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Article

Perceived diversity, threat, and attitudes towards immigrants: the mitigating role of cross-group friendships and empathy

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Abstract

Little is known about whether the benefits of intergroup contact extend to contexts (e.g., a diverse underdeveloped township) likely to prove demanding for improved intergroup relations. There is a need for further research in these contexts on the potential inhibitors of contact (such as diversity and threat) and their effects. Perceived social diversity has been implicated in the deterioration of intergroup relations. This is particularly salient in the context of immigrant relations, where anti-immigrant sentiments are characterized by perceived threat and lower outgroup trust. Diversity can, however, have an indirect positive effect on outgroup attitudes, via intergroup contact, which reliably predicts lower perceived threat and prejudice. Moreover, recent evidence suggests that empathy could mitigate negative attitudes towards immigrants. We investigated the relationship between perceived neighbourhood diversity, cross-group friendships, realistic and symbolic threat, empathic responding, trust, and outgroup orientation within the volatile context of Black (African) South Africans' relations with African immigrants. Survey data were collected from South Africans ($N = 317$) living in a township. Structural equation modelling showed that perceived diversity was significantly positively associated with both realistic threat (which was significantly negatively associated with outgroup trust) and cross-group friendships (which was significantly negatively associated with realistic threat). There was a significant indirect association between cross-group friendships and positive orientation towards African immigrants via empathic responding towards African immigrants. These findings suggest that cross-group friendships and empathy might mitigate the negative impact of diversity and threat on attitudes towards immigrants, even in this demanding context.

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Positive intergroup contact reliably reduces prejudice (see Pettigrew & Tropp, 2006). Less clear is whether contact is effective in contexts (e.g., a South African township that had previously experienced conflict between South Africans and African immigrants) that are likely to prove demanding for improved intergroup relations (Pettigrew, 2008; but see Mousa, 2020), and whether the nature of these demanding contexts inhibits contact per se, or the ability of contact to reduce prejudice. For example, research has identified increased social diversity (Blalock, 1957) and perceived outgroup threat (Stephan & Stephan, 2000) as two factors associated with greater outgroup prejudice, which may discourage, or limit the benefits of, such contact, especially within the context of host country-immigrant relations (Hooghe & De Vroome, 2015). We investigated the relationship between two potential inhibitors (diversity and threat) and one potential facilitator (empathic responding) of contact effects within the (sometimes violent) context of relations between Black (African) South Africans[1] and African immigrants (i.e., Black [African] nationals of other African countries residing in South Africa).

Global migration has contributed to greater social diversity (International Organization for Migration [IOM], 2020), and immigrants are often characterized as posing a real or symbolic threat (e.g., to employment prospects or the values held by citizens, respectively; Schlueter et al., 2008). This poses a challenge to research promoting positive intergroup contact as a reliable means of reducing prejudice and improving intergroup relations. Pettigrew and Tropp (2006, p. 767) argued that a focus on both the impact of negative factors on contact and the effects of contact itself 'deserve to become a major focus of future contact research . . . [and] would allow a more comprehensive understanding of conditions that both enhance and inhibit the potentially positive effects of contact'.

South Africa hosts the 14th largest immigrant population globally (IOM, 2020), constituting 7.2% of the South African population (United Nations, Department of Economic and Social Affairs, Population Division, 2019). Compared with attitudes towards immigrants held elsewhere South Africans' attitudes are among the most negative (Crush et al., 2013), and there has been a significant increase in anti-immigrant violence since 2008. Among South African population groups Black South Africans do *not* hold the most negative views towards African immigrants (Dube, 2019), yet most of the anti-immigrant violence has been experienced between Black South Africans and African immigrants (Steenkamp, 2009) with victims on both sides, and often occurs in townships where these two groups live side-by-side (Ruedin, 2019). For this reason, and because adult minority samples from the general population are underrepresented within the psychological literature more generally (see Henrich et al., 2010), and the contact literature more specifically (see Pettigrew & Tropp, 2006), we chose to focus our research on a sample of South African adults living in a South African township that had previously experienced violent conflict directed at immigrants.

We begin by exploring how diversity may impact outgroup attitudes, specifically within the context of immigrant relations. We then describe immigrant relations in South Africa, before introducing empathy as an important variable that may explain how positive intergroup contact might mitigate the negative impact of perceived diversity on immigrant attitudes.

Diversity and intergroup relations

Diversity is implicated in the deterioration of intergroup relations, including lower trust (Dinesen et al., 2020; Putnam, 2007) and greater threat (Laurence et al., 2019) and prejudice (Rae et al., 2015). The threat hypothesis suggests that majority groups become more hostile in the face of

increasing minority proportions due to the perceived economic (i.e., realistic) and social (i.e., symbolic) threat minorities are believed to pose (see Oliver & Wong, 2003). However, findings are complex and qualified (see Laurence et al., 2019). Semyonov et al. (2004) investigated the association between both objective and subjective measures of diversity and intergroup outcomes. They found that only the *perceived*, but not the actual, size of the outgroup population predicted greater perceived threat and exclusionary outgroup attitudes. This suggests that both perceived outgroup threat and outgroup attitudes are shaped by perceptions of the diversity profile of the social context (see Outten et al., 2012). Thus, perceived diversity (the subjective proportion of immigrants in the social context) may be indirectly negatively associated with outgroup trust and positive orientation towards immigrants via perceptions of realistic and symbolic threat (H1).

Challenging this view, other studies have shown that people adapt to social diversity over time (Ramos et al., 2019) and begin to view social groups as more similar to one another (Bai et al., 2020). Key to this positive effect is that diversity creates opportunities for intergroup contact (Christ et al., 2014), which, when taken up, are associated with various benefits (see Hewstone & Swart, 2011). While perceived diversity may be directly associated with negative intergroup outcomes, it may be indirectly associated with more positive outcomes (via intergroup contact), including less threat (Tausch et al., 2007) and prejudice (Clarke & Antonio, 2012), and greater trust (Christ et al., 2014). Indeed, positive contact with immigrants is both directly (Dhont et al., 2011) and indirectly (Pagotto et al., 2010) associated with lower anti-immigrant prejudice, via lower perceived threat. Thus, perceived diversity may be indirectly associated with positive outcomes (lower threat, more trust, and a more positive orientation) via cross-group friendships with immigrants (H2).

South African immigrant relations

Most immigrants to South Africa come from Zimbabwe, while others come from Mozambique, Somalia, Nigeria, Malawi, Democratic Republic of Congo, and Angola (Gordon, 2019; Moyo & Nshimbi, 2020). Some come as temporary workers (Organization for Economic Cooperation and Development/*International Labour Organization* [OECD/ILO], 2018), while others seek refuge from political instability in their home countries (Gordon, 2015). Although immigrants are often negatively portrayed in the media as illegal refugees (Crush, 2009), many are legal (e.g., skilled workers, entrepreneurs, students; (Crush & Ramachandran, 2014; OECD/ILO, 2018).

Anti-immigrant prejudice is pervasive in South Africa (Crush et al., 2013), but South Africans are significantly more distrustful of African immigrants than they are of White immigrants (Moyo & Nshimbi, 2020). Three factors germane to our study may promote South Africans' negative attitudes and distrust towards African immigrants: overestimating the number of immigrants in the country (Crush & Pendleton, 2004); believing migrants pose a threat to society through criminal activities and viewing them as competition for limited employment opportunities (Kerr et al., 2019; Ruedin, 2019); and lacking more than casual encounters with African immigrants (Crush & Pendleton, 2004; Crush et al., 2013; Ruedin, 2019). Black South Africans, whose unemployment rate (31%) is five times greater than that of White South Africans (6.7%; Statistics South Africa [SSA], 2019) and 47.1% of whom live in poverty (SSA, 2017), are vulnerable to the perceived economic threats of African immigrants. Yet, research suggests that South Africans who have positive contact (specifically friendships), and not mere proximity (e.g., as neighbours, work colleagues), with African immigrants (Crush & Pendleton, 2004) have generally positive attitudes towards them (Debrosse et al., 2016; Ruedin, 2019). Indeed, Crush et al. (2013) propose that the negative attitudes towards African immigrants that prevail in those areas that have experienced anti-immigrant violence may arise from there being *too few* immigrants living there to allow for positive contact, rather than too many.

Empathy and attitudes towards immigrants

Empathy promotes understanding and tolerance between host nationals and immigrants (e.g., Cortland et al., 2017). It may be especially relevant in the context of intergroup relations between South Africans and African immigrants, many of whom live close together in townships and informal settlements and face similar socioeconomic hardships that exacerbate competition for scarce resources (e.g., housing and employment). These factors may heighten perceptions of threat (Crush et al., 2013) and lead to violence (Debrosse et al., 2016). The ability of South Africans to recognize their shared hardships with African immigrants, through increased empathy, could promote greater understanding and tolerance towards them (see also Kerr et al., 2019).

Both cognitive (i.e., taking the perspective of another person; Galinsky & Moskowitz, 2000) and affective (i.e., an affective response to the emotional state of another person; Stephan & Finlay, 1999) empathy are associated with long-lasting, beneficial individual- and group-level outcomes (Batson & Ahmad, 2009). Empathy increases the perception that a common humanity and destiny is shared with the outgroup, which reduces prejudice and discrimination (Batson & Ahmad, 2009), evokes altruistic motivation towards the person for whom empathy is felt (Batson, Early, & Salvarani, 1997), and promotes motivations to restore justice in response to discrimination (Dovidio et al., 2004). Further extending the predictions of positive indirect effects of diversity in H2, we hypothesized that there is a significant indirect association between cross-group friendships and both trust and positive outgroup orientation towards African immigrants via empathic responding towards them among South Africans (H3).

To summarize, we tested three hypotheses: perceived diversity will be indirectly associated with more *negative outcomes* (lower trust and less positive outgroup orientation towards African immigrants) via perceptions of realistic and symbolic threat (H1). Perceived diversity will be indirectly associated with more *positive outcomes* (lower threat, greater outgroup trust, and more positive outgroup orientations) via the beneficial effects of cross-group friendships with African immigrants (H2). Finally, as an extension of H2, there is an indirect association between cross-group friendships and both trust and positive outgroup orientation via empathic responding towards African immigrants (H3).

Method

Participants

Data were collected from an opportunity sample of 344 adults living in a township in Cape Town, South Africa. Only the surveys of those respondents who identified themselves as Black South African ($N = 332$) were considered for analyses. Fifteen cases showed significant ($p < .001$) deviations from multivariate normality and were excluded from the analyses. The final sample comprised 317 South African adults ($n = 119$ males, $n = 181$ females, $n = 17$ did not indicate their gender; $M_{age} = 29.70$ years, $SD = 10.91$; range = 18–72 years).

Instruments

Items within constructs were collapsed to yield scale scores (reliabilities are shown in Table 1). Higher scores denote greater perceived neighbourhood diversity, more cross-group friendships and time spent with cross-group friends, greater perceived realistic and symbolic threat, more empathic responding, more outgroup trust, and more positive orientation towards African immigrants.

Table 1. Means, standard deviations, reliability, and bootstrapped (5000) bivariate Pearson product–moment correlations (*r*) between principal variables.

	1	2	3	4	5	6	7	*M* (*SD*)	Reliability (α)
1. Perceived diversity	–							5.41 (1.89)	.72
2. Cross-group friendships	.51***	–						3.64 (2.43)	.93
3. Realistic threat	.03	−.13*	–					6.24 (1.99)	.75
4. Symbolic threat	.16**	.15*	.47***	–				5.20 (2.15)	.69
5. Empathic responding	.37***	.34***	−.05	.09	–			5.76 (2.19)	.86
6. Outgroup trust	−.00	.00	−.58***	−.38***	.16**	–		4.71 (2.18)	.71
7. Positive outgroup orientation	.37***	.28***	−.09	.04	.75***	.19**	–	5.49 (2.87)	.96

Note: Sample consists only of Black South Africans; all outcomes refer to the outgroup, African immigrants.
*$p < .05$ **$p < .01$ ***$p < .001$.

Perceived neighbourhood diversity. Three items (Turner et al., 2007) assessed perceived diversity (e.g., 'In your opinion, how many of the people living in [your community] are African foreigners?'; 1 = *none*, 10 = *almost all*).

Cross-group friendships. Five items (Swart et al., 2010) measured the number of friendships with African immigrants (e.g., 'How many friends do you have in this township who are African foreigners?'; 1 = *none*, 10 = *nine or more*) and the time spent with these friends (e.g., 'How often do you spend time with your African foreigner friends doing social activities?'; 1 = *never*, 10 = *all the time*).

Perceived realistic threat. Four items (Stephan & Stephan, 2000) measured realistic threat (e.g., 'African foreigners are getting jobs far too easily, and it means that black South Africans are finding it difficult to get jobs'; 1 = *totally disagree*, 10 = *totally agree*).

Perceived symbolic threat. Three items (Stephan & Stephan, 2000) measured symbolic threat (e.g., 'African foreigners are forcing their culture and way of life onto black South Africans'; 1 = *totally disagree*, 10 = *totally agree*).

Empathic responding. Three items (Batson, Polycarpou, et al., 1997) measured affective empathy (e.g., 'To what extent do you experience compassion for African foreigners'; 1 = *never*, 10 = *all the time*) and two items measured perspective-taking (e.g., 'I can put myself in the shoes of an African foreigner and imagine what life is like for him/her'; 1 = *totally disagree*, 10 = *totally agree*). An exploratory factor analysis (EFA; direct oblimin rotation and maximum likelihood extraction) revealed that these five items loaded onto a single factor (eigenvalue larger than 1.00, explaining 64.00% of the variance), and we combined all items to form a measure of empathic responding.

Intergroup trust. Three items (Tam et al., 2008) measured intergroup trust (e.g., 'African foreigners are only concerned with their own wellbeing (and that of their group) and cannot be relied upon to look out for my best interests as a black South African'; 1 = *totally disagree*, 10 = *totally agree*).

Positive outgroup orientation. Three items (Wright et al., 1997) measured outgroup attitudes (e.g., 'I admire them'; 1 = *not at all*, 10 = *completely*), positive action tendencies (based on Mackie et al., 2000; e.g., 'Get to know them better'; 1 = *not at all*, 10 = *all the time*), and social distance (Bogardus, 1933; respondents indicated the extent to which they would be happy to have (an) African foreigner(s): 'Living in South Africa?', 'Working with you at your place of work?', 'Living here in [your township]?'; 1 = *not at all happy*, 10 = *very happy*). An EFA revealed that these nine items loaded onto a single factor (eigenvalue larger than 1.00, explaining 75.74% of the variance), and we combined all items to form a measure of positive outgroup orientation.

Procedure

Data were collected with the assistance of specially trained local community volunteers (aged 18 years or older), who gave informed consent to assist with data collection. A half-day training workshop was held to familiarize volunteers with the relevant data-collection procedures and potential risks (given the sensitive nature of the contents of the survey).

Ethical considerations

This research was approved by the Research Ethics Committee (Humanities) at Stellenbosch University, South Africa (Ref: 185/2009). Respondents, who were assured that their responses would be confidential and anonymous and that they could withdraw their participation at any time, signed informed consent forms and completed the survey under the guidance and assistance (where necessary) of the volunteer.

Data analyses

Preliminary data analyses showed that all the items displayed univariate normality ($M_{skewness} = 0.13$, $SD_{skewness} = 0.31$, $\min_{skewness} = -0.52$, $\max_{skewness} = 0.76$; $M_{kurtosis} = -0.99$, $SD_{kurtosis} = 0.30$, $\min_{kurtosis} = -1.53$, $\max_{kurtosis} = -0.51$). The means, standard deviations, bootstrapped (5,000) bivariate correlations (Pearson's r), and reliability estimates for the principal variables are summarized in Table 1.

Given that respondents were interviewed by community volunteers about very sensitive personal opinions relating to their interactions with, and attitudes towards, African immigrants, we undertook a series of independent samples t-tests to determine the likelihood of a systematic social desirability bias present in the data. The mean scores for cross-group friendships ($p < .001$), symbolic threat ($p < .05$), and outgroup trust ($p < .001$) were all significantly lower than the scale midpoint (i.e., 5.50 for each scale), but significantly greater than the lower scale anchor (i.e., 1.00; all ps $< .001$), ruling out potential floor effects. The mean scores for realistic threat ($p < .001$) and empathy ($p < .05$) were significantly greater than the scale midpoint (i.e., 5.50 for each scale), but significantly lower than the upper scale anchor (i.e., 10.00; all ps $< .001$), ruling out potential ceiling effects. The mean score for positive orientation was not significantly different from the scale midpoint (i.e., 5.50, $p = .97$). Together with the substantial variation observed in the data (as seen in the standard deviation for each principal construct in Table 1), these results do not support the presence of systematic social desirability bias in the data.

We tested the three hypotheses using structural equation modelling, employing bootstrap mediation analyses (Preacher & Hayes, 2008) with 5000 iterations to calculate the parameter estimates for all direct and indirect effects, as well as the estimation of 95% adjusted confidence intervals. Parcel indicators (Little et al., 2002) were created for those latent variables measured with more than four items (cross-group friendship, empathic responding, and positive orientation) to increase

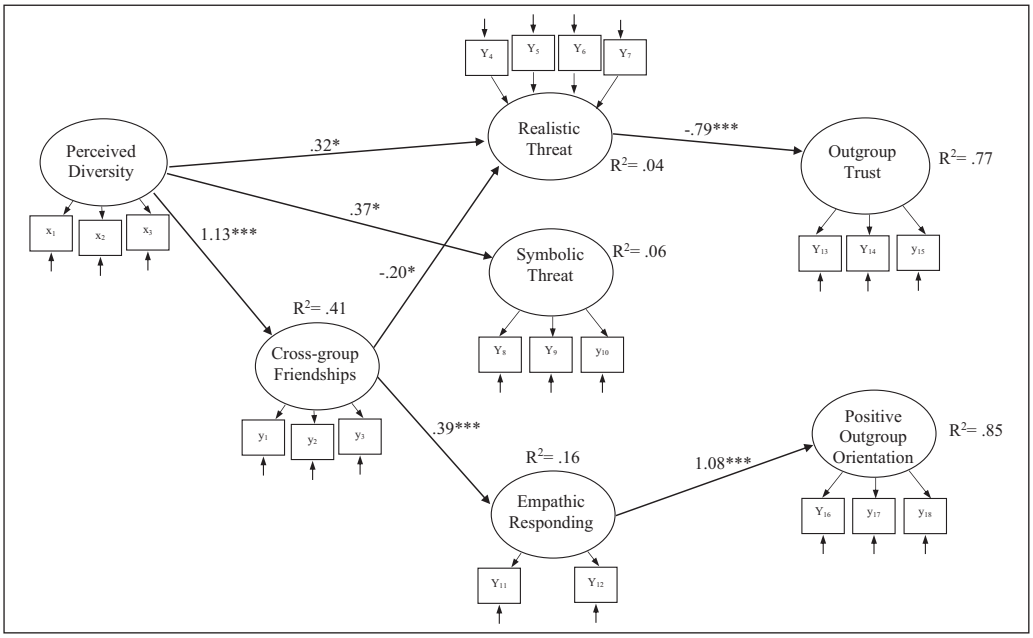

Figure 1. The indirect effect of diversity and cross-group friendships on outgroup trust and positive outgroup orientation, via threat and empathic responding, among South Africans.
$\chi^2(171) = 344.53$, $p < .001$; CFI = .947; RMSEA = .057 [90% CI: .048, .065]; SRMR = .061.
$N = 317$; *$p < .05$ ***$p < .001$; Unstandardized coefficients; only significant paths are reported. Disturbance terms not illustrated. Unstandardized correlations: realistic threat and symbolic threat: $r = 2.35$***; trust and positive orientation: $r = -.15$, $p = .44$.
Note. Sample consists only of Black South Africans; positive outgroup orientation refers to African immigrants.

model parsimony and reduce measurement error. For cross-group friendships, parcels were created using the item-to-construct method (Little et al., 2002). The respective items for affective empathy and perspective-taking were parcelled so that these two measures served as indicators for the underlying latent variable of empathic responding. The respective items for outgroup attitude, positive action tendencies, and social distance were parcelled so that these measures served as indicators for the underlying latent variable of positive outgroup orientation. The individual items measuring perceived diversity, realistic threat, symbolic threat, and trust served as manifest indicators for their respective latent construct. Each latent construct was identified by fixing the factor loading of the first indicator to 1 and allowing all other parameters to be freely estimated.

Results

The measurement model showed acceptable fit, $\chi^2(166) = 324.05$, $p < .001$; CFI = .952; RMSEA = .055, 90% CI = [.046, .064]; SRMR = .050. The structural model describing the *a priori* hypotheses achieved acceptable fit, $\chi^2(171) = 344.53$, $p < .001$; CFI = .947; RMSEA = .057, 90% CI = [.048, .065]; SRMR = .061 (see Figure 1).[2]

Perceived diversity was significantly positively associated with realistic ($b = .32$, $p < .05$, 95% CI = [0.04, 0.61]) and symbolic ($b = .37$, $p < .05$, 95% CI = [0.06, 0.67]) threat. In turn, realistic threat was significantly negatively associated with trust ($b = -.79$, $p < .001$, 95% CI = [−1.14, −0.45]) but not positive orientation ($b = -.07$, $p = .47$, 95% CI = [−0.25, 0.12]). Symbolic threat

Table 2. A decomposition of total effects into direct and indirect effects.

Predictor	Outcome	Decomposition of effects		
		Direct effect	Indirect effect	Total effect
Perceived diversity	Cross-group friendships	1.13***	[a]	1.13***
	Realistic threat	.32*	−.22*	.10
	Symbolic threat	.37*	.03	.40**
	Outgroup trust	[b]	.03[c]	.03[c]
	Positive orientation	[b]	.35***	.35***
Cross-group friendships	Realistic threat	−.20*	[a]	−.20*
	Symbolic threat	.03	[a]	.03
	Empathic responding	.39***	[a]	.39***
	Outgroup trust	.04	.20*	.24***
	Positive orientation	−.10	.43***	.33***

[a]No indirect effects were hypothesized or estimated.
[b]No direct effects were hypothesized or estimated.
[c]The significant negative indirect effect of perceived diversity via realistic threat ($b = -.25$, $p < .05$) and the significantly positive serial indirect effect of perceived diversity via both cross-group-friendships and realistic threat ($b = .18$, $p < .05$) explain the small, non-significant overall effect of perceived diversity on outgroup trust.
Note: Sample consists only of Black South Africans; all outcomes refer to the outgroup, African immigrants.
*$p < .05$ **$p < .01$ ***$p < .001$.

was not significantly associated with either trust ($b = .02$, $p = .83$, 95% CI = [−0.20, 0.24]) or positive orientation ($b = -.02$, $p = .87$, 95% CI = [−0.19, 0.16]). Moreover, there was a significant indirect association between perceived diversity and trust, via realistic threat ($b = -.25$, $p < .05$, 95% CI = [−0.50, –0.01]). These results offer partial support for the negative indirect effects of diversity predicted by H1.

Perceived diversity was significantly positively associated with cross-group friendships ($b = 1.13$, $p < .001$, 95% CI = [0.87, 1.39]). In turn, cross-group friendships were significantly negatively associated with realistic threat ($b = -.20$, $p < .05$, 95% CI = [–0.37, –0.03]) but not symbolic threat ($b = .03$, $p = .76$, 95% CI = [–0.15, 0.20]). There was a significant indirect association between perceived diversity and realistic threat via cross-group friendships ($b = -.22$, $p < .05$, 95% CI = [–0.43, –0.02]). Furthermore, there was a significant indirect association between cross-group friendships and trust via realistic threat ($b = .16$, $p < .05$, 95% CI = [0.01, 0.30]). These results offer partial support for the positive indirect effects of diversity predicted by H2.

In addition, cross-group friendships were significantly positively associated with empathic responding ($b = .39$, $p < .001$, 95% CI = [0.26, 0.51]), and empathic responding was significantly positively associated with positive orientation ($b = 1.08$, $p < .001$, 95% CI = [0.85, 1.31]) but not trust ($b = .11$, $p = .11$, 95% CI = [–0.03, 0.24]). There was a significant indirect association between cross-group friendships and positive orientation via empathic responding ($b = .42$, $p < .001$, 95% CI = [0.23, 0.60]). These results offer partial support for the mediation effects of empathy predicted in H3.

Finally, we assessed the serial indirect effect of perceived diversity on trust (via cross-group friendships and realistic threat) and positive orientations (via cross-group friendships and empathic responding). The serial indirect effects of perceived diversity on trust ($b = .18$, $p < .05$, 95% CI = [0.01, 0.35]) and perceived diversity on positive orientation ($b = .47$, $p < .001$, 95% CI = [0.25, 0.69]) were significant. These results offer further partial support for the positive indirect effect of diversity predicted by H2. The decomposition of total effects into direct and indirect effects is summarized in Table 2.

Discussion

This study addressed the neglected issue of factors that might inhibit or enhance intergroup contact and its beneficial effects (Pettigrew & Tropp, 2006) within contexts that are likely to prove most demanding for improved intergroup relations (Pettigrew, 2008). We explored the role of perceived neighbourhood diversity and perceived threat as potential inhibitors, and empathic responding as a potential facilitator, of contact effects, in relations between South Africans and African immigrants living in a township that had previously experienced conflict between the two groups. We first summarize the findings, then discuss issues arising, and end by acknowledging some limitations of this study.

Perceived diversity was significantly positively associated with realistic and symbolic threat, and realistic threat in turn predicted lower trust, but not positive orientation. These results offer partial support for H1 that diversity is detrimental to intergroup relations (Outten et al., 2012; Putnam, 2007; Semyonov et al., 2004), and suggest that the lack of trust towards African immigrants in South Africa (e.g., Crush & Pendleton, 2004) is driven (in part) by the (realistic) threat they are perceived to pose (e.g., Crush & Ramachandran, 2014).

Analysis of measures of intergroup contact, however, yields a different picture. Perceived diversity was significantly positively associated with cross-group friendships with African immigrants, which, in turn, were significantly negatively associated with realistic, but not symbolic, threat (partially supporting H2). Thus, cross-group friendships mitigated the negative effect of perceived diversity on perceived realistic threat. Hence, diversity can be a means of promoting more opportunities for contact (Christ et al., 2014), and cross-group friendships can reduce the negative impact of perceived diversity on perceptions of threat (Laurence et al., 2019), even in this unpromising context.

According to marginality theory, historically marginalized groups tend to be more sympathetic towards immigrants and less likely to discriminate against them (e.g., Hayes & Dowds, 2006). Our results offer support for this tendency; in a context often marred by violence, cross-group friendships were associated with greater understanding of (and feeling for) African immigrants, which was in turn associated with more positive orientation towards African immigrants (partially supporting H3). This is encouraging because it suggests that anti-immigrant prejudice in the South African context might be ameliorated by increasing South Africans' empathy towards African immigrants.

The fact that cross-group friendships were negatively associated with realistic threat and positively associated with empathic responding supports the literature showing that cross-group friendships both reduce negative and enhance positive outcomes (e.g., Pettigrew, 1998; Swart et al., 2011). Thus, the present study suggests that contact interventions aimed at improving relations between host-nationals and immigrants should consider integrating efforts aimed at increasing empathic responding with attempts at reducing perceived threat among host nationals. However, cross-group friendships should not be regarded as *essential* for the reduction of prejudice, especially in volatile contexts. There are many practical obstacles (including self-segregation and negative intergroup emotions) to the development of cross-group friendships in such contexts. Yet, in the absence of cross-group friendships, our findings underline the value of *high-quality contact*, rather than contact quantity, as the stronger predictor of positive outgroup orientation (Pettigrew & Tropp, 2006).

We acknowledge four limitations of this study to address in future research. First, the cross-sectional design of the study does not allow us to draw causal inferences, for which experimental studies are required. Moreover, cross-sectional designs can result in unstandardized regression coefficients that are larger than one (as observed in the present study) when intra-psychic concepts

are too temporally proximal (see Fiedler, 2014). Longitudinal research may assist by increasing the temporal distance between closely associated constructs, allowing for a more accurate estimation of their relationships. Second, we only collected data from South Africans, and not African immigrants, living in a single township and can therefore not generalize our findings beyond this opportunity sample or the township in which the data were collected (an important consideration given the socio-spatial heterogeneity of South African townships; e.g., Harrison & Harrison, 2014). Third, the present study only considered the impact of perceived (and not objective) diversity on our measures. Finally, research needs to test whether more cross-group friendships with immigrants, greater empathic responding, and more positive attitudes and trust towards immigrants translate into stronger endorsement of egalitarian immigration policies (see Debrosse et al., 2016). Taken together, the present results, notwithstanding their promise, should be interpreted with due caution.

Conclusion

Ameliorating the strained relationship between South Africans and African immigrants offers a steep challenge for contact theory. The present findings suggest nonetheless that intergroup contact offers a means of harnessing the ever-increasing social diversity that South Africans are exposed to for the promotion of positive relations and intergroup harmony with African immigrants.

Authors' note

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Notes

1. The use of ethnic terms is a contentious issue in South Africa. We do not endorse their legitimacy and recognize the many ways in which South Africans may self-identify. The term 'Black (African) South African' is used in this article to locate our findings within a very specific intergroup context. This term is abbreviated to South African(s) for ease of reading since we only collected data from this one South African group.
2. The most plausible alternative (selection bias) model showed good model fit, $\chi^2(171) = 329.99$, $p < .001$; CFI = .951; RMSEA = .054, 90% CI = [.045, .063]; SRMR = .053. None of the theory-driven predictions associated with the selection bias model were supported, however. Since the primary objective of this research was theory testing (as opposed to model fitting; see Hayduk et al., 2007), these findings suggest that our *a priori* model, which supported many of the theory-driven predictions associated with it, is more meaningful for this sample than the selection bias model.

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