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Perceptions of the Intergroup Structure and Anti-Asian Prejudice Among White Australians

Daniel Johnson, Deborah J. Terry, and Winnifred R. Louis

The University of Queensland

Subjective intergroup beliefs and authoritarianism were assessed in a field study ($N = 255$) of White Australians' anti-Asian stereotyping and prejudice. A social identity analysis of intergroup prejudice was adopted, such that perceptions of the intergroup structure (instability, permeability, legitimacy and higher ingroup status) were proposed as predictors of higher prejudice (blatant and covert) and less favorable stereotyping. Consistent with the social identity approach, both independent and interacting roles for sociostructural predictors of Anti-Asian bias were observed, even after demographic and personality variables were controlled. For example, perceived legitimacy was associated with higher prejudice when White Australians' status position relative to Asian Australians was valued. Moreover, when participants evaluated Whites' position as unstable and high status or legitimate, perceptions of permeable intergroup boundaries were associated with anti-Asian bias. The present findings demonstrate status protection responses in advantaged group members in a field setting, lending weight to the contention that perceptions of sociostructural threat interact to predict outgroup derogation. Implications for theories of intergroup relations are discussed.

KEYWORDS intergroup relations, prejudice, social identity theory

PREJUDICE encompasses the holding of derogatory stereotypes or cognitive beliefs, the expression of negative affect, and the display of hostile or discriminatory behavior toward people on the basis of their membership in certain social groups (Brown, 1995). Over the last 20 years, conflicts such as those in Rwanda, Bosnia and Northern Ireland have served to remind psychologists that the study of prejudice is of social as well as theoretical interest. In the present article, an analysis of group- and individual-

level explanations of prejudice is presented, and predictors of prejudice against Asian Australians are empirically assessed in a community sample of White Australians.

Author's note

Address correspondence to Winnifred R. Louis, Department of Psychology, University of Queensland, Brisbane, QLD 4072, Australia [email: wlouis@psy.uq.edu.au]

Individual difference explanations for prejudice

In the individual difference approach to prejudice, prejudiced people are theorized to be those individuals whose personalities render them susceptible to the racist ideas prevalent in a society at any given time (Altemeyer, 1981, 1988). The authoritarian personality (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950) has been the individual difference factor most robustly linked to prejudice: measures of authoritarianism have been observed empirically to predict prejudiced attitudes and behavior toward a wide variety of religious, ethnic and political outgroups (e.g. Altemeyer, & Hunsberger, 1992). In a similar vein, recent research on social dominance orientation has found that individuals who generally endorse the principle of hierarchies in social relations, rather than egalitarian relationships—those who have higher levels of social dominance orientation—have more unfavorable attitudes toward a variety of low power groups, such as Black Americans and women (Sidanius, 1993; Sidanius & Pratto, 1999). Yet individual difference explanations of prejudice have attracted theoretical criticism as well (e.g. Billig, 1976; Louis, Mavor, & Terry, 2003; Pettigrew, 1958). In particular, personality accounts of prejudice are not sufficient to explain the sudden changes that occur in levels of prejudice, such as the change in American attitudes toward Asians after the bombing of Pearl Harbor (Billig, 1976), or the changes in social attitudes after the terrorist attacks in the United States in 2001 (Esses, Dovidio, & Hodson, 2001; Louis & Taylor, 2002). Because such changes may occur in a time frame that falls dramatically short of the period required for the socialization of an entire generation, they cannot easily be explained by an individual differences explanation of prejudice.

Group-based explanations for prejudice: Social identity theory

The problems associated with an individual difference approach to explaining prejudice

may be overcome when a collectivist or social viewpoint is taken. The social identity approach (Tajfel & Turner, 1979; Turner, 1985; see also Hogg & Abrams, 1988; Terry & Hogg, 1996; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) is a general social psychological theory of group processes and intergroup relations. Social identity theory seeks to explain individuals' behaviour in terms of relevant group memberships, intergroup relations, and broader social forces. Because of the focus on situational variables, the social identity approach can explicate sudden changes that occur in the expression of prejudiced views and attitudes. Central to the approach is the concept of *social identity*, a component of the self-concept derived from memberships in social groups and social categories. People have a repertoire of groups and social categories to which they belong, and these are proposed to vary in their importance to the self-concept in response to contextual cues that increase or decrease the salience of particular group memberships. The psychological strategies used to pursue a positive sense of self are determined by individuals' *subjective beliefs* about the relations between their own and other groups (Tajfel & Turner, 1979). These subjective beliefs concern the *stability* and *legitimacy* of intergroup status relations, the *permeability* of group boundaries, and the relative *status* position of their group.

Empirical research has supported the contention that perceptions of status, stability, legitimacy and permeability predict group members' cognitive, emotional and behavioural responses to intergroup conflict (Bettencourt, Dorr, Charlton, & Hume, 2001; Ellemers, 1993). For example, research suggests that membership in a low status group is aversive and may motivate status enhancement strategies (Ellemers, van Knippenberg, de Vries & Wilke, 1988; Tajfel, 1974; Tajfel & Turner, 1979). In comparison with members of high status groups, members of low status groups evaluate their group less positively, favor their group less in outcome allocations, and identify less strongly with the group (Ellemers, Wilke, & van Knippenberg, 1993; Islam &

Hewstone, 1993; Mummendey, Klink, Mielke, Wenzel & Blanz, 1999). In contrast, members of high status groups are motivated to *protect* their dominant status position (Bettencourt et al., 2001). There has been a relative scarcity of studies on status protection among high status groups, perhaps as a reflection of the belief that the motivation to protect one's status position may be less salient and harder to elicit than status enhancement strategies (Ellemers et al., 1988, 1993; but see, for example, Guimond, Dif, & Aupy, 2002; Roccas, 2003).

Social identity theory predicts that group members will react to threat by attempting to positively differentiate the ingroup from relevant outgroups (Tajfel & Turner, 1979; see, for example, Cadinu & Reggiori, 2002). In the case of high status groups, the level of threat experienced at any given time should be a function of perceptions concerning the stability of the intergroup structure, the permeability of the intergroup boundaries, and the level and legitimacy of the relative status position. More specifically, given a stable intergroup structure, the perception that intergroup boundaries are permeable discourages subordinate groups from challenging the status quo, which may be advantageous for members of the dominant group (Ellemers, van Knippenberg, & Wilke, 1990; Ellemers et al., 1993; Jackson, Sullivan, Harnish, & Hodge, 1996; Wright, Taylor, & Moghaddam, 1990). However, instability of status positions implies a threat to the favorable position of the dominant group, and when intergroup status relations are unstable, permeable group boundaries may increase threat (Echabe & Castro, 1996; Skevington, 1980). Thus, for members of the dominant group, stability and permeability should interact such that high levels of both permeability and instability are associated with evidence of status protection motivation and prejudice, whereas high levels of permeability in the presence of low levels of instability should be related to relatively lower levels of status protection and prejudice.

The effect of permeability in an unstable intergroup context should be further moderated by the perceptions that members of the

dominant group have about their own status position. Group members who perceive their status as particularly high are likely to engage in the strongest status protection behaviours, given that they will see themselves as having more at stake (Mullen, Brown, & Smith, 1992). Similarly, dominant group members who feel their status position to be a deserved outcome of a just procedure are likely to react to threat more strongly than those who view their status as less legitimate, or illegitimate (Hornsey, Spears, Cremers, & Hogg, 2003; Major, 1994). As well as moderating the effects of permeable intergroup boundaries in unstable contexts, perceptions of relative status and legitimacy of status are likely to interact with each other. Dominant group members who perceive that the ingroup occupies a relatively high status position should show strong status protection behaviour when they perceive their status position to be legitimate—the joint beliefs of superiority of status position and legitimacy should engender stronger status protection motivations (Bettencourt et al., 2001). In contrast, perceptions of legitimacy should not be related to levels of advantaged group members' prejudice when the status position is perceived to be relatively low, given that in the absence of *perceptions* of high status the strength of status protection motivations is likely to be relatively weak.

The interactive effects among subjective intergroup beliefs have received relatively little attention in research on dominant groups. In one early laboratory study, high status groups were most biased toward low status groups when the status hierarchy was perceived to be unstable, but legitimate (Turner & Brown, 1978). The researchers interpreted this as evidence of the dominant group seeking to restore the stability of their rightful status. Ellemers et al. (1988), also in a laboratory study, found that permeability led to increased ingroup identification in high status groups (while weaker identification in low status groups), whereas Ellemers et al. (1993), again in an experimental study, found evidence that in the presence of permeable intergroup relations, participants in the high status group

were prepared to sacrifice their personal interest in order to favor fellow ingroup members.

Bettencourt and colleagues (2001) reported in a recent meta-analysis of the relationship between intergroup beliefs and prejudice that high status groups in general show more ingroup bias (see also Mullen et al., 1992). Moreover, their analysis indicated that high status groups' stronger bias is exacerbated on dimensions relevant to the group by legitimacy beliefs, and attenuated on irrelevant dimensions by beliefs of illegitimate, impermeable and unstable relations. However, more studies of the interactive relationships among these intergroup beliefs are called for, given the potential complexity of the interplay among illegitimacy, impermeability and instability beliefs.

Whereas previous field research on dominant groups has not routinely tested the higher-order interactions among perceptions of sociostructural variables implied in a social identity account of intergroup relations, the present study was designed to provide such a test. In light of the scarcity of naturalistic research on group-level subjective belief structures among dominant group members and the potential advantages of non-laboratory research in this area, the present study focused on the prejudiced responses of a dominant group in a naturalistic setting.

Measures of prejudice

Because changes in societal norms and institutionalized measures such as antidiscrimination legislation may have reduced the acceptability of overt prejudice, some researchers have argued that the characteristics of prejudiced beliefs and actions have changed, becoming less direct (Gaertner & Dovidio, 1986; McConahay, 1986; McConahay, Hardee, & Batts, 1981; Pettigrew, 1997). The *modern racist* shares with the old-fashioned racist negative feelings toward minority group members, but differs by not endorsing the negative stereotypes associated with particular minority groups. Analogously, Pettigrew and

Meertens (1995) have developed measures of subtle versus blatant prejudice. Subtle prejudice is closely related to modern racism, but it incorporates two additional components: the exaggeration of cross-cultural differences and the denial of any positive emotional response toward outgroup members. According to a modern racism approach, individual or group-based motivations for prejudice may be expressed as *subtle prejudice* even where little variance in *blatant prejudice* or less favorable *stereotyping* is expected. A similar predicted pattern may be derived from a social identity approach: if intergroup tensions are expressed normatively, greater variance should be accounted for in moderately normative measures of stereotypes or subtle prejudice than strongly antinormative measures of blatant prejudice (Louis et al., 2003). In the present study, then, measures of both subtle and blatant prejudice are obtained along with a measure of stereotyping, allowing the possibility of differential effects of intergroup and/or individual predictors to be assessed.

The present study

In Australia, renewed public awareness of racism and prejudice as pervasive social issues has been signalled by controversies concerning the rise and fall of the One Nation party, with a platform of cultural nationalism and opposition to Asian immigration; political and cultural policies toward Aboriginal Australians; and unfavorable attitudes toward asylum seekers (e.g. Fraser & Islam, 2000; Terry, Hogg, & Blackwood, 2001). In this context, the aim of the present study was to examine the predictors of prejudice for majority White Australians toward minority Asian Australians. In terms of individual difference predictors, Heaven and his colleagues have linked authoritarianism with anti-Asian prejudice in psychology undergraduates (Heaven & Quintin, 2003) and authoritarian attitudes with anti-Asian prejudice in a community sample (Morris & Heaven, 1986). Accordingly, the present study expected to replicate the link between authoritarianism and anti-Asian sentiments. Over and above the

effects of personality, however, respondents' subjective beliefs about the relationship between White and Asian Australians were predicted to be linked in the present study to their racial attitudes and stereotyping.

In accord with social identity theory, it was expected that perceptions of stability and permeability would have interactive effects on the levels of prejudice endorsed by White Australians in relation to Asian Australians, particularly when White Australians perceived their status position to be relatively high or as reflecting a legitimate outcome of a just procedure. Specifically, when intergroup relations were perceived to be unstable, it was expected that perceptions of permeable group boundaries would be positively related to blatant and subtle prejudice against Asian Australians, as well as unfavorable stereotyping, particularly among White Australians who perceived high ingroup status (H1) or legitimacy of their status position (H2). Second, it was proposed that White Australians' perceptions of ingroup status and the perceived legitimacy of status position would have interactive effects on prejudice. Specifically it was proposed that White Australians' perceptions of the legitimacy of their status position would be positively related to the extent of blatant and subtle prejudice, and outgroup stereotyping, particularly when they perceived their status position to be high (H3).

Method

Procedure

Potential participants were randomly selected from the 1996 electoral roll for three electoral divisions in the state of Queensland. The electorates were chosen to include a major urban area, a regional centre, and a rural area. Questionnaires were sent to the selected sample with a cover letter that assured participants that their responses were anonymous, informed them they had the right to leave out any questions they did not wish to answer, and offered them a summary of the results of the study. Three weeks later postcards were sent to all the potential participants, thanking people who had already returned their questionnaires and

asking people who still intended to complete the questionnaire to do so as soon as possible.

Of the 1060 questionnaires posted to potential participants, 144 (14%) were returned due to incorrect addresses, and 70 (7%) were returned unanswered. Completed questionnaires were received from 265 residents; thus, the response rate for correctly addressed questionnaires was 31%. The response rate did not vary disproportionately across the three electorates ($\chi^2(2) = 5.79, ns$).

Participants

Ten participants who did not consider themselves part of the focal group (White Australians) were excluded from further analysis. The final sample ($N = 255$) ranged in age from 20 to 89 years ($M = 47.2$; $SD = 15.46$), with 106 men (42%) and 148 women (58%). Approximately 34% ($n = 87$) had completed or were enrolled in undergraduate or graduate-level tertiary education, whereas 66% ($n = 167$) had educational training extending to primary or secondary school, or a vocational college. The sample is broadly representative of the electoral districts from which it was drawn, which have an average age of 45 and a comparable proportion (38%) of tertiary educated students (Australian Bureau of Statistics, 1998).

Materials

Authoritarianism Seven items adapted from Adorno et al. (1950) were used to measure authoritarianism (e.g. 'The real keys to the "good life" are obedience, discipline, and sticking to the straight and narrow') using 9-point Likert scales (1 *strongly disagree* to 9 *strongly agree*) ($\alpha = .83$).

Perceived instability Participants rated the extent to which the status of White Australians compared to Asian Australians had declined or improved, and was currently changing (e.g. 'Currently, is the status of White Australians, compared to Asian Australians, improving, declining, or staying the same?' (1 *declining*, to 9 *improving*)). The two items were averaged to form an index of perceived instability ($\alpha = .81$). Because of the ambiguity created by both ends

of the scale indexing change, the measure was dichotomized to contrast respondents who perceived White Australians' position as unstable and changing ($n = 144$) versus those who did not ($n = 97$).

Perceived permeability Two items assessed permeability by measuring perceptions of social and economic mobility (e.g. 'How easy is it for Asian Australians to be accepted into White-Australian society?' (1 *not at all easy* to 9 *very easy*)). The items were averaged to form a single scale ($\alpha = .72$).

Perceived status Participants were asked, 'Objectively, what is the overall status of White Australians relative to Asian Australians?' (1 *much lower in status* to 9 *much higher in status*), and 'In your opinion, compared to Asian Australians, are White Australians low or high in status?' (1 *low in status* to 9 *high in status*), and the two items were averaged to form an index of perceived status ($\alpha = .69$).

Perceived legitimacy A single item measure was used to assess participants' perceptions of the legitimacy of their group's status position. The item asked participants to indicate whether they thought their perceptions of their group's status reflected the way things should be (1 *not at all* to 9 *very much so*).

Subtle and blatant prejudice Nine items were adapted from previous research by Pettigrew (1997) and McConahay (1986) to assess subtle prejudice (e.g. 'Asians living here teach their children values and skills different from those required to be successful in Australia', 1 *strongly disagree* to 9 *strongly agree*), blatant prejudice (e.g. 'I would not mind if an Asian-Australian person joined my close family by marriage', 1 *strongly disagree* to 9 *strongly agree*; reverse scored), and modern racism (e.g. 'Over the past few years, Asian Australians have received more economically than they deserve', 1 *strongly disagree* to 9 *strongly agree*). Principal components analysis suggested a two-factor solution accounting for 62% of the variance, reflecting the distinction between the four items measuring blatant pre-

judice or old-fashioned racism and the five items measuring subtle prejudice or modern racism. Accordingly, scales were created for subtle prejudice/modern racism ($\alpha = .77$), and blatant prejudice/old-fashioned racism ($\alpha = .81$).

Positive stereotypic perceptions of Asian Australians To assess the extent to which participants perceived Asian Australians in stereotypic terms, they were asked to indicate how accurately five adjectives described Asian and White Australians, on 9-point scales ranging from 1 *not at all accurate*, to 9 *very accurate*. The adjectives used (self-disciplined, quiet, traditional, hardworking and respectful) were adapted from research on the positive traits typically assigned to Asians (Jackson et al., 1996; Jackson, Lewandowski, Ingram, & Hodge, 1997). Ratings of White Australians on each trait were subtracted from ratings of Asian Australians to provide a difference score. These items were averaged to form an index of positive stereotyping of Asians ($\alpha = .81$).

Results

Preliminary analyses

Means, standard deviations and intercorrelations are presented in Table 1. A preliminary one-sample t test confirmed that White Australians considered their own status, relative to Asian Australians, to be significantly higher than the scale midpoint of 5 ($t(254) = 8.55, p < .001$). In the analysis of White Australians' attitudes to Asian Australians, then, it is appropriate to test predictions derived from social identity theory for advantaged group members.¹

Design

The relatively small sample size precluded a test of the four-way interaction and all its lower order interactions. Accordingly, three regression models were run to examine the interactive effects of the focal variables on subtle prejudice, blatant prejudice and positive stereotypic perceptions of Asian Australians. The first model focused on whether perceived status qualified the effects of instability and permeability. The second model focused on whether

Table 1. Means (standard deviations) and intercorrelations

Variables	1	2	3	4	5	6	7	8
1. Authoritarianism	5.52 (1.80)							
2. Permeability	.30*	4.83 (1.68)						
3. Instability	.15*	-.07	0.20 (0.98)					
4. Status	-.15*	-.05	-.04	5.74 (1.27)				
5. Legitimacy	.27*	.32*	-.03	-.09	4.57 (2.37)			
6. Subtle prejudice	.60*	.13*	.21*	-.14	.22*	4.14 (1.96)		
7. Blatant prejudice	.49*	.18*	.09	-.15*	.23*	.64*	3.75 (1.75)	
8. Positive stereotyping	-.17*	-.22*	-.04	.13	-.13	-.37*	-.41*	1.58 (2.02)

* $p < .05$.

perceived legitimacy qualified the effects of instability and permeability. Finally, the third model examined the interaction of perceived status and legitimacy. In each set of analyses, age, gender, education and authoritarianism were entered in Step 1, followed by the entry of the subjective intergroup beliefs (Step 2), the two-way interaction terms (Step 3) and, where relevant, the three-way interaction term (Step 4). Missing values were replaced with means, and in order to reduce multicollinearity, the variables were centered and the two-way and three-way interaction terms were based on centered scores (Aiken & West, 1991). Four multivariate outliers were identified on the basis of standardized residuals greater than +3 or less than -3 and deleted from the analyses. Tests of the variance accounted for and improvement in model fit are presented at each step, along with entry and final model β s.²

Analysis 1: The effects of instability, permeability and status

Table 2 presents the results of the analyses analysing the interacting effects of instability, permeability and status on subtle and blatant prejudice, and on positive stereotypic perceptions of Asian Australians. Among the control

variables, authoritarianism was found to be positively associated with both subtle prejudice ($\beta = .50, p < .001$) and blatant prejudice ($\beta = .42, p < .001$).³ No other control variables were significantly related to the measures of prejudice.

For *blatant prejudice*, neither the independent effects of instability, permeability and status nor the two-way interactions accounted for a significant increment of variance after the control variables (see Table 2). However a significant interaction of stability and permeability was observed in Block 3 ($\beta = .12, p < .05$), which was in turn qualified by a significant three-way interaction with status, increasing model fit and contributing independently to blatant prejudice ($\beta = .12, p < .05$). Simple slope analyses demonstrated, in line with H1, that when the ingroup was seen as higher status and the context was seen as unstable, permeability was linked with stronger anti-Asian bias ($\beta = .19, p < .05$), but not when the context was stable ($\beta = -.06, ns$). This interaction is depicted in Figure 1. When the ingroup was seen as less high in status, permeability perceptions were not reliably linked to bias in either stable contexts ($\beta = -.03, ns$) or unstable contexts ($\beta = -.15, ns$).

Table 2. Hierarchical multiple regression analysis predicting prejudice from instability, permeability and status

Step	Predictor	Subtle prejudice			Blatant prejudice			Positive stereotypes		
		R ² change	Entry β	Final β	R ² change	Entry β	Final β	R ² change	Entry β	Final β
1	Authoritarianism	.35***	.54***	.50***	.24***	.48***	.42***	.03	-.14 ⁺	-.03
	Gender		.00	.02		.07	.10 ⁺		.05	.05
	Age		.00	.00		-.04	-.06		-.02	.00
	Education		-.09	-.11		-.02	-.04		.03	.03
2	Permeability	.37***	-.07	-.09	.26***	.01	.00	.07 ⁺	-.18 [*]	-.22**
	Instability		.11 [*]	.11 [*]		.02	.01		-.04	-.05
	Status		-.03	-.05		-.06	-.07		.03	.02
	Legitimacy		.09	.06		.12 ⁺	.09		-.03	-.02
3	Status × Permeability	.39***	.07	.06	.27***	.12 ⁺	.10 ⁺	.11**	-.11 ⁺	-.09
	Status × Instability		.03	.03		.04	.05		.17 ⁺	.16 ⁺
	Permeability × Instability		.13 [*]	.11 ⁺		.06	.03		.03	.05
4	Status × Permeability × Stability	.40***	-.01 ⁺	.09 ⁺	.28***	-.01 ⁺	.12 ⁺	.12**	-.02	-.13 [*]

*** $p < .001$; ** $p < .01$; * $p < .05$; + $p < .10$.

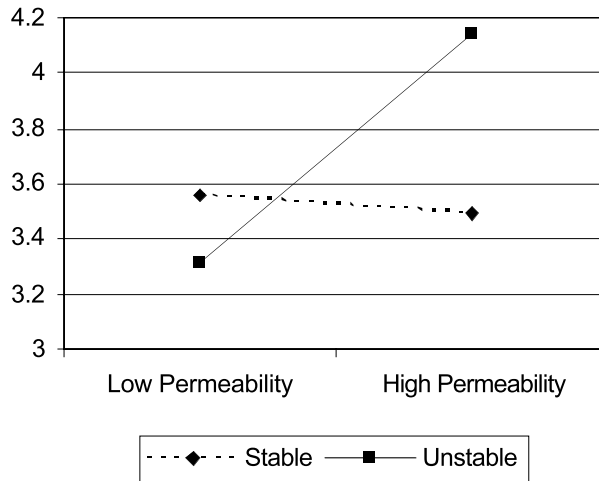


Figure 1. Interaction between perceived instability of context and perceived permeability of group boundaries on blatant prejudice at high levels of perceived ingroup status.

For *subtle prejudice*, similarly, the entry of the subjective intergroup beliefs as a group did not reliably increase the predictive power of the model. However, instability was independently associated with anti-Asian bias ($\beta = .11, p < .05$): participants who perceived greater instability tended to show higher levels of subtle prejudice. The entry of the interaction terms did not improve the fit of the model, but a significant two-way interaction of instability and permeability emerged in Block 3 ($\beta = .14, p < .05$), and interacted marginally with perceived status in the final model ($\beta = .09, p = .08$). Analysis of the simple slopes for permeability revealed that when White Australians' status was seen as higher and the context was seen as unstable perceived permeability was associated with a trend toward stronger anti-Asian bias ($\beta = .14, ns$), whereas when the context was seen as stable, perceived permeability was associated with weaker bias ($\beta = -.22, p < .05$). When White Australians' status was seen as less high, perceived permeability was not reliably linked to bias in either stable contexts ($\beta = -.16, ns$) or unstable contexts ($\beta = -.11, ns$).

For *positive stereotypical perceptions* of Asian Australians, the entry of subjective intergroup beliefs in Step 2 increased the model fit, such

that participants who perceived greater permeability of boundaries stereotyped Asian Australians less positively ($\beta = -.18, p < .05$). The inclusion of the interaction terms significantly increased predictive power (see Table 2), with the two-way interaction of instability and status in Block 3 ($\beta = .17, p < .05$) qualified by the three-way interaction with permeability in the final model ($\beta = -.14, p < .05$). Simple slope analyses demonstrated that when White Australians were seen as higher status and the context was unstable, permeability was linked to less positive stereotyping of Asian Australians ($\beta = -.33, p < .01$). The link between permeability and bias was attenuated when the context was seen as stable ($\beta = -.21, p = .06$). When the ingroup was seen as less high in status, permeability perceptions were not reliably linked to bias in either stable contexts ($\beta = -.24, p = .09$) or unstable contexts ($\beta = .02, ns$).

Analysis 2: The effects of instability, permeability and legitimacy

Table 3 presents the results of the analyses analyzing the interacting effects of instability, permeability and legitimacy on subtle and blatant prejudice, and on positive stereotypic

Table 3. Hierarchical multiple regression analysis predicting prejudice from instability, permeability and legitimacy

Step	Predictor	Subtle prejudice				Blatant prejudice				Positive stereotypes			
		R ²	R ² change	Entry β	Final β	R ²	R ² change	Entry β	Final β	R ²	R ² change	Entry β	Final β
1	Authoritarianism	.35***	.35***	.56***	.53***	.24***	.24***	.48***	.44***	.03	.03	-.14 ⁺	-.03
	Gender			.00	.01			.07	.09			.05	.07
	Age			-.05	-.01			-.04	-.06			-.02	-.03
	Education			-.11	-.09			-.02	-.04			.03	.04
2	Permeability	.37***	.02 ⁺	-.07	-.11 ⁺	.26***	.02	.01	.02	.07*	.04*	-.18*	-.19*
	Instability			.11*	.08			.02	.02			-.04	-.05
	Status			-.03	-.06			-.06	-.08			.11 ⁺	.09
	Legitimacy			.09	.07			.12 ⁺	.12 ⁺			-.02	.00
3	Legitimacy × Permeability	.39***	.02 ⁺	.07	.04	.26***	.00	.04	-.01	.10**	.03 ⁺	.15*	.14*
	Legitimacy × Instability			.01	.02			-.02	-.02			-.10	-.10
	Permeability × Instability			.10 ⁺	.10 ⁺			.04	.04			.01	.02
4	Legitimacy × Permeability × Instability	.40***	.01	-.01	-.09	.27***	.01*	-.01	.13*	.10*	.00	-.02	-.02

*** $p < .001$; ** $p < .01$; * $p < .05$; + $p < .10$.

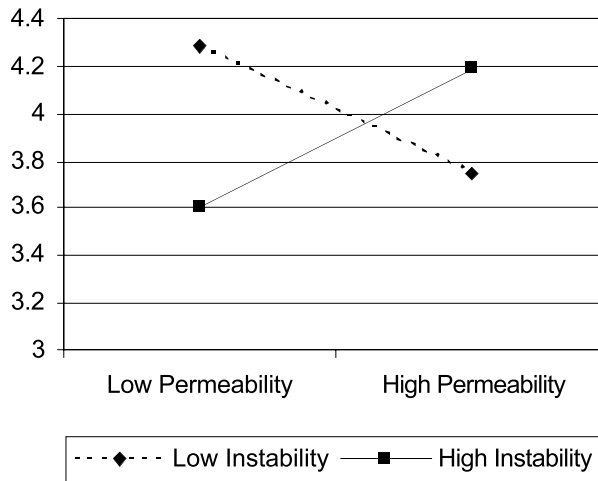


Figure 2. Interaction between perceived instability of context and perceived permeability of group boundaries on blatant prejudice at high levels of perceived legitimacy.

perceptions of Asian Australians. As reported above, among the control variables, authoritarianism was associated with subtle and blatant prejudice.

For *blatant prejudice*, consideration of the two-way interactions involving legitimacy, permeability, and stability did not contribute to improved model fit (see Table 3). However, the three-way interaction improved the predictive power of the model and was uniquely associated with blatant prejudice ($\beta = .14, p < .05$). In line with H2, simple slope analyses demonstrated that when the ingroup's position was seen as unstable and legitimate, perceived permeability was associated more positively with bias against Asian Australians ($\beta = .10, ns$) than when the context was seen as illegitimate ($\beta = -.16, ns$). This interaction is depicted in Figure 2: the difference between the slopes is marginally significant ($t(238) = 1.76, p = .08$), although neither of the simple slopes can be distinguished from zero. The simple slopes for legitimacy at high instability are more clearly differentiated: when the context is perceived as unstable and permeability is high, legitimacy is linked to blatant prejudice against Asian Australians ($\beta = .21, p < .05$), but not when permeability is low ($\beta = .00, ns$). This interaction is

depicted in Figure 3. Meanwhile, when the ingroup's position was seen as less legitimate, permeability perceptions were not linked to bias in either stable contexts ($\beta = .04, ns$) or unstable contexts ($\beta = -.09, ns$), and the slopes did not differ ($t(238) = -0.91, ns$).

For *subtle prejudice*, consideration of the two- and three-way interactions involving legitimacy, permeability and instability as a group did not improve the fit of the model significantly. As above, an independent contribution of perceived instability emerged in Block 1 ($\beta = .11, p < .05$), and an interaction of permeability and instability in Block 2 ($\beta = .10, p = .06$). No two-way interactions with legitimacy were observed, and the three-way interaction did not attain significance ($\beta = .09, ns$). Simple slope analysis for permeability indicated that participants who perceived the context was stable associated permeability with reduced bias ($\beta = -.21, p < .05$), but participants who perceived the context was unstable did not ($\beta = .01, ns$).

For *positive stereotypic perceptions of Asian Australians*, consideration of the two-way interactions involving legitimacy did not improve model fit significantly (see Table 3), but a significant interaction of Legitimacy \times Permeability was observed ($\beta = .14, p < .05$). The

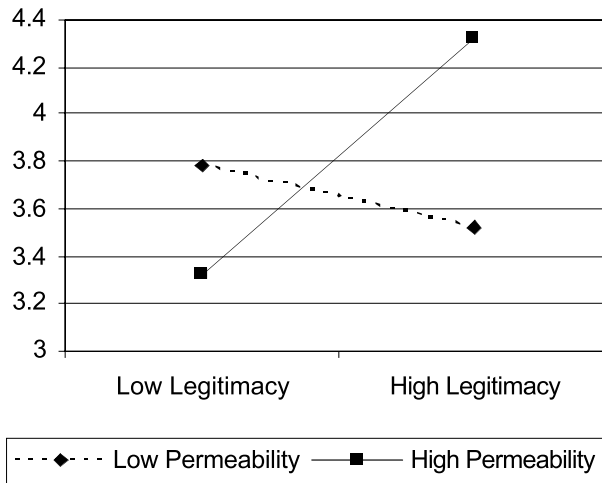


Figure 3. Interaction between perceived legitimacy of status and perceived intergroup permeability on blatant prejudice at high levels of instability.

interaction was not moderated by stability, in that the three-way interaction was not significant ($\beta = .02, ns$). In the final model, as reported above, perceptions of permeable group boundaries were negatively associated with positive stereotypic perceptions of Asian Australians ($\beta = -.17, p < .05$). Simple slope analyses revealed however that the link between permeability perceptions and favorable stereotypes of Asians was observed among those who considered the status relations between the groups to be less legitimate ($\beta = -.30, p < .01$), but not among those who perceived White Australians' status as more legitimate ($\beta = -.07, ns$).

Analysis 3: The effects of status and legitimacy

The results of the analyses analyzing the interactive effects of status and legitimacy are presented in Table 4. As predicted, significant Legitimacy \times Status interactions were associated with subtle prejudice ($\beta = .21, p < .001$) and for blatant prejudice ($\beta = .26, p < .001$). For positive stereotyping, the interaction of legitimacy and status attained marginal significance ($\beta = -.12, p = .07$).

Simple slope analyses suggested that that participants who perceived White Australians as

relatively higher status showed increasing blatant prejudice as their perceptions of legitimacy increased ($\beta = .31, p < .001$), whereas participants who perceived White Australians as less high in status did not ($\beta = -.08, ns$). This interaction is depicted in Figure 4. Similarly, participants who perceived higher status for White Australians showed more subtle prejudice against Asian Australians ($\beta = .26, p < .001$), whereas participants who perceived White Australians' status as less high did not ($\beta = -.08, ns$). A similar pattern emerged for measure of stereotyping: participants who thought White Australians' status was high linked legitimacy more strongly with unfavorable stereotypes of Asian Australians ($\beta = -.12, ns$) than participants who thought their status was low ($\beta = .08, ns$). However, as noted above the difference between the slopes was only marginally reliable ($t(238) = -1.86, p = .07$).

Discussion

The present study was designed to test an intergroup model of predictors of prejudice among members of a dominant group. Specifically, the study examined the independent and interactive effects of subjective beliefs (stability,

Table 4. Hierarchical multiple regression analysis predicting prejudice from status and legitimacy

Step	Predictor	Subtle prejudice				Blatant prejudice				Positive stereotypes			
		R ²	R ² change	Entry β	Final β	R ²	R ² change	Entry β	Final β	R ²	R ² change	Entry β	Final β
1	Authoritarianism	.35***	.35***	.54***	.48***	.24***	.24***	.48***	.39***	.03	.03	-.14 ⁺	-.04
	Gender			.00	.03			.07	.10 ⁺			.05	.05
	Age			.00	.00			-.04	-.06			-.02	.00
	Education			-.09	-.09			-.02	-.03			.03	.03
2	Permeability	.37***	.02 ⁺	-.07	-.09 ⁺	.26***	.02	.01	-.02	.07*	.04*	-.18*	-.17*
	Instability			.11*	.10 ⁺			.02	.00			-.04	-.03
	Status			-.03	.02			-.06	.00			.11 ⁺	.08
	Legitimacy			.09	.09			.12 ⁺	.11 ⁺			-.02	-.02
3	Legitimacy × Status	.41***	.04***	—	.21***	.31***	.06***	—	.26***	.08 ⁺	.01 ⁺	—	-.12 ⁺

***: $p < .001$; * $p < .05$; + $p < .10$.

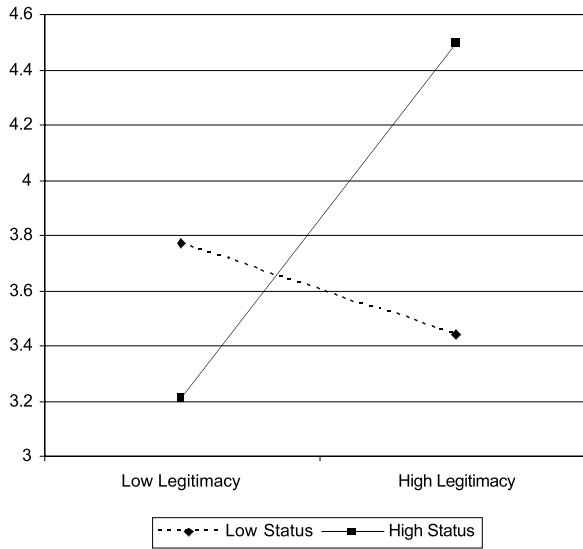


Figure 4. Interaction between perceptions of legitimacy of status and perceived ingroup status on blatant prejudice.

permeability, status and legitimacy) on White Australians' anti-Asian bias. For a community sample of White Australians, intergroup beliefs were measured in relation to subtle and blatant anti-Asian prejudice, and stereotypic perceptions of Asian Australians as a group.

As predicted under H1, White Australians who perceived that their status was high but that the position was unstable showed more blatant prejudice when they believed the intergroup boundaries to be permeable, and were less likely to endorse positive stereotypes of Asian Australians. In contrast, for White Australians who perceived that their status was advantaged and the relations were stable, belief in permeable group boundaries was unrelated to blatant prejudice, weakly linked to less favorable stereotyping, and associated with lower subtle bias against Asian Australians. Similarly, as predicted in H2, White Australians who perceived the status position to be unstable and judged the intergroup boundaries to be permeable showed increasing blatant prejudice the more legitimate they felt their group's high status position to be. Among White Australians who perceived high instability and

low permeability of intergroup boundaries, by contrast, there was no relationship between perceived legitimacy of White status and blatant prejudice.

In accord with social identity theory, these interactions suggest that dominant group members (in this case, White Australians) experience increased threat when they perceive that their superior status position is insecure, particularly when the intergroup boundaries are perceived to be permeable and their dominant status position is judged to be high or legitimate. White Australians who perceived high instability and high status showed increasing prejudice (presumably reflecting status protection responses) toward Asian Australians the more they perceived the group boundaries as permeable, and the more they considered their dominant position to be a deserved outcome (i.e. legitimate). In contrast, White Australians who perceived their high status position to be stable presumably did not experience high levels of threat and, thus, did not feel the need for status protection. Thus, in a stable intergroup structure, dominant group members are likely to feel secure about their dominant

position and do not express higher levels of prejudice as a function of status and legitimacy.

In accord with H3, support was also found for the proposed interaction between perceived relative status of the ingroup and perceived legitimacy of the status position. The interaction of legitimacy and status was associated with both subtle and blatant prejudice. White Australians who perceived relatively high ingroup status showed increasing levels of subtle and blatant prejudice as their perceptions of the legitimacy of their position increased. In contrast, White Australians who perceived their status position to be relatively low showed no change in blatant or subtle prejudice as a function of perceived legitimacy. The differential effect of legitimacy among White Australians who perceived high and low status of the ingroup position is in line with the predictions of social identity theory. Presumably, White Australians who perceived the ingroup to be high in status were motivated to protect their status position to the extent that they regarded it as being legitimate. When seen as a deserved outcome of a just procedure, dominant group members are likely to perceive their high status position to be more worthy of protection. In contrast, White Australians who perceived their ingroup's position to be relatively low in status showed no change in levels of prejudice as their perceptions of the legitimacy of their position increased. It is possible that White Australians who perceived their relatively low status position as legitimate were unmotivated to engage in status protection strategies.

Taken together, the interactive effects of instability, permeability and legitimacy/status on White Australians' self-reported anti-Asian bias highlight the value of considering contextually varying beliefs about the intergroup relationship as predictors of prejudice. Unlike the variables considered in individual-level approaches, perceptions of the instability of the intergroup structure and the permeability of intergroup boundaries are likely to change quite rapidly as a function of broad economic and political changes, which may provide a means of predicting and modelling relatively

sudden changes in the expression of prejudiced attitudes and behaviours (Esses et al., 2001; Louis et al., 2003). Moreover, these interactions—among instability, permeability and status/legitimacy and between legitimacy and status—support a social identity approach to an understanding of prejudice among dominant group members. These interactions contribute to research on the responses of high status group members in that they provide evidence in a naturalistic setting of status protection among dominant group members under the conditions that should, theoretically, engender such motivations.

One additional interaction was observed between legitimacy and permeability for positive stereotypic perceptions of Asian Australians. Although not a focus of the present study, the interaction is consistent with the argument derived from social identity theory that perceptions of sociostructural insecurity underlie outgroup derogation. White Australians who endorsed the status quo as more legitimate and believed the intergroup boundaries to be more permeable were less likely to endorse favorable stereotypes of Asian Australians, whereas stereotyping did not vary as a function of legitimacy for participants who perceived low permeability. Arguably, White Australians who felt their dominant position to be legitimate reacted more strongly to the threat posed by the permeable boundaries, whereas White Australians who perceived their dominant position to be less legitimate were not reactive to permeability perceptions.

While it is not a focus of the present paper, it is also noteworthy that few differential effects on blatant and subtle prejudice (Pettigrew & Meertens, 1995) were observed in the present study of White Australians' attitudes to Asian Australians. Consistent with a modern racism approach (McConahay et al., 1981; Pettigrew, 1997), intergroup and individual factors associated with prejudice appeared to explain more variance in subtle prejudice than blatant prejudice (Tables 2–4). However, similar patterns of prediction were observed in each case, and the variables were intercorrelated (Table 1). A somewhat larger discontinuity is apparent

between the expression of stereotyping and prejudice. Stereotypes of Asian Australians appear to be more weakly predicted than the prejudice measures, and some inconsistencies appear in the pattern of prediction. Authoritarianism, for example, while strongly associated with blatant and subtle prejudice against Asian Australians, was not uniquely linked to stereotyping. In this case, authoritarian motivation to stereotype on these dimensions of evaluation (*conventionalism*) may have been pitted against the motivation to derogate a minority group (*authoritarian aggression*), creating inconsistency. However, future research with negative and positive stereotyping measures as well as evaluative measures of prejudice may be conducted to replicate these results and tease apart the processes involved. The results stress the need to ensure the generalizability of models is tested across multiple measures.

In the interim, the present research provides support for the importance of group-based subjective beliefs in understanding anti-Asian prejudice in a community sample of White Australians. Authoritarianism was strongly linked to Australians' anti-Asian prejudice in the present study, as indeed it has been in other Australian samples (Heaven & Quintin, 2003; Morris & Heaven, 1986). Although it was not assessed in the present study, individual differences in social dominance orientation (Sidanius, 1993) have also been linked to less favorable attitudes and stereotyping of Asian Australians (Heaven & Quintin, 2003). However, individual approaches to prejudice are unable to explain the sudden changes in levels of prejudice toward low status groups that have occurred throughout history—and in Australia, with the recent rise of the One Nation Party (Fraser & Islam, 2000; Terry et al., 2001). The present results are thus consistent with the argument that changes in subjective beliefs regarding the permeability, instability and legitimacy of intergroup structures can be associated with changes in stereotyping and levels of prejudice, even when individual personality factors are controlled (Esses et al., 2001; Louis et al., 2003; Terry et al., 2001). For instance, among advan-

taged group members who perceive high permeability of group boundaries and high legitimacy of the ingroup's status position, a significant change in perceptions of the instability of the status differential would be expected to lead to marked changes in levels of prejudice in a very short period of time. Similarly, among dominant group members who perceive the ingroup as high status, a sudden change in the perceived legitimacy of the status position should lead to corresponding changes in levels of bias.

An analysis of the relationships between social beliefs and levels of prejudice suggests several means by which prejudice among dominant group members might be challenged or exacerbated. For example, given that perceptions of legitimacy of the status differential were associated with greater prejudice (under conditions of high perceived status, and both high levels of instability and permeability), encouraging White Australians to challenge their views about the legitimacy of their dominant status position should lead to a decrease in levels of prejudice. Similarly, the present results suggest that to decrease the intergroup threat experienced by White Australians' perceptions of instability of the relative status position may be reduced, weakening motivation to protect the ingroup's status position and subsequent expression of prejudice. Correspondingly, where the legitimacy of the present status of White Australians is reinforced, or perceptions of instability are increased, increases in prejudice may be expected.

It should be noted, however, that in the present study the direction of causality is open to question because the analyses were cross-sectional and correlational. Laboratory studies do confirm that manipulated legitimacy perceptions are associated with varying prejudice (e.g. Hornsey et al., 2003). However, dominant groups' motivation to retain privilege has also been observed to motivate both prejudice and legitimacy perceptions (e.g. Jost & Banaji, 1994). Similarly, within particular intergroup contexts individual difference factors such as *belief in a just world* (Lerner, 1971) may be

associated both with the derogation of disadvantaged groups and with perceiving inequitable status relations as legitimate. In the present data, for example, small decreases in the link between authoritarianism and prejudice when intergroup subjective beliefs are controlled for suggest that the effects of authoritarianism on prejudice may sometimes be partially mediated by subjective beliefs about intergroup relationships. To establish the direction of causality between authoritarianism, intergroup subjective beliefs, and levels of prejudice, which presumably are mutually reinforcing among dominant group members, future research using a longitudinal design would be valuable. Longitudinal data demonstrating societal changes in subjective intergroup beliefs and consequent changes in prejudice would be a valuable complement to the present findings. Counterbalancing the administration of the scales might also allow for tests of anchoring and contrast effects. Finally, field research with a larger sample would allow higher order interactions among focal variables to be tested.

In conclusion, the present study highlights the importance of examining the interplay among group-level factors in the prediction of prejudice among a community sample of dominant group members. This research represents an attempt to assess the effects of subjective belief variables among dominant group members in a naturalistic setting. Instability, permeability, status and legitimacy interacted in theoretically interpretable ways to predict prejudiced responses toward Asian Australians among White Australians. The study opens the way for more extensive research, along the lines suggested by social identity theory, in an endeavor to understand the basis for societal and temporal variations in expressions of prejudice among dominant group members toward minority groups.

Notes

1. Few respondents (<8%) perceived Asian Australians were of higher status: a vestigial 'White Australia' policy remained in force in

Australia until the 1970s, and political, social and economic elites include few Asian Australian faces. If those who rate Asian Australians' status higher than White Australians' are excluded from the analyses, however, the same pattern of results is obtained.

2. Exploratory analyses incorporating the four-way interactions as well as all the control variables, the subjective intergroup beliefs, and the lower-order interactions suggest that the four-way term is not uniquely associated with any of the three measures (β s < .11, R^2 change < .01, p s > .14). If the variables are dichotomized and analyses of variance are conducted, the four-way terms remain insignificant (F s < .27, p s > .60). As noted in the discussion, the relatively small N and intercorrelated IVs will have reduced the power to detect the higher order interactions, however.
3. Unless otherwise specified, β s given in the text refer to coefficients in the final model.

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Biographical Note

DANIEL JOHNSON, BA, completed an honours degree in social psychology, and is a doctoral candidate in information technology at the University of Queensland. His research interests include identity processes in cybermedia, social influence, computer-mediated communication and the media equation.

DEBORAH J. TERRY, PhD, is a professor of social psychology in the school of psychology at the University of Queensland. Her research interests are in the areas of group processes, intergroup relations, attitude–behavior relations, and social influence.

WINNIFRED R. LOUIS, PhD, is a postdoctoral research fellow in the school of psychology at the University of Queensland. Her research interests include decision-making in intergroup conflict, social influence, and collective action.

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