereotypes</td>
<td>3.18</td>
<td>0.98</td>
</tr>
<tr>
<td>Symbolic Threats</td>
<td>3.07</td>
<td>1.35</td>
</tr>
<tr>
<td>Realistic Threats</td>
<td>2.63</td>
<td>1.28</td>
</tr>
<tr>
<td>Intergroup Contact</td>
<td>2.76</td>
<td>1.53</td>
</tr>
</tbody>
</table>

Note: All responses are made on a 7-point scale.

In relation to the nationalities of foreign students, inspection of the frequency distribution indicated that participants were predominantly thinking of Chinese and Indian students when completing the questionnaire. Percentage frequency does not add up to reflect number of respondents because multiple nationality selections were available. Students from China were identified by almost 65% of participants, followed by Indian students (54%), Malay (28%), Korean (18%), Other Asian (17%), British/European (7%), and American (6%). The African group was not included in the
multiple-choice selection but was specifically nominated in the free text field by 25% of respondents.

Relationship between Attitudes, Threats and Intergroup Contact

Correlations were calculated among all four threat variables and attitudes toward international students. Table 2 indicates that all predictor variables and both attitudinal scales were significantly intercorrelated and in the expected direction. Despite the strong intercorrelations, in particular between symbolic and realistic threat, \( r(108) = .78, p < .001 \), the variance inflation factors for all predictor variables in the regression model were below 3.0, suggesting that multicollinearity did not pose a problem.

To check if any multivariate outliers were present in the data, Mahalanobis distance values were reviewed using \( \chi^2 (5, 110) = 20.52, p < .001 \). A multivariate outlier was identified that exceeded the aforementioned critical value, however, it was decided to retain the outlier as it most likely represented a legitimate case drawn from the population, yet more extreme in comparison to the rest of data.

As presented in Table 2, significant negative correlations were found between all the predictor variables and the attitude measure, which indicates that more positive attitudes were correlated with lower perceived threat. The strongest negative correlations were observed between the criterion variable (12-item attitudinal score) and negative stereotypes and realistic threat, indicating that the more negative the attitudes, the higher the perception of realistic threat and likelihood to stereotype international students negatively. As is evident from Table 2, there was a significant positive correlation between the 12-item attitude measure and intergroup contact, indicating that more favourable attitudes toward foreign students were associated with higher levels of reported intergroup contact. There was also a significant negative correlation between intergroup contact and negative stereotypes, and a weaker negative correlation between intergroup contact and symbolic threat. This may indicate that increased interaction
Intergroup Attitudes 24

between the groups is related to less negative stereotyping of international students and lower perception of symbolic threat. Finally, there was a negative correlation between attitudes and the single item measure, which may suggest that higher numbers of international students in the country are associated with less favourable attitudes toward them.

Table 2

*Intercorrelations among Threats, Intergroup Contact and Attitudes Toward International Students (N = 110)*

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Intergroup anxiety</td>
<td>--</td>
<td>.42**</td>
<td>.32**</td>
<td>.37**</td>
<td>-.40**</td>
<td>.28**</td>
<td>-0.13</td>
</tr>
<tr>
<td>2 Negative stereotypes</td>
<td>--</td>
<td>--</td>
<td>.48**</td>
<td>.50**</td>
<td>-.76**</td>
<td>.51**</td>
<td>-.37**</td>
</tr>
<tr>
<td>3 Symbolic threats</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>.78**</td>
<td>-.57**</td>
<td>.55**</td>
<td>-.20*</td>
</tr>
<tr>
<td>4 Realistic threats</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-.66**</td>
<td>.71**</td>
<td>-0.12</td>
</tr>
<tr>
<td>5 Attitudes toward int. students</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-.63**</td>
<td>.30**</td>
</tr>
<tr>
<td>6 The 500,000 international students enrolled in Australia in 2009 was?</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-0.07</td>
</tr>
<tr>
<td>7 Intergroup contact</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

**p < .01, *p < .05

In order to test the combined and unique contribution of the four threat variables to attitudes towards international students, a hierarchical multiple regression analysis was conducted. At step one, using the 12-item attitude scale as the criterion variable and entering the four threats in one step, the analysis revealed that the four predictor variables, combined, explained 68% of the variance in attitudes toward international students, $R^2 = .68$, $\Delta R^2 = .67$, $F(4, 105) = 55.24, p < .001$. Further examination of the beta weights indicated that only negative stereotypes, $\beta(109) = -8.29, p < .001$, and
realistic threat, \( t(109) = -3.68, p < .001 \), were strong and significant predictors of attitudes toward international students (see Table 3).

The addition of intergroup contact variable at step 2 accounted for an additional but non significant 0.2% of the variance, \( \Delta R^2(1, 104) = .69, p = .408 \). This indicates that intergroup contact could not account for significant proportion of variance in attitudes, beyond that already accounted for by realistic threat and negative stereotypes.

Inspection of the beta values indicated that again only negative stereotypes, \( t(109) = -7.54, p < .001 \), and realistic threat, \( t(109) = -3.76, p < .001 \), were strong and significant predictors of attitudes toward international students (see Table 3).

Table 3

Unstandardised (B) and Standardised (\( \beta \)) Regression Coefficients, and Standard Deviations (SE B) for each Predictor Variable on each Step of a Hierarchical Multiple Regression Predicting Attitudes toward International Students (N=110)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>( \beta )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step one</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative stereotypes</td>
<td>-.64</td>
<td>.08</td>
<td>-.56**</td>
</tr>
<tr>
<td>Realistic threat</td>
<td>-.30</td>
<td>.08</td>
<td>-.34**</td>
</tr>
<tr>
<td>Intergroup anxiety</td>
<td>-.03</td>
<td>.07</td>
<td>-.03</td>
</tr>
<tr>
<td>Symbolic threat</td>
<td>-.03</td>
<td>.08</td>
<td>-.03</td>
</tr>
<tr>
<td><strong>Step two</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative stereotypes</td>
<td>-.62</td>
<td>.08</td>
<td>-.54**</td>
</tr>
<tr>
<td>Realistic threat</td>
<td>-.31</td>
<td>.08</td>
<td>-.35**</td>
</tr>
<tr>
<td>Intergroup anxiety</td>
<td>-.03</td>
<td>.07</td>
<td>-.03</td>
</tr>
<tr>
<td>Symbolic threat</td>
<td>-.02</td>
<td>.08</td>
<td>-.02</td>
</tr>
<tr>
<td>Intergroup contact</td>
<td>.04</td>
<td>.04</td>
<td>.05</td>
</tr>
</tbody>
</table>

Note. \( R^2 = .68 \) for Step 1; \( \Delta R^2 = .67 \) for Step 2, ** \( p < .001 \).
Discussion

The aim of the present study was to investigate Anglo-Australians’ attitudes toward international students and to determine if perceived threats and intergroup contact are significant predictors of those attitudes. Previous research has demonstrated that perceived threats of the Integrated Threat Theory are associated with higher levels of prejudice and negative attitudes toward out-group members. Previous research has also highlighted that the quantity and quality of intergroup contact strongly influence the formation of positive attitudes. In accordance with this literature, it was hypothesised that realistic and symbolic threat would be strongly related to negative attitudes toward international students and that greater amount of intergroup contact would be associated with more positive attitudes toward international students.

Consistent with past research on the relationship between intergroup threat and attitudes, the results in the current study provide further support for the Integrated Threat Theory. Although perceptions of threat were relatively low, they were observed to be linked with participants’ negative attitudes toward international students. In combination, realistic and symbolic threats, negative stereotypes and intergroup anxiety accounted for a significant 68% of the variance in attitudes toward international students, which was higher than the 41% observed in Spencer-Rodgers and McGovern’s (2002) study or in Riek et al.’s (2006) meta-analytic review (36%). This indicates that perceived intergroup threat was a substantial component of out-group attitudes in the present study.

Negative stereotypes, followed by realistic threat appeared as the only unique predictors of attitudes toward international students. No other predictor variables could account for the variance in attitudes beyond that explained by realistic threat and negative stereotypes. The endorsement of negative stereotypes of international students, depicting them as tense, closed-minded, or unsociable, was associated with participants’
more negative attitudes toward them. Harrison and Peacock (2010) maintain that negative stereotypes, which are often based on misinformation, lack of familiarity or lack of individuation of out-group members, are linked to the portrayal of international students as a homogeneous group. And indeed, results in this study regarding intergroup contact indicated that cross-cultural relations between host and international students were low. Almost half of respondents reported they never engage socially with international students, and almost half also acknowledged that they do not have any international students as friends. Spencer-Rodgers and McGovern (2002) found that negative expectancies about interpersonal behaviours from international students, triggered by the stereotypic beliefs often developed during brief inter-cultural encounters or other sources, were associated with unfavourable attitudes toward out-group members. In the current study, it is possible that participants who had little personal information or relevant contact with international students had negative expectations about cross-cultural interactions and relied on foreign student categorisations and negative stereotypes such as unsociable, closed-minded or tense, in forming their attitudes.

In line with past research, the results of this study supported the hypothesis that realistic threat would be a strong unique predictor of attitudes toward international students. Anglo-Australian students’ sense of competition for university resources, academic and employment opportunities, as well as perceived threat posed by international students to the changes in standards of academic success in Australia, were negatively related to attitudes. Namely, participants who perceived international students as a threat to their status and success in the academic and employment sectors held more negative attitudes toward them. These results are consistent with Maddux et al. (2008) study on attitudes toward Asian American students as well as Schweitzer et al. (2005) study on prejudice in Australia. The timing of the study and data collection
occurred soon after the unfortunate events relating to the attacks on international students. The extensive media coverage of the events, rumours of potential retaliation of Indian students against the assaults, perceptions of potential diplomatic retaliation as well as reported risks of damaged reputation to Australia in the international arena may have also influenced the participants’ perception of safety and attitudes toward international students.

Contrary to the hypothesis symbolic threat failed to emerge as a reliable and unique predictor of attitudes toward international students. A possible explanation may exist within the methodological limitations. Namely, the study used only 5 items to measure perceived symbolic threat, whereas previous studies utilised 10 to 12 items (Stephan et al., 2002; Bizman & Yinon, 2001). In addition, the scale was altered to suit the Australian sample, and although modifications are sometimes made to the Integrated Threat Theory scales (Schweitzer et al., 2005; Stephan et al., 1998), combined this may have affected the strength of the measure.

The other explanation may be that Anglo-Australian students do not perceive their higher education environment to be negatively affected by linguistic or cultural variations introduced by international students. To the contrary, over 40% of participants agreed (agree and strongly agree) that international students made important contribution to Australian universities and similar proportion reported they enjoy having international students in classes. Spencer-Rodgers and McGovern (2002) also observed a minimal effect of symbolic threat in predicting prejudice toward international students in the US.

The findings of the current study also do not lend support to the third hypothesis, which assumed that intergroup contact would be a separate unique predictor of attitudes toward international students. This finding is in contrast with previous studies indicating that intergroup contact is positively associated with attitudes, such that higher levels of
intergroup contact were associated with less negative attitudes (Pettigrew & Tropp, 2006). One possible reason why contact did not emerge as a salient predictor of intergroup attitudes is that the present study only examined the quantity of intergroup contact and did not consider the quality of contact with international students. Although more contact with out-group members has been positively related to attitudes, it has also been suggested that mere exposure is insufficient and quality of prior intergroup contact should also be measured (Gonzalez et al., 2008; Stephan et al., 2000).

Another possible explanation may pertain to the observed inter-correlations among the measures, such that intergroup contact and negative stereotypes were significantly and negatively inter-correlated. It is thus possible that some overlap existed among the two predictors and they were measuring the same construct. This could possibly explain why intergroup contact did not make a significant, unique predictive contribution to attitudes toward international students beyond what was explained by negative stereotypes. However, intergroup contact may still be a good predictor of attitudes toward international students but not as strong as negative stereotypes. The present study examined the variable from the perspective of a predictor that is directly associated with attitudes toward international students. However, more recent studies, including that of Gonzalez et al. (2008) have shown that intergroup contact can have a non-direct effect on attitudes, mediated by the different types of threat. Their research found that intergroup contact was associated with less negative stereotypes, which in turn mediated the relationship between contact and prejudice toward Muslims (Gonzalez et al., 2008). Therefore, further research should explore whether frequent and positive intergroup contact is related to individuation and reduced stereotyping of international students, and thus indirectly associated with less negative attitudes.

In relation to participants’ overall attitudes toward international students, the results indicated that Anglo-Australian students predominantly described their attitudes
as *somewhat positive*. Participants expressed comparable *somewhat positive* feelings toward foreign students using the feeling thermometer. Other studies that employed the feeling thermometer to measure global attitudes toward international students obtained varying results. Respondents in Ward et al. (2005) study gave *very positive* evaluations; whereas the US participants in Spencer-Rodgers’ (2001) study provided a *somewhat positive* rating of international students. These disparities in evaluations of foreign students may suggest that the measure is context-specific and may vary depending on the target population. Therefore, it is more meaningful, as suggested by Spencer-Rodgers and McGovern (2002), to compare evaluations of host students with those of international students. Participants in the current study revealed a more favourable attitude toward Anglo-Australian students, however the difference was minor and was not indicative of any unfavourable attitudes toward international students.

Interestingly, participants’ attitudes toward international students were less favourable when measured by their level of tolerance toward the increasing numbers of international students in Australia. While over half of respondents reported that the numbers were *about right*, the majority of the remaining responses indicated that they were in the *high to much too high* range. Ward et al. (2005) support this finding in their New Zealand research, in which even more host students deemed the numbers of international student as too high. In the current study, the participants’ attitudes may be reflective of the commonly held perceptions that the majority of international students choose to study in Australia to secure themselves permanent residency. Many education providers are perceived as ‘visa factories’ that allow international students to jump the immigration queue (Mares, 2010). It is possible that participants’ attitudes reported in this item may have been influenced by these issues, along with the more recent debates on the large influx of ‘boat people’ entering Australia illegally.
Past research in Australia found that the majority of citizens recognised that racism and intolerance toward minority groups is a matter of concern; and national attitudinal surveys indicated that one in five overseas born respondents experienced some level of discrimination in education (Dunn et al., 2004; Graycar, 2010). In view of aforementioned findings, the moderately favourable attitudes reported by participants in the present study appear somewhat inconsistent. A possible explanation for the differing findings resides in the target population of higher education, where negative attitudes are possibly less pronounced compared to the society at large. This is supported by research asserting that negative and racist attitudes toward out-groups are positively associated with age and non-tertiary education. In addition, it is likely that participants' attitudes were influenced by the desire to respond in a politically correct manner, appear tolerant and liberal. Prior research has shown the usefulness of the social desirability scale in examining the relationships between participants' inclination to provide socially desirable answers and their attitudes (Schweitzer et al., 2005). The current study did not include the social desirability scale but it is recommended that future research on attitudes and integrated threat theory incorporates this measure to control for social desirability bias.

Another methodological limitation of the present study pertains to the recruitment process and its impact on the demographic characteristics of the sample. In their research on racism in Australia, Dunn et al. (2004) found that men, compared to women, were more inclined to have negative and racist attitudes toward out-groups. The current study had a very low proportion of men compared to women, potentially because the sample was recruited mainly from undergraduate psychology courses, which are typically vastly represented by female students. Future studies on attitudes and threats should ensure the sample and thus the beliefs are more representative of the larger population. This could be achieved by including other courses in the recruitment
process, such as information technology and engineering, which typically have more male students.

The current study also failed to provide respondents with a vehicle for expressing their opinions in more detail and expanding on their personal experiences with international students. A number of participants suggested to the researcher that they were ‘disappointed that there was no space for qualitative data’ and that the researcher would have ‘received more valuable information and insight’ by using qualitative research methods. Reports from some respondents that were emailed to the researcher regarding more personal experiences with international students varied vastly. Therefore indeed, future studies should expand on the current knowledge about Integrated Threat Theory and how it relates to both intergroup attitudes and intercultural contact by means of qualitative studies. In addition, such research design would allow for a more thorough exploration of the local community’s concerns and experiences with international students.

The current research is also limited in its exploration of the nature of contact between Anglo-Australian students and international students. The study focused on the quantity of intercultural contact, whereas the quality of intercultural relations was not examined. Stephan et al. (2000) demonstrated that interaction frequencies as well as quality of those interactions influence people’s attitudes and their perceptions of threat from out-groups. Hence future studies could focus on questions that investigate both aspects of intercultural contact to better understand its association with attitudes and perceptions of threat. Such knowledge would inform education providers and community organisations concerned with intercultural matters about the obstacles that impact on Anglo-Australians’ contact with international students. Consequently, interventionist strategies could be developed that aim to increase and encourage
interactions with international students, and therefore potentially improve relations between host communities and foreign student groups.

Integration of international students through increased and positive contact should not cease at the university campus but should be extrapolated to other areas of community life. Developing more cross-cultural interactions and structured intergroup exposure during various sporting, university or community events may increase liking for and knowledge of the diverse community of international students, consequently decategorising, changing negative stereotypes and thus reducing negative attitudes toward them.

The associations revealed in the present study between realistic threat and attitudes could be addressed in a manner that reduces people's perception of threat posed by international students. Realistic threat, which is oftentimes exaggerated by fear-evoking media coverage, could be potentially lowered by means of non-sensationalist journalism that promotes diversity and emphasises the contribution of international students to the Australian economy and international relations.

The aim of this study was to identify which perceived threats best predict attitudes toward international students, and to determine the role intergroup contact as a separate predictor of those attitudes. The findings provided partial support for the Integrated Threat Theory because it revealed that only two variables, namely realistic threat and negative stereotypes, were significant and unique predictors of attitudes toward international students. Although, one cannot determine causality in the present study due to its correlational nature, the findings highlight that the two predictors comprise a significant component of negative attitudes toward international students. Intergroup contact failed to directly and uniquely explain any of the variance in attitudes, however it may have affected attitudes in an indirect manner, via negative stereotypes. Overall, the study indicated that Anglo-Australians hold moderately
positive attitudes toward international students but have very limited social and educational interactions with them.

The importance of this study is highlighted by the recent assaults that occurred on international students in Melbourne and Sydney and the initial response by the government and media indicating that there was no cause for concern. Combined with the shortage of scientific knowledge investigating the root cause of these occurrences there are implications to our stated policy regarding multiculturalism. These events both indicate potential shortfall in policy creation, coordination or implementation at the federal state level to ensure safety of all individuals and promote cross-cultural diversity. The present study should form a part of a larger effort in developing a body of knowledge to improve our understanding of Anglo-Australians’ attitudes towards immigrants, such that our policy and application thereof are better suited to the multicultural society that Australia is committed to building.
References


doi:10.1016/j.ijintrel.2009.10.003


conducted at the meeting of Academy of the Social Sciences in Australia, Universities Australia & Australian Human Rights Commission, Canberra.

Retrieved from


http://www.usm.my/ijaps/articles/Editorial2.pdf


University of Wellington. Retrieved from

Appendix A

Research Project Title: Anglo-Australian attitudes and perceptions of international students

Participant Information Letter

You are invited to participate in this project, which aims to explore the attitudes toward, and experiences with international students.

My name is Katarzyna Koska and I am currently enrolled in Honours in Psychology at Edith Cowan University. This project is a requirement of my degree and has been approved by Faculty of Computing, Health and Science Human Research Ethics Sub-committee.

The aim of this research is to examine Anglo-Australians’ attitudes towards, and experiences with international students. It is hoped that findings revealed by this study will enhance the understanding of how the Australian society perceives international students and determine factors that contribute to fruitful and successful intercultural relations.

All participants in this research must be of Anglo-Australian descent, born in Australia and whose both parents were born in either Australia or other Anglo-Celtic countries.

As part of this research you will be requested to complete an online questionnaire that should take approximately 20 minutes. The questionnaire can be completed at your convenience. The questionnaire will be anonymous; therefore no identifying information will be obtained.

Participation in this study is entirely voluntary and you can refuse or withdraw your participation at any time and do not have to provide a reason.

Access to the information acquired during the survey will be limited to only my supervisor and myself. Any printed hard copies of the questionnaires will be kept in a secure filing cabinet at Edith Cowan University for a minimum period of seven years, after which they will be destroyed. Information regarding the results of the research will be made available to you upon request by contacting me via phone or e-mail (provided below).

Should participation in this study make you feel distressed or uncomfortable, you may contact Lifeline counselling services on 13 11 14. If you have any questions or concerns about taking part in this questionnaire, you may contact my supervisor, or myself. If you wish to speak to an independent representative of ECU, you may contact Professor Craig Speelman.

Katarzyna Koska: (Researcher) Prof. Craig Speelman (Independent Representative)
Thank you for taking the time to read this information and for expressing interest in my research.

Please click on the link to access the on-line survey: http://ecuphysych.qualtrics.com/SE/?SID=SV_8q5bWjOpiJwAatu

Yours Sincerely,

Katarzyna Koska
Appendix B

EDITH COWAN UNIVERSITY
School of Psychology and Social Science

FORM.

Participant Consent Form

Research Project Title: Anglo Australians' attitudes and experiences with international students

Please read the following statements and select 'I Agree' marked below if you agree to participate in this study:

1. I have read and understood the participant information letter that was provided to me by the researcher, Katarzyna Koska, and I have understood the aim of the research.

2. I understand that my involvement in this project will involve completing an online questionnaire of approximately 20 minutes duration.

3. I was given the opportunity to ask questions about the research and all questions have been answered to my satisfaction.

4. I understand that my full name or any other identifying information will not be required in completing the survey and therefore will not be disclosed or referenced in any way without my consent.

5. I understand that both printed and electronic versions of my completed questionnaire will only be used for the purpose of this study and will be kept confidential in a secure possession of the research team.

Please remember when completing this questionnaire that there are no right or wrong answers; we are only interested in your opinions!

__________________________
I Agree

○
Demographic Information

Q1. Are you an:
- [ ] International Student
- [ ] Australian Student

Q2. In which country were you born?

Q3. Is your cultural background British (e.g. English, Scottish, Irish, Welsh)?
- [ ] Yes
- [ ] No

Q4. Do you speak only English at home?
- [ ] Yes
- [ ] No

Q5. Do you parents only speak English at home?
- [ ] Yes
- [ ] No

Q6. Please select the age group that applies to you:
- [ ] 16 - 20
- [ ] 21 - 25
- [ ] 26 - 30
- [ ] 31 - 35
- [ ] 36 - 40
- [ ] 41 - 45
- [ ] 46 - 50
- [ ] 51 - 55
- [ ] 56 - 60
- [ ] 61 - 70
- [ ] above 70

Q7. Please indicate your gender:
- [ ] Female
- [ ] Male
Q8. Please indicate your course:

- Undergraduate
- Postgraduate

Q9. What is your residential post code?

Questionnaire

Q10. The following questions concern your personal opinions about international students. Using the scale below, please select the rating point that best represents your views:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>International students have many qualities I admire.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International students have made an important contribution to our universities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like having international students in my class.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International students are good mates.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International students have a positive influence in our class.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International students are boring.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International students are good role models for Australian students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International students don’t get along well with Australian students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t like international students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International students are not interested in being friends with Australian students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There should be fewer international students in the country.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We should make an extra effort to welcome international students.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q11. The following questions are about how you feel or think you would feel while interacting with people who are different from you. Imagine that you are interacting with a group of international students. Indicate how you would feel using the following scale:

<table>
<thead>
<tr>
<th></th>
<th>Not at All</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>How confident do you think you would feel?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How awkward do you think you would feel?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How patient do you think you would feel?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How uncertain do you think you would feel?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How anxious do you think you would feel?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How irritated do you think you would feel?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q12. The following questions ask you to present a general picture of how much contact you actually have with international students. Using the scale below, please select the option that best represents your views:

| How often do you do things socially with international students? This includes things like going to the movies or parties, eating together, etc. | Rarely | Occasionally | Sometimes | Often | All the time |
|---|---|---|---|---|
| How often do you study or do other class work with international students? | Rarely | Occasionally | Sometimes | Often | All the time |
| How often do you talk to and converse with international students? | Rarely | Occasionally | Sometimes | Often | All the time |

Q13. How many of your friends are international students?
- none
- 1
- 2-3
- 4-5
- 6-7
- 8-9
- 10 or more

Q14. Use the following thermometer to indicate your overall feelings about international students. The scale runs from 0 to 100 degrees, where 0 indicates a very cold attitude and 100 indicates a very warm attitude. Please mark on the thermometer below which best indicates your personal attitude.

Q15. Use the following thermometer to indicate your overall feelings about Australian students. The scale runs from 0 to 100 degrees, where 0 indicates a very cold attitude and 100 indicates a very warm attitude. Please mark on the thermometer below which best indicates your personal attitude.
Q16. Below are some characteristics that may be used to describe people. In this section we are interested in your perceptions of international students. For each characteristic below, please select the scale point that best describes your impressions of international students:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Scale Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>friendly</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>hard working</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>responsible</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>efficient</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>tense</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>open minded</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>cold</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>kind</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>intelligent</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>unhelpful</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>conscientious</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>thoughtless</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>sociable</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>accepting</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>rude</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>unfriendly</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>lazy</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>irresponsible</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>inefficient</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>easy going</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>closed minded</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>warm</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>unkind</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>unintelligent</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>helpful</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>careless</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>thoughtful</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>unsociable</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>rejecting</td>
<td>0 0 0 0 0</td>
</tr>
<tr>
<td>courteous</td>
<td>0 0 0 0 0</td>
</tr>
</tbody>
</table>

Q17. For each of the following statements, select a response that best represents your views, using the scale below:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>When international students make academic gains, it is at the expense of Australian students:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less money is spent on Australian students when more money is spent on international students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When teachers make their classes simpler so international students can understand, classes are not challenging for Australian students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fewer educational opportunities are available for Australian students when more educational opportunities are available for international students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian students lose out when international students hold up the class by asking questions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More school awards for international students mean fewer awards for Australian students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian students get less feedback on assignments when teachers put more effort into correcting the assignments of international students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic success for international students means that it will be harder for Australian students to get ahead.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When lecturers spend more time answering questions from international students, they spend less time answering questions from Australian students.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
International students have too much money to spend.

Because international students work so hard, Australian students feel pressured to change their study habits.

International students get too much attention from teachers/lecturers in Australia.

International students speak their own language when they should be speaking English.

International students stick to their own customs instead of adopting Australian customs.

International students have a negative effect on the quality of Australian education.

International students do not appreciate the Australian way of life.

International students put pressure on health care facilities in Australia.

Students’ social environment has been negatively affected by international students.

International students bring new diseases to Australia that would not otherwise be here.

International students are changing the standards of academic success in Australia.

Q18. There were almost 500,000 international students enrolled in Australia in 2009.

<table>
<thead>
<tr>
<th>much too low</th>
<th>Much too high</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you think that this number is...?</td>
<td></td>
</tr>
</tbody>
</table>

Q19. Which of the following nationalities of International students did you mainly think of when completing this questionnaire? Please indicate the answer(s) that best represents your view.

- Chinese
- British
- Indian
- American
- Korean
- Other, please specify
- Malay