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Intergroup contact in context: The mediating role of social norms and group-based perceptions on the contact–prejudice link

Abe Ata^a, Brock Bastian^b, Dean Lusher^{c,*}

^a Institute for the Advancement of Research, Australian Catholic University, Fitzroy, VIC 3065, Australia

^b Australian Centre for Peace and Conflict Studies, Institute for Social Science Research & Department of Psychology, University of Queensland, St Lucia, QLD 4072, Australia

^c School of Behavioural Science, University of Melbourne, Redmond Barry Building, Parkville, VIC 3010, Australia

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ABSTRACT

The prejudice-reducing effects of intergroup contact have been well documented. However few studies have investigated the importance of the broader context within which contact occurs. The current study examined the predictors of social distance from Muslims in a large sample of Australian secondary school children ($N = 980$). Intergroup contact was an important predictor of reduced social distance even after demographics and perceptions of parents, school, media and broader intergroup dynamics were taken into account. However, in part the contact–social distance relationship was mediated by perceived parental support for intergroup relations and perceived fairness of media representation. Student's perceptions of broader group dynamics relating to collective threat and differentiation between groups impeded the relationship. The findings attest to the importance of the broader context within which contact occurs. Having contact with outgroup members leads to reduced social distance to the outgroup, however perceived norms and outgroup perceptions play a pivotal role in explaining this relationship.

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1. Introduction

Relations between Muslims and non-Muslims have been an increasing focus of social and political concern over the past decade. Within Australia the potential for conflict between these two groups reached a crescendo during riots at Cronulla beach in Sydney in December 2005, highlighting the potential for social division between “white Australians” and those of “Middle Eastern appearance” (Poynting, Noble, & Tabar, 2001). Islamic communities have expressed fear that non-Muslim Australians view extremist Islam as representative of Islamic beliefs (Saeed, 2006) leading to generalized anger and prejudice towards those of Islamic faith. At the same time, fear of Islamic terrorists among non-Muslims has contributed to prejudice against asylum seekers (Lusher & Haslam, 2007). In short, mutual fear and perceived threat casts a pall over Australian Muslim/non-Muslim relations.

If countries like Australia are to reduce the likelihood of segregation of religious communities, better relations between Muslim and non-Muslim residents must be achieved. In the psychological literature, one way of reducing prejudice that has received a great deal of attention is intergroup contact (Pettigrew & Tropp, 2006). Having a friend from another group has been argued to reduce negative attitudes towards the group as a whole. However, intergroup contact is not isolated from other important factors and the environment within which contact occurs plays an important role in facilitating or impeding the contact–prejudice relationship. Several factors may be particularly important in explaining how and why contact

* Corresponding author. Tel.: +61 3 8344 4757; fax: +61 3 9347 6618.

E-mail addresses: a.ata@patrick.acu.edu.au (A. Ata), bbastian@unimelb.edu.au (B. Bastian), dean.lusher@unimelb.edu.au (D. Lusher).

reduces prejudice. First, the context within which intergroup contact occurs has been shown to influence the contact–prejudice link, suggesting that the generalizability of the effects of contact beyond the immediate contact situation may depend on a range of broader factors (Hughes, 2007; Pettigrew, 1998). Second, the effects of contact appear to be reduced when substantial intergroup anxiety or perceived threat are present, suggesting that broader group-based perceptions may mediate the contact–prejudice relationship. Third, even if intergroup contact reduces prejudiced attitudes, its effects on reducing social distance between groups and increasing the social integration of groups within a particular society are less certain. Although most research on the contact–prejudice link has focused on attitudes, the structural integration of groups within a society – how ‘close’ people feel to outgroups and whether they would be likely to initiate relational ties with their members – is, arguably, of at least equal social importance. The effects of contact on social distance versus integration have been largely neglected. The research literatures relating to these three factors that complicate the contact–prejudice link are discussed below.

1.1. *Context and intergroup contact*

Intergroup contact has long been viewed as a means of reducing prejudice between groups. According to the ‘contact hypothesis’, the prejudice-reducing effects of contact with specific outgroup members generalize to the outgroup as a whole, thereby impacting on broader intergroup relations. Allport (1954) stressed that for contact to have the desired impact on prejudice the conditions of equal group status, common goals, intergroup cooperation and support of the goals of intergroup contact by external authorities, law, or custom were key conditions. However, there have often been conflicting and mixed results regarding these conditions (Brown & Hewstone, 2005). A recent meta-analysis of 713 independent samples from over 500 studies demonstrates that intergroup contact typically reduces prejudice and that although Allport’s conditions are important facilitating factors, they are not essential for prejudice reduction (Pettigrew & Tropp, 2006). Mere contact with members of another group appears to be a powerful force in the reduction of prejudice, arguably due to the tendency for familiarity to breed liking (Tropp & Pettigrew, 2005).

Despite its promise, critics of the contact hypothesis have argued that the theory is ‘too simple’, with ongoing disagreement regarding what contextual factors are necessary for optimal contact to occur (Maoz, 2002). The theory has been criticized for failing to account for the mediating processes through which attitudinal change is generated (Bar-On, 1999; Maoz, 2002; Pettigrew, 1998; Ross, 2000) and whether contact effects generalize beyond the immediate contact situation. Furthermore, Allport’s fourth condition, relating to support of the authorities, law, or custom, cannot be addressed within the immediate contact situation and requires an investigation of broader contextual factors. These factors may hold particular significance for whether the effects of the intergroup contact situation generalize to perceptions of the outgroup as a whole. Consequently, research on the contact hypothesis has evolved to focus more on process or intervening variables during contact, and on wider contextual factors that may facilitate or impede the development of better relations (Hughes, 2007; Pettigrew, 1998).

Overall, it is increasingly recognized that contact in the real world does not happen in a vacuum, and that social norms and broader intergroup contexts are important factors in explaining how and why contact reduces intergroup prejudice (Hughes, 2007). Generally speaking, social norms, defined as socially shared definitions of the way people do behave or should behave (Miller, Monin, & Prentice, 2000) have powerful effects on prejudice and conflict (Crandall & Stangor, 2005; Sherif, 1936). As such, there appears to be good reason for investigating the contact hypothesis within a larger social context that includes broader intergroup perceptions as well the influence of relevant social norms.

1.2. *Normative influence, intergroup perceptions and intergroup contact*

There is a rich theoretical tradition that suggests that social norms powerfully predict behavior (Allport, 1954; Asch, 1958; Sherif, 1936) and that individuals may value knowledge of social norms more than their own personal beliefs (Kuran, 1995; Miller et al., 2000; Stangor, Sechrist, & Jost, 2001). Recent research within schools has begun to shed light on normative factors that may mediate the prejudice-reducing effects of contact. Supportive school environments that facilitate commitment to ‘relationship building’ have been suggested as critical for optimal contact to occur (Hughes, 2007) and bilingual environments have been shown to have a positive influence on school children’s intergroup attitudes (Hughes, 2007; Wright & Tropp, 2005). Furthermore, the influence of peer-group and perceived parental disapproval of contact has been demonstrated as important for judgments of race-based exclusion by students in grades 4–10 (Crystal, Killen & Ruck, 2008).

Attitudes held by significant others are important normative influences that impact on the contact–prejudice link however media may also play an important role. Radio host Allen Jones led a ‘call to protest’ on his radio talkback program that was cited (both by himself and others; see Wise, 2006) as responsible for the display of racially focused anti-social behavior during the Cronulla riots. In social psychology the link between media and prejudice has a long history (Cantril & Allport, 1935) and theories of media persuasion claim that beliefs are influenced by media cultures and programs (Ball-Rokeach, Grube & Rokeach, 1981) and that mass communication is very good at conveying both descriptive (Mutz, 1998; Noelle-Neumann, 1973) and prescriptive (Cialdini, Kallgren, & Reno, 1991; Kallgren, Reno, & Cialdini, 2000) norms. More recent research has demonstrated that media has a significant impact on reducing intergroup prejudice and conflict via changed perceptions of social norms (Paluk, 2009; see also Esse, Veenvliet, Hodson, & Mihic, 2008).

A significant body of research on intergroup contact has also investigated the role of outgroup perceptions and intergroup emotions. Perceived threat has been shown as a critical factor that may influence the success of intergroup contact.

According to the integrated threat theory of prejudice (Corenblum & Stephan, 2001) negative attitudes are predicted by proximal factors consisting of perceived threats from outgroup members. These threats may be both realistic (i.e., economic) or symbolic (i.e., cultural) and are predicted by distal factors such as negative outgroup contact. Moreover, both symbolic and realistic threat mediate the relationship between intergroup contact and reduced prejudice (Ward & Masgoret, 2006).

Cognitive representations of the outgroup are also important factors in facilitating the contact–prejudice link (Dovidio, Gaertner, & Kawakami, 2003). Intergroup contact has been argued to reduce prejudice by changing social representations from ‘us’ versus ‘them’ to a more inclusive ‘we’ (Gaertner, & Dovidio, 2000) and more inclusive intergroup perceptions have been shown to mediate contacts prejudice-reducing effects (Dovidio, Gaertner, & Kafati, 2000). Recent research has demonstrated that viewing social identities as fixed, non-overlapping and incompatible has been shown to have implications for intergroup attitudes (Bastian & Haslam, 2008; Hong et al., 2003). This work suggests that specific beliefs about how incompatible Muslims and Australian identities are would be likely to impact on the contact–prejudice link.

Incorporating a focus on both social norms and intergroup perceptions, Pettigrew, Christ, Wagner, and Stellmacher (2007) investigated the influence of direct and indirect contact on both affective and cognitive factors. They asked participants whether they had outgroup friends and also whether their ingroup friends had outgroup friends. They found that having direct contact was related to having ingroup friends with outgroup friends (indirect contact) and that both factors related negatively to prejudice. Furthermore they found that the likelihood of having direct or indirect contact was positively associated with the presence of the outgroup in the local neighborhood and at work, and that indirect contact increased where ingroup norms were perceived to be tolerant towards the outgroup. Importantly, threat mediated the relationship between contact and prejudice. Having an outgroup friend reduced both perceived individual and collective threat, but indirect contact was mostly associated with diminished collective threat. These findings are supported by other studies that have included secondary contact variables (Hewstone et al., 2005; Paolini, Hewstone, Cairns, & Voci, 2004), demonstrating the importance of taking into account indirect exposure to the outgroup and social context. In particular, tolerant group norms and indirect contact are associated with reducing collective, as opposed to personal, threat.

1.3. Social distance and prejudice

Social distance has a long history in the study of intergroup relations. Avoidant behaviors and attitudes were one of the earliest measures of prejudice (Samelson, 1978) with much of this work pioneered by Bogardus (1925, 1938) who developed one of the best known measures of social distance. Intergroup social distance has been defined as “feelings of unwillingness among members of a group to accept or approve a given degree of intimacy in interaction with a member of an out-group” (Williams, 1964, p. 29).

Subsequent to this earlier research, psychologists interested in the same outcomes began labeling them as prejudice, stereotyping and discrimination (Duckitt, 1992; Samelson, 1978). The study of avoidance and prejudice share the same birthplace, and perhaps for this reason researchers do not generally distinguish between the two concepts (Goff, Steele, & Davies, 2008). However, intergroup distancing may be distinct from prejudice in that a desire not to affiliate with another group may arise even when overt negative attitudes are weak or non-existent. This kind of passive or laissez-faire prejudice is evident where strong segregation between racial or religious groups remains even when explicitly expressed attitudes are rare (Massey & Denton, 1993; Williams & Eberhardt, 2008).

While a large body of research has focused on the link between intergroup contact and prejudice, none has investigated social distance as a measure of intergroup relations. If intergroup contact is to impact on the broader structural integration of groups within society, then how it affects feelings of ‘closeness’ and the motivation to cross intergroup boundaries is an important extension of previous work.

A brief review of the literature highlights a number of contextual factors (e.g., parental approval, media and school support) that may play an important role in the success of student’s intergroup contact as a means of improving the structural integration of different groups within society. Muslim and non-Muslim relations within Australia provide an interesting context within which to investigate the effects of intergroup contact on social distance. First, there remain large sectors of Australian society that are opposed to Muslim integration. Whole communities, including authorities within those communities, have opposed Muslim integration and the development of Muslim cultural and educational centers (e.g., the recent rejection of a proposed Muslim school in Camden, NSW). Moreover, the media has played a prominent role in the mobilization of anti-Muslim sentiment. Together these factors suggest the salience of anti-Muslim norms and the role of institutions and significant others in facilitating or impeding the generalized effects of contact. Second, the troubled relations between Muslims and non-Muslims are salient within Australia as they are around the world. In particular the association of terrorist activities with Islam contributes substantially to an intergroup dynamic characterized by anxiety and threat. Where intergroup conflict is salient, broader group-based perceptions are likely to play a particularly important role in whether the effects of contact are generalized to the group as a whole.

If better relations between Muslim and non-Muslim groups are to be achieved within Australia and other countries, understanding the predictors of social distance between future generations is a critical first step. With a focus on school-aged youth across a broad cross-section of Australia, the current research aimed to answer some of these questions. First, a focus on a broad range of demographic factors, normative influences, and group-based perceptions allowed for an investigation of the predictors of social distance and a test of the efficacy of contact in reducing social distance. Second, this broader focus allowed for an investigation of the mediators of the contact–social distance relationship. Specifically, we predicted that

direct contact would reduce social distance towards Muslims (Pettigrew & Tropp, 2006), but that broader social norms would play an important mediating role (Pettigrew et al., 2007). In particular, perceived parental and school support for positive intergroup relations was expected to play an important role in explaining the generalized effects of contact on social distance, supporting the work of Crystal et al. (2008). Furthermore, perceiving the media as unfair in its portrayal of Muslims was also expected to facilitate the relationship (Roberts, 2006). Based on the findings of Turner, Hewstone, and Voci (2007), we expected that group-based perceptions would mediate the relationship as well, with contact predicted to reduce perceived symbolic threat and beliefs that Muslim and Australian identities are incompatible, thereby facilitating reduced social distance towards the group as a whole. Symbolic as opposed to realistic threat is particularly relevant given the emphasis on ideological differences between Islam and the West.

Finally we also examined several demographic variables including gender, year level, language, religion, parental country of birth, school location, socio-economic status (SES) and the presence of Muslims within a student's neighborhood. These variables were expected to represent broader contextual influences that may impact on the contact–prejudice link. Although we did not have firm predictions for the influence of all demographic variables we expected that lower SES, being Christian, speaking only English, attending a rural school and a lack of opportunity for contact (i.e., low-level Muslim presence in neighborhoods) would amount to normative influences that may weaken the social distance reducing function of intergroup contact.

2. Method

2.1. Participants

An initial group of 1000 students from 20 secondary schools around Australia (from 5 of 6 states and 1 of 2 territories) were administered a survey examining attitudes towards Muslims and Islam in February–July 2006. Schools were selected by first seeking permission from the relevant school agencies (state government departments, Catholic Education Offices, and Independent School Councils). In each selected school, the survey was administered to all eligible students present on the day of the survey in years 10–12 (typical ages 14–18). The research was part of a larger study examining the attitudes of non-Muslim and non-Jewish secondary schools students towards Muslims and Islam (Ata, 2007). Participating schools were either Christian or non-religious.

Exploratory statistics demonstrated that one school was an outlier on the demographic and prejudice-related variables, so it was discarded from our sample. A further 61 cases were discarded due to missing data. As a result there were 916 participating students from 19 schools. The final sample characteristics were as follows: sex (male: 297; female: 619), year level (year 10: 29; year 11: 517; year 12: 370), school type (Catholic: 13; independent: 3; state/government: 2; other Christian school: 1), language spoken at home (English only: 737; language other than English: 179), religion (Christian: 702; non-Christian: 214), parental background (born in Australia: 763; born outside Australia: 153), and metropolitan versus rural location (urban: 292; rural: 624).

2.2. Materials

The research instrument was a structured questionnaire administered to students in a classroom setting. Unless otherwise specified, a mean score was derived from the items included for each scale. Cronbach alpha values for the scales are provided in parentheses. The response scale was 1 (*Strongly disagree*) to 5 (*Strongly agree*) unless otherwise stated.

2.2.1. Social distance

A 3-item measure of social distance to Muslim Australians was used as the dependent variable (“I would enjoy having a close Muslim friend”, “I would go out with a Muslim”, “I would marry a Muslim”; $\alpha = .87$). Scores were reversed so that higher scores represent a greater desired distance from Muslims. This measure was developed for the current research and differs from the Bogardus scale. It investigates a smaller range of contact scenarios and utilizes mean scores rather than a Guttman scale approach.

2.2.2. Intergroup contact

One item measured intergroup contact with participants responding either ‘yes’ = 1 or ‘no’ = 0 to the question “Do you have any Muslim friends?” Having a Muslim friend was indicative of direct contact ($n = 206$).

2.2.3. Normative influence variables

Three measures assessing the influence of parental attitudes towards contact, school based support for contact and representations of Muslims in the media were included. *Perceived Parental Approval* assessed the influence of perceived parental attitudes towards students contact with Muslims. For this measure participants were asked to respond to three items on a scale ranging from: “My parents would be happy if I had a close Muslim friend”, “My parents would be happy if I went out with a Muslim” and “My parents would be happy if I married a Muslim” ($\alpha = .88$). *School Support* was included as a measure of the perceived contribution of the school towards improving intergroup relations. For this measure participants responded to two items designed to assess their perceptions of the school's influence on intercultural relations (“Since being

at this school I understand Muslims better”, “I have learned a lot about Muslims at this school”; $\alpha = .83$). Higher scores represented increased school support of Muslims. Lastly, *Media Representation* assessed how participants felt Muslims are represented in the media and included two items (“Australian TV and newspapers show Muslims in a fair way”, “Hollywood movies show Muslims in a fair way”; $\alpha = .62$). Again, higher scores represented greater agreement with fair representations of Muslims.

2.2.4. Intergroup perceptions

Two measures of intergroup perceptions were included in the study to capture both cognitive and emotional aspects of intergroup prejudice. A question about *Symbolic Threat* was included to examine feelings of threat attached to Muslims as a group (“Muslims threaten the Australian way of life”). For this item higher scores represented increased perceived threat. *Identity Incompatibility* represented a measure of the extent to which people believed that Muslim and Australian identities can co-exist (“Muslims do not belong in Australia”, “A person can be both a good Muslim and a loyal Australian” (reversed); $\alpha = .74$). Higher scores indicate a decreased belief in identity compatibility.

2.2.5. Demographic characteristics

We also included a number of demographic variables relating to participant and school characteristics. These were gender (female: 0, male: 1), language spoken at home (other: 0, English only: 1), religion (non-religious: 0, Christian: 1), birthplace of parents (other: 0, Australia: 1) and school location (rural: 0, metro: 1). We also included a measure of socio-economic status (SES) using the socio-economic index for areas (SEIFA, Australian Bureau of Statistics (ABS), 2001a, 2001b) which was derived from the area in which the school was located. For the variable SES, higher scores represented higher socio-economic status. Finally, we included a measure of opportunity for contact or the presence of Muslims within the local neighborhood. Participants responded either ‘yes’ = 1 or ‘no’ = 0 to the question “Do you have any Muslim neighbors?” ($n = 50$)

3. Results

Table 1 presents the correlations between all variables. Social distance shows a moderate relationships between being male ($r = .15, p < .001$), being Christian ($r = .14, p < .001$), lower SES ($r = -.11, p < .001$) and increased social distance. Muslim presence (in the form of having a Muslim neighbor) was not significantly correlated with social distance ($r = -.03, p > .05$). Language spoken at home ($r = -.05$), school location ($r = -.02$) and parental birthplace ($r = -.05$) were also not significantly related (p 's $> .05$). Importantly, there is evidence for a relationship between normative influences and social distance, with modest correlations showing that perceived school support ($r = -.14, p < .001$) related to decreased social distance and perceptions of fair representation of Muslims in the media ($r = .19, p < .001$) showing a positive relationship with increased social distance. Noteworthy is the particularly strong and negative relationship between parental approval towards contact and social distance ($r = .78, p < .001$). This highlights the importance of parental influence over school student's attitudes although is likely inflated due to similarity in measurement approach for both variables. Students intergroup perceptions themselves also held strong relationships with social distance, demonstrating that perceived symbolic threat ($r = .53, p < .001$) and beliefs that Muslim and Australian identities were incompatible ($r = .58, p < .001$) are both strongly related to increased social distance. Finally, direct intergroup contact is negatively correlated with social distance ($r = -.29, p < .001$) indicating the positive influence of contact on prejudice towards Muslims generally.

Table 1
Correlations between dependent and independent variables.

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Social distance	–														
2. Sex	.15***	–													
3. Year level	-.04	-.14**	–												
4. Language	-.05	.07*	-.08*	–											
5. Religion	.14***	.00	.02	.11***	–										
6. Parental birthplace	-.05	.06	-.02	.67***	.19***	–									
7. SES	-.11***	-.31***	.29***	-.31***	-.16***	-.28***	–								
8. School location	-.02	-.25***	.18***	-.37***	-.04	-.35***	.77***	–							
9. Muslim presence	-.03	-.06	.02	-.12***	-.03	-.14***	.18***	.16***	–						
10. Parental approval	-.78***	-.05	.03	.17***	-.12***	.13***	-.00	-.09**	.00	–					
11. School support	-.14***	.03	-.05	-.01	.03	-.04	-.08*	.01	.03	-.11***	–				
12. Media	.19***	.09**	-.05	.09**	.09**	.10**	-.18***	-.15***	-.03	.12***	.04	–			
13. Symbolic threat	.53***	.22***	-.04	.08*	.17***	.06	-.17***	-.05	-.00	.45***	-.05	.22***	–		
14. Identity compatibility	.58***	.19***	-.04	.04	.11***	.06	-.21***	-.15***	-.05	.50***	-.07	.29***	.56***	–	
15. Direct contact	-.29***	-.15***	.14***	-.21***	-.14***	-.14***	.33***	.29***	.17***	-.19***	.08*	-.10**	-.17***	-.25***	–

* $p < .05$.

** $p < .01$.

*** $p < .001$.

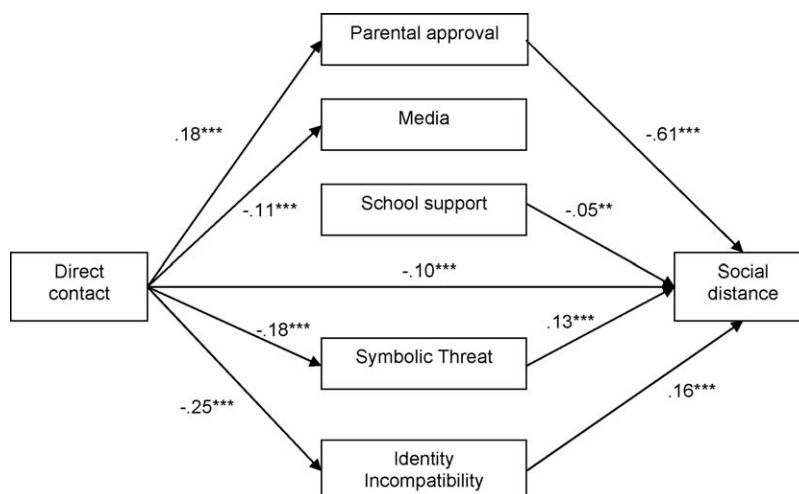


Fig. 1. Path-model (with standardized coefficients) of the effects of direct contact on social distance towards Muslim Australian by non-Muslim Australians ($N = 916$), demonstrating mediation via normative influence and intergroup perceptions. A saturated model with only significant paths is shown. Correlations: parental approval-media = .11**, parental approval-school support = $-.09^{**}$, parental approval-symbolic threat = .43***, parental approval-identity compatibility = .47***; media-school support = .05; media-symbolic threat = .21***; media-identity compatibility = .29***; school support-symbolic threat = $-.03$; school support-identity compatibility = $-.05$; threat-identity compatibility = .54***. ** $p < .01$, *** $p < .001$.

We next simultaneously regressed all predictor variables onto social distance in order to investigate the unique contribution of each. Overall the regression model was significant, $F(14, 901) = 143.66, p < .001, R^2 = 0.69$. Results show that demographic variables do not make any contribution to social distance (year level: $\beta = .01, p > .05$, language: $\beta = .04, p > .05$, religion: $\beta = .01, p > .05$, parental birthplace: $\beta = -.03, p > .05$, SES: $\beta = -.02, p > .05$, school location: $\beta = .00, p > .05$, Muslim presence: $\beta = -.00, p > .05$) apart from a modest contribution of gender ($\beta = .04, p < .05$) indicating that boys are more socially distant. Perceived parental approval again explain a large and significant amount of variance in social distance ($\beta = -.62, p < .001$) while perceived school support makes a modest contribution ($\beta = -.05, p < .01$) and media representation does not make a unique predictive contribution ($\beta = .03, p > .05$). Perceived symbolic threat ($\beta = .13, p < .001$) and identity incompatibility ($\beta = .16, p < .001$) both explain unique variance supporting the importance of individual perceptions of broader intergroup relations. Finally, direct intergroup contact also explains unique variance ($\beta = -.09, p < .001$) supporting previous research that contact is sufficient to reduce prejudice independent of other factors.

Finally, in order to assess the role of context in the contact–social distance relationship, the mediating role of normative influences and intergroup perceptions were considered in a path analysis. Using AMOS (Arbuckle, 2006) we fitted a saturated model with the observed parameters. As such, all paths were estimated but only significant paths are presented in Fig. 1. As predicted direct contact is independently associated with reduced social distance ($\beta = -.10, p < .001$), however contact was also associated with more perceived parental approval for Muslim relations ($\beta = .18, p < .001$), with perceptions that the media is unfair towards Muslims ($\beta = -.11, p < .001$) and with decreased perceptions of threat ($\beta = -.18, p < .001$), and decreased perceptions that Muslim and Australian identities are incompatible ($\beta = -.25, p < .001$). As such contact also had an indirect relationship with social distance via parental approval for Muslims relations, symbolic threat and the perceived compatibility of Muslim and Australian identities. Indicative of significant mediations a bootstrapped 95% confidence interval constructed around the unstandardized indirect effects did not include zero for parental support ($-.42, -.20$), symbolic threat ($-.28, -.13$), and identity incompatibility ($-.40, -.25$) (Preacher & Hayes, 2004) which themselves were significant predictors of social distance (Table 2). The effects of media on social distance were not significant in the path-model, however media was a significant mediator ($-.07, -.01$) when it was considered independently of the other variables (see Table 1). School support was significantly associated with reduced social distance ($\beta = -.05, p < .001$), however was unrelated to contact.

4. Discussion

The findings of the study support expectations and show that having a Muslim friend is associated with reduced social distance to Muslims generally. This finding is consistent with a vast literature indicating that having direct intergroup contact is associated with improved attitudes towards the outgroup (Pettigrew & Tropp, 2006). The current work extends previous research by replicating the effects for intergroup social distance. The relationship between contact and reduced social distance remained significant after controlling for a broad range of demographic and context-specific variables, highlighting the efficacy of simply having contact with a member of the outgroup.

However as expected the context within which contact occurred played an important role. Social norms such as perceived parental approval mediated the contact–social distance relationship, while there was some evidence that the perceived

Table 2
Standardized beta weights for predictors of social distance in multiple regression.

	Social distance to Muslims
<i>Demographic variables</i>	
Sex	.04*
Year level	.01
Language	.04
Religion	.01
Parental birthplace	-.03
SES	.02
School location	.00
Muslim presence (neighbor)	-.00
<i>Normative influence</i>	
Perceived parental approval	-.62***
Perceived school support	-.05**
Media representation	.03
<i>Intergroup perceptions</i>	
Symbolic threat	.13***
Identity compatibility	.16***
<i>Intergroup contact</i>	
Direct (friend)	-.09***

* $p < .05$.

** $p < .01$.

*** $p < .001$.

fairness of the media did also. As such the generalized effects of contact on social distance are in part explained by perceptions of broader societal norms. Intergroup contact leads to reduced social distance partly because it occurs within contexts where significant others are supportive of intergroup relationships and the outgroup in general. Furthermore, having contact is associated with perceived unfairness of the media, or support for the outgroup as victimized, and this in part accounts for reduced social distance.

In line with predictions the research findings also support group-based perceptions as important process variables that mediate the generalized effects of contact. Contact is related to social distance in part because it reduces perceived collective threat and views about how easily Muslims 'fit' into Australia. This supports previous work that has shown threat or intergroup anxiety to be an important mediator of both direct and indirect contact (Turner, Hewstone, & Voci, 2007) and extends it to include other group-based perceptions.

We also found support for the direct effects of demographic factors, with being male, being Christian and going to school within a lower SES region leading to increased social distance. Importantly, apart from gender, these variables did not contribute to predicting social distance once normative influences and group-based perceptions were taken into account.

The strong influence of perceived parental attitudes towards contact in all analyses is noteworthy and supports the previous research that shows perceived parental approval to be important for students' intergroup relationships (Crystal et al., 2008) and to play an important role in facilitating the generalized effects of contact. Although this relationship may have been inflated due to our measurement approach, it does appear that parents clearly have an important role to play in the social integration of Muslim and non-Muslim future generations. The current findings suggest that promoting tolerance and acceptance among adults within society will have a very significant flow-on effect to their children and their intergroup relations. Perhaps more sobering is the suggestion, although not directly evidenced in the current research, that promoting tolerance and acceptance among students may have a limited effect if their parents are not also supportive of positive intergroup relations.

This research contributes to past work by investigating a broad number of contextual variables that in part explain how and why contact can reduce prejudice. Broadly this demonstrates the importance of taking context into account and shows that this operates at a number of levels. Broad demographic variables make some contribution, however their impact is limited once perceptions of social norms and group-based dynamics are accounted for. Supportive environments are also important both at school and especially at home. In this way the findings also attest to the importance of Allport's 4th condition relating to the support of the goals of intergroup contact by influential others. Previous research has shown that indirect contact has prejudice-reducing effects (Pettigrew et al., 2007) and that this may occur via the attitudes expressed by ingroup friends who have outgroup friends. However, few studies have investigated the role that perceived support (or lack thereof) by significant others plays in facilitating the benefits of intergroup contact itself (cf. Crystal et al., 2008). Future work might pay closer attention to the role of normative support both with regards to significant others and the perceived support of the media. Furthermore, given work to date has focused on the effects of normative support in school-aged samples it would be particularly interesting to see whether this kind of support is just as important in adult samples.

Lastly the current work is unique in that it uses a measure of social distance that has distinct implications for social integration. Whereas negative attitudes provide insight into the affective evaluation of a particular group, measures of social

distance provide a direct assessment of the impact that contact has on the structural integration of groups. This is an important direction for work on intergroup contact given its inherently relational focus. Social distance provides a clear indication of whether having some outgroup contact leads to a desire to have more. It also assesses the extent to which having friends from an outgroup may lead to the potential for more intimate intergroup relations.

The current study is limited by the small number of items used in its measures, given the costs associated with large samples. These measurement limitations may have impacted on our results and future research could look to replicate the findings with more rigorous measures of contact and social distance. This work did not differentiate between having one or more friends, which would likely provide some additional insight. Furthermore our measure of collective threat could be broadened to include notions of symbolic and realistic threat as well as measures of personal anxiety within the contact situation (Stephan & Stephan, 1985, 2000). A particularly interesting question is to what extent and how collective threat translates into anxiety within the contact situation itself.

5. Conclusion

In conclusion, the current research demonstrates the importance of broader social norms and group-based perceptions in mediating the prejudice-reducing effects of intergroup contact. The context of Muslim and non-Muslim contact occurs within the context of broader intergroup relations and these are the focus of much media attention, with significant variance in the support for Muslim integration across various communities. However, contact does have a positive independent impact on social distance, supporting the notion that promoting intergroup contact between Australia's school students will promote improved relations between Muslim and non-Muslim groups within the broader Australian community.

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