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New Zealand = bicultural? Implicit and explicit associations between ethnicity and nationhood in the New Zealand context

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Abstract

Four studies examined explicit and implicit perceptions of ethnicity and nationhood in New Zealand (NZ). NZ Europeans/Pakeha (the majority group) endorsed a bicultural perspective and explicitly rated both their own ingroup and Maori (the indigenous peoples of NZ) as contributing equally to NZ national identity and culture (Study 1). Contrary to the divergence between explicit and implicit ethnic-national associations observed in the USA, implicit associations in NZ were generally consistent with explicitly stated values. Pakeha and Maori, but not Asian New Zealanders, were both strongly implicitly associated with the national category 'NZ' (Studies 1–3), although this general tendency was qualified by weak levels of ingroup favoritism from all three ethnic groups (Study 2). Finally, the small tendency for Pakeha to implicitly associate their ingroup more strongly with NZ was erased by using moderately well-known Pakeha and Maori rugby players as targets (Study 4). These findings contrast with the American = White implicit associations described by Devos and Banaji (2005), and provide insight into the ways in which socio-cultural realities foster convergence or divergence between explicit and implicit beliefs about equality and the function of ethnicity in nationhood. Copyright © 2007 John Wiley & Sons, Ltd.

For an 'imagined community' of nationhood (Anderson, 1983) based on Anglo settler ideals, New Zealand (NZ) is unique. This is due to a political system that has emerged over the last 30+ years formally recognizing Maori (the indigenous peoples of NZ) and non-Maori New Zealanders as distinct but equal partners who (a) share guardianship of many of NZ's resources and (b) contribute equally to its national identity and culture. These ideals of 'biculturalism' (see Durie, 1998; Liu, 2005; Sibley & Liu, 2004) are enshrined in the Treaty of Waitangi, signed in 1840. The Treaty, declared as a legal 'nullity' in 1877 and without legal standing for most of the 20th century, began its rehabilitation in the late 1960s as a part of the civil rights movement (see Orange, 2004; Walker, 2004 for historical reviews). It is now regarded as one of the legal foundations for NZ sovereignty, and is considered by both Maori and Pakeha¹ (New Zealanders of European descent) to be the most important event in NZ's

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¹There is continued debate in NZ regarding the most appropriate term describing New Zealanders of European descent. Although New Zealand European is the most popular term (Liu et al., 1999), Pakeha is the term that most strongly implies a relationship with Maori and hence seems most appropriate for this paper.

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2 history (Liu, Wilson, McClure, & Higgins, 1999). The rehabilitation of a 160 year old treaty between
3 indigenous peoples and Europeans as a foundational covenant of nationhood, enshrined in legislation
4 and national iconography (e.g., the passport and the national museum) is unique among Anglo settler
5 states.

6 Of course, how one defines and implements concepts such as (a) shared and equal resource
7 rights and (b) contributions to NZ culture and identity are the subjects of considerable debate.
8 Qualitative and quantitative analyses suggest that Pakeha discourses and attitudes relating to the
9 former theme tend to be anchored in traditional Western notions of equality-as-meritocracy, whereby
10 everyone is construed as being equal in the here and now regardless of group membership (e.g.,
11 Kirkwood, Liu, & Weatherall, 2005; Nairn & McCreanor, 1991; Sibley & Wilson, in press; Wetherell &
12 Potter, 1992). Consistent with findings examining discourses surrounding ethnic group relations in the
13 United States (US, Arriola & Cole, 2001; Gamson & Modigliani, 1987), Pakeha justify opposition to
14 policies that redistribute resources to Maori by negating the relevance of historical injustices (Sibley,
15 Liu, Duckitt, & Khan, in press), and generally constructing such policies as unfair because they
16 disadvantage other ethnic groups. Discourses regarding the second theme, in contrast, appear to be
17 more unique to the NZ socio-political context and reflect the sentiment that aspects of both Maori and
18 Pakeha/European culture should contribute equally to NZ national identity, and thus to what it means to
19 be (symbolically) a New Zealander. Previous self-report research, for example, suggests that this latter
20 position is widely endorsed in both student and general population samples, whereas support for
21 resource-specific aspects of bicultural policy is more limited (Sibley & Liu, 2004; Sibley, Robertson, &
22 Kirkwood, 2005; Sibley, Wilson, & Robertson, 2007). Hence, Pakeha and Maori are frequently invoked
23 categories for social comparison, sometimes under divisive conditions of resource conflict, but are at
24 other times unified by national iconography enshrining both groups as symbolically part of the national
25 identity.

26 The present research aims to provide a detailed assessment of implicit beliefs about NZ national
27 identity and what it means to be a New Zealander. We introduce a series of studies that address the
28 major theoretical issue of how to document and understand the processes involved in the divergence or
29 convergence of implicit and explicit associations between ethnic and national categories. To paraphrase
30 Devos and Banaji (2005, p. 448), this research focuses on a single fundamental dimension of
31 equality—the degree to which the national category ‘NZ’ is associated with New Zealanders of varying
32 ethnic origin.

33 In recent research examining ethnic-national associations in the US, Devos and Banaji (2005)
34 identified a divergence in Americans’ explicit and implicit associations between ethnicity and the
35 concept ‘American.’ They reported that American undergraduates implicitly perceived America as
36 monocultural. That is, the national category ‘American’ was consistently more closely *implicitly*
37 associated with White people, be they faces of unfamiliar White Americans (relative to faces of
38 unfamiliar African and Asian Americans), faces of famous White Athletes (relative to faces of African
39 American athletes), or first and last names of White celebrities known to be European (relative to names
40 of Asian celebrities known to be American). In all instances, White Americans responded more quickly
41 when Whites were paired with symbols representing America. However, these same participants
42 endorsed a more multicultural perspective when similar associations were assessed using explicit
43 self-report measures. This ‘American Dilemma,’ where an explicit regard for equality is undermined by
44 implicit racism and the privileging of Whiteness in the national imagination, was most famously
45 theorized by Myrdal in 1944 and provides an enduring critique of the structure of inequality in the US
46 (see Sidanius & Pratto, 1999).

47 The equation of American with White people is not limited to White Americans, however. Devos
48 and Banaji (2005) reported that Asian American undergraduates expressed similar implicit biases, and
49 viewed their own group as less American than White Americans (Devos & Banaji, 2005). There was a
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1
2 trend in their data suggesting that African American undergraduates may also have shown a small
3 implicit bias in favor of White Americans (although this effect was non-significant). Thus, for both
4 majority and minority groups in the US, it appears that White Americans form the prototypical
5 exemplar of the national category 'America.' These findings are consistent with a System Justification
6 Theory perspective, which proposes that, like members of the majority group, members of
7 disadvantaged groups have a fundamental (and often automatic) motivation to perceive the system as
8 legitimate in order to reduce dissonance associated with their group's lower status and power (Jost,
9 Pelham, Sheldon, & Sullivan, 2003). This often results in outgroup favoring attitudes, particularly at
10 the implicit level, which may occur even when group boundaries are perceived as impermeable (Jost,
11 Banaji, & Nosek, 2004).

12 As both System Justification Theory (Jost & Banaji, 1994) and Social Dominance Theory (Sidanius
13 & Pratto, 1999) would predict, representations of American = White may help to promote and maintain
14 hierarchically organized social structures, especially when they are consensually shared by both
15 majority and minority group members. Under such conditions, appeals to national identity and values
16 become synonymous with appeals to White American identity and values. As Devos and Banaji (2005)
17 emphasized, such appeals may therefore function to reduce the opportunity of ethnic minority groups to
18 contribute to concepts of national identity and nationhood (or in some cases marginalize or directly
19 exclude such contributions). These findings suggest that rather than representing an inclusive
20 superordinate categorization, implicit representations of national identity in America may promote a
21 form of exclusionary patriotism, wherein both ethnic majority and minority groups exclude symbolic
22 markers of minority group identity from representations of national identity (see also Sidanius &
23 Petrocik, 2001).

24 What of the NZ context? Which ethnic group(s) is perceived as most representative of NZ? Assessed
25 at the explicit level, NZ and the US hold similar generalized ideals and values. NZ, like the US, holds
26 liberal democratic values anchored in the ideals of Freedom and Equality as central to defining
27 nationhood (Liu, 2005). NZ was the first country in the world to introduce universal suffrage, was one
28 of the first welfare states, and New Zealanders have a tradition of protest against anti-egalitarian
29 regimes. Thus at the explicit level, it is likely that most New Zealanders will rate all New Zealanders as
30 belonging equally to the nation, regardless of ethnicity. NZ, however, differs quite dramatically from
31 the US in the historical context of intergroup relations between indigenous New Zealanders (Maori)
32 and more recent immigrants (primarily European settlers, see Liu et al., 1999). As a consequence, we
33 argue that in NZ, implicit associations between ethnicity and nationhood may be more consistent with
34 espoused explicit values.

35 NZ is a formally bicultural nation, which incorporates many aspects of both Maori and NZ European
36 (or Pakeha) culture into national iconography. Maori arrived in NZ from Polynesia approximately
37 800 years ago, establishing a unique culture. European settlement began slowly following the
38 'rediscovery' of NZ by Captain Cook in 1769, with Maori still being in the majority and in control of
39 most of the country at the time of the signing of the Treaty of Waitangi in 1840. The period from 1840 to
40 1870 was marked by intergroup conflict as European settlement proceeded in full force and the two
41 groups struggled for sovereignty (Belich, 1986). By the 1870s, a firm process of colonization had been
42 set in place, with land confiscation and cultural alienation for Maori to follow until the civil rights
43 movement and Maori renaissance of the 1970s reinvigorated biculturalism (Walker, 2004). The NZ
44 national anthem is now sung in both English and Maori, many Pakeha wear Maori bone carvings when
45 traveling overseas, and the label 'Pakeha', which is often used to refer to NZ Europeans is itself a Maori
46 term. Indeed, the Maori language is formally recognized as an official language of the nation (along
47 with English and sign language). Maori culture and arts are also widely employed to represent NZ
48 overseas, with movies such as *Whale Rider* (set in a small rural Maori community) achieving
49 international acclaim. In this respect, NZ is unique among Anglo settler states, and as Sibley and Liu
50

(2004) have argued, this unique socio-cultural context creates important psychological differences in how many New Zealanders think about and represent the social groups within their nation.

We argue that there is considerable appeal in symbolic forms of biculturalism from the majority perspective because Maori culture is viewed as helping to define the culture of NZ in a positively distinct way (Liu, 2005; Liu & Sibley, 2006). Without Maori, NZ culture would simply be a colonial derivative of Great Britain, a mother country that left NZ to its own devices and is no longer seen as an adequate source of identity. Thus, the adoption of symbolic aspects of Maori culture allows Pakeha to promote the positive distinctiveness of identity as a New Zealander on the world stage. However, it is difficult for Pakeha to claim bicultural heritage unilaterally; it must also be acknowledged by Maori. Liu (2005) refers to this as a system of checks and balances where Maori, the disadvantaged minority in terms of realistic resources, have symbolic power over the majority because they have the ability to validate key aspects of national identity for many members of the majority group.

Investigating implicit and explicit associations between ethnicity and nationality in cultural context provides a deeper understanding of the dynamics and etiology of the construction of national identity. If symbols of nationhood (e.g., official government policy, backed by primary and secondary education and represented by artifacts such as a giant Treaty as the centerpiece of the national museum and practices such as ceremonial Maori welcoming) are central to these associations, we should expect a bicultural pattern of results, where Maori and Pakeha are equally associated with national symbols at both the explicit and implicit level. To the extent that the actual distribution of wealth and power in society and stereotypes reflecting this are primary, we should expect a monocultural pattern similar to the US, where explicit associations favor biculturalism or multiculturalism, but implicit associations link Pakeha (or Whites) more closely with the national identity. Given the late arrival of most Asians to NZ, and the relatively limited representation of Asian culture in national iconography, we do not anticipate a multicultural pattern of results, where Asian, Maori, and Pakeha peoples are equally associated with NZ symbols.

We present four studies that examine explicit and implicit perceptions of ethnicity and nationhood in NZ. Study 1 contrasted the implicit and explicit beliefs Pakeha hold about national belongingness on the basis of ethnicity. Study 2 then compares results from samples of NZ-born Pakeha, Maori, and Asian participants to examine the extent to which implicit ethnic-national associations are (a) consensual across ethnic groups residing in NZ versus (b) influenced by ingroup bias. Study 3 replicates the implicit ethnic-national associations using an independent Pakeha sample, and examines the explicit self-report correlates of such implicit associations. Finally, Study 4 tests the boundary conditions of implicit pro-Pakeha ethnic-national associations by comparing the strength of implicit associations between famous Maori and Pakeha rugby players and symbols of NZ.

STUDY 1

Study 1 adapted the ethnic-national Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) used by Devos and Banaji (2005). This procedure examines Pakeha participants' implicit and explicit associations between the concept 'NZ' and faces of New Zealanders of varying ethnic origin (Pakeha, Maori, or Asian)².

²Because Maori and Pacific Nations people have similar facial features we were unable to include Pacific peoples within this design. Asian faces were those of East Asians, typically but not exclusively Chinese, rather than South Asians (e.g., from India); Chinese form the largest demographic group of Asian in NZ.

Method

Participants

Participants were 36 undergraduate students who received partial course credit for participation and who self-identified as NZ European/Pakeha and were NZ born. Participants (12 males and 24 females) ranged from 18–33 years of age ($M = 21.25$, $SD = 4.12$). On average, participants' families had been in NZ for 3.71 ($SD = 1.96$) generations on their mothers' side, and 3.62 ($SD = 2.10$) generations on their fathers' side.

Stimuli

Three versions of Devos and Banaji's (2005) ethnic-national IAT were used, each of which assessed the implicit association between a pair of ethnic groups (Pakeha vs. Maori, Pakeha vs. Asian, and Maori vs. Asian) and symbols of NZ (relative to foreign symbols). Six full color symbols were used to represent NZ: the NZ flag, green and gray maps of NZ, a made in NZ logo, a picture of a Kiwi with the letters 'NZ' embossed below, and a silver fern on a black background. To represent the concept 'foreign', we used four of the symbols developed by Devos and Banaji (2005): a modified version of the Kiribati flag, the Flemish lion, and two 90° rotated maps of Luxembourg (colored green and gray).³ Two new stimuli were also developed: a silhouette of a fish and bird on a black and white background, and a picture of a small boat surrounded by a yellow circle on a blue background. An independent group of participants rated the six NZ and six foreign symbols as being easily recognizable as NZ and foreign, respectively. Symbols ranged from 62 mm wide × 82 mm high to 64 mm wide × 44 mm wide in size.⁴

Six black-and-white head-and-shoulder photos (three men and three women) were used to represent New Zealanders from each ethnic group (Pakeha, Maori, and Asian). An independent group of participants selected these faces from a larger pool. All faces were rated as displaying neutral facial expressions, as being of mid-to-late twenties in age, and as being easily recognizable and relatively prototypical examples of NZ-born members of their respective ethnic groups. All faces were 52 mm wide × 68 mm high.

Procedure

Explicit Associations Between Ethnicity and Nationhood Explicit beliefs about the degree to which Pakeha, $\alpha = .87$, Maori, $\alpha = .88$, and Asian people born in NZ, $\alpha = .90$, may be considered 'true' New Zealanders were each assessed using four Likert items: '[NZ European/Pakeha, Maori, Asian] people born in this country are just as entitled to call themselves New Zealanders as anyone else who was born here,' '[NZ European/Pakeha, Maori, Asian] people born in this country should have the opportunity to contribute to NZ culture just as much as all other New Zealanders,' '[NZ European/Pakeha, Maori, Asian] people born in this country are, on average, just as patriotic as other New Zealanders,' '[NZ European/Pakeha, Maori, Asian] people born in this country belong here just as much as other New Zealanders.' These items were based on ones used by Devos and Banaji (2005), and provided an explicit counterpart to the implicit association between each of these three ethnic groups and NZ. Participants were aware that they would be asked to respond to the same series of questions

³We thank Thierry Devos for providing these stimuli.

⁴Stimuli developed for use in this research are available from the first author upon request.

1
2 about each ethnic group. Item order was randomized, and items were rated on a scale ranging from 0
3 (strongly disagree) to 6 (strongly agree). Demographic details were also assessed. The measures were
4 included as part of a larger battery of independently administered and unrelated surveys.
5
6
7

8 *Implicit Associations Between Ethnicity and Nationhood* IATs assessing implicit associations
9 between ethnicity and nationhood were conducted in the week following the completion of the explicit
10 measures. Participants completed three IATs in counterbalanced orders: one IAT assessed the implicit
11 association between NZ symbols (relative to foreign symbols) and photos of Pakeha and Maori New
12 Zealanders, a second IAT assessed the implicit association between NZ symbols (relative to foreign
13 symbols) and photos of Pakeha and Asian New Zealanders, and a third IAT assessed the implicit
14 association between NZ symbols (relative to foreign symbols) and photos of Maori and Asian New
15 Zealanders.

16 Before completing each IAT, participants were shown copies of the symbols and faces used in the
17 study. All participants easily categorized the symbols and faces into their correct categories.
18 Participants were explicitly told that all faces were of people born in NZ who self-identified as
19 members of their respective ethnicity, and that the study examined how quickly people could categorize
20 these different symbols and faces. The IATs were administered using PCs running Inquisit (Draine,
21 1998), and followed the standard procedure developed by Greenwald et al. (1998), using groups of
22 5–15 participants. Participants were seated at separate computers, each in its own cubicle. Participants
23 could not see each other and were instructed to remain silent once data collection began. A male Pakeha
24 experimenter conducted all sessions. There was a 15 minute break between each IAT, during which
25 participants completed unrelated filler tasks.

26 Each IAT consisted of seven blocks. The stimuli contained in each block were presented in a random
27 order and were displayed in the middle of the computer screen. If participants pressed the wrong
28 response key (e.g., categorizing a foreign symbol as NZ) then a red 'X' was displayed below, and
29 participants were required to press the correct key to complete that trial. Response times were recorded
30 from the onset of when a stimulus was displayed to when it was correctly classified using the
31 appropriate response key. Each trial was separated by a 400-ms inter-trial interval. To encourage
32 participants to respond quickly, median reaction time and percentage of errors were displayed after
33 each block.

34 The first block consisted of 25 practice trials during which participants used separate response keys
35 ('d' and 'k') to sort faces from two ethnic groups (e.g., Pakeha vs. Maori) into their respective
36 categories. The second block consisted of a further 25 practice trials, during which participants used
37 these same two response keys to categorize NZ and foreign symbols into categories as quickly as
38 possible. The third and fourth blocks alternately presented national symbols and faces. Participants
39 used one response key to categorize faces belonging to one ethnic group (e.g., Pakeha) or NZ symbols,
40 and one response key to categorize faces belonging to the other ethnic group (e.g., Maori) or foreign
41 symbols. These two blocks consisted of 25 and 40 trials, respectively. The fifth block then re-trained
42 participants to use the alternate response keys when categorizing faces on the basis of ethnicity.
43 Following the recommendations of Nosek, Greenwald, and Banaji (2005), the number of practice trials
44 included in this block was increased to 60 in order to reduce potential order effects. Finally, the sixth
45 and seventh blocks swapped the pairing of stimuli administered in blocks three and four, so that in this
46 example, Maori faces and NZ symbols were categorized using one response key, and Pakeha faces and
47 foreign symbols were categorized using one response key. These two blocks consisted of 25 and
48 40 trials, respectively. The order of the pairings presented in blocks 3 and 4, and blocks 6 and 7 were
49 counterbalanced within each IAT, and randomized across IATs.
50

The category labels 'New Zealand Symbols' and 'Foreign Symbols' were used to describe these two categories of stimuli. The category labels 'NZ EUROPEAN FACES', 'NZ MAORI FACES,' and 'NZ ASIAN FACES' were used to describe categories of faces. Relevant category labels were displayed at the top of the screen during each trial to indicate the requested pairing. We chose to use the category label 'NZ EUROPEAN FACES' rather than a label such as 'NZ PAKEHA FACES' because research indicates that the majority of New Zealanders of European descent prefer this term (Liu et al., 1999). IAT and self-report survey data were matched using confidential student identification numbers.

Results

Explicit Associations Between Ethnicity and Nationhood

A repeated measures ANOVA indicated that self-identified Pakeha participants perceived Pakeha, Maori, and Asian people born in NZ as differing significantly in their explicit level of association with NZ, $F(2, 70) = 15.10, p < .001$, partial $\eta^2 = 0.30$. Bonferroni-corrected pairwise comparisons indicated that participants did not differ in how strongly they associated Pakeha ($M = 5.39, SD = 0.72$) and Maori with NZ ($M = 5.38, SD = 0.74$), $d = 0.02$. However, Asian New Zealanders ($M = 5.03, SD = 0.98$) were significantly less associated with NZ than both Maori and Pakeha, $d = 0.37, d = 0.40$, respectively. Relative differences in the size of these explicit associations (Cohen's d) are shown by the white bars in Figure 1.

Implicit Associations Between Ethnicity and Nationhood

IAT reaction-time data were analyzed following the recommendations outlined by Greenwald, Nosek, and Banaji (2003). Trials with latencies > 10000 were deleted. No participants responded quicker than 300 ms on more than 10% of trials. An index of effect size (IAT D) was created by first calculating the differences between blocks 6 and 3, and blocks 7 and 4, dividing these two difference scores by their

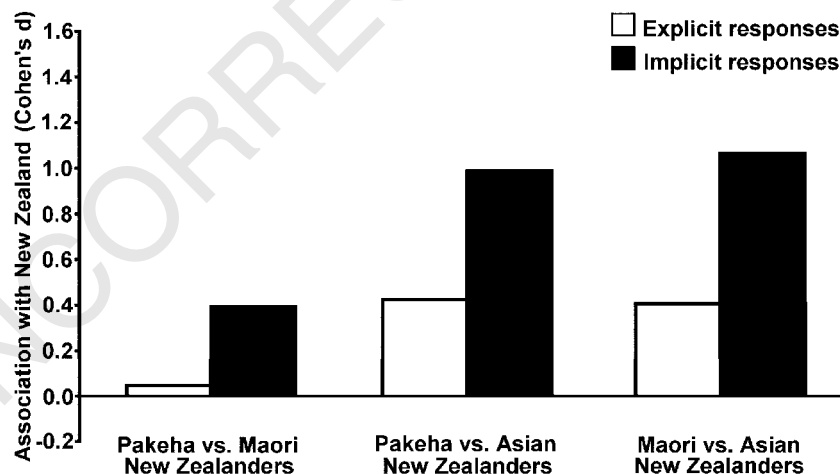


Figure 1. Study 1: Strength of explicit and implicit associations with New Zealand (Cohen's d) and pairs of ethnic groups. For each pair of ethnic groups (e.g., Pakeha vs. Maori), a positive effect size indicates a stronger association between the first ethnic group (e.g., Pakeha) and New Zealand, whereas a negative effect size would indicate a stronger association between the second ethnic group (e.g., Maori) and New Zealand ($n = 36$)

pooled standard deviation, and then averaging these two scores. Thus, IAT D provides an estimate of the relative difference between the two pairing conditions (e.g., Maori + NZ symbols – Pakeha + NZ symbols) adjusted for differences in the underlying variability of responses across conditions (see Greenwald et al., 2003, for further details). Consistent with Devos and Banaji (2005), the IAT D effect was scored so that a larger (positive) value represented a stronger implicit association between Pakeha + NZ (relative to Maori), Pakeha + NZ (relative to Asian peoples), and Maori + NZ (relative to Asian peoples).

Pakeha–Maori NZ Comparison Self-identified Pakeha participants appeared to react slightly more quickly when pairing NZ symbols and Pakeha faces using a single response key ($M = 601$ ms) than when pairing NZ symbols and Maori faces using a single response key ($M = 643$ ms). A one sample t -test indicated that the IAT D effect ($M_{\text{IAT D}} = 0.19$, $SD_{\text{IAT D}} = 0.48$) differed significantly from 0, $t(35) = 2.37$, $p < .02$, $d = 0.39$.

Pakeha–Asian NZ Comparison Pakeha participants were faster to respond when pairing NZ symbols and Pakeha faces using a single response key ($M = 572$ ms) than when pairing NZ symbols and Asian faces using a single response key ($M = 692$ ms). A one sample t -test indicated that the IAT D effect ($M_{\text{IAT D}} = 0.48$, $SD_{\text{IAT D}} = 0.48$) differed significantly from 0, $t(35) = 5.91$, $p < .001$, $d = 1.00$.

Maori–Asian NZ Comparison Pakeha participants were also faster to respond when pairing NZ symbols and Maori faces using a single response key ($M = 580$ ms) than when pairing NZ symbols and Asian faces using a single response key ($M = 690$ ms). A one sample t -test indicated that the IAT D effect ($M_{\text{IAT D}} = 0.43$, $SD_{\text{IAT D}} = 0.40$) differed significantly from 0, $t(35) = 6.42$, $p < .001$, $d = 1.07$.

Relative differences in the size of these implicit associations (Cohen's d) are shown by the solid black bars in Figure 1. A repeated measures ANOVA indicated that Pakeha, Maori, and Asian people born in NZ were perceived as differing significantly in their implicit level of association with NZ, $F(2,70) = 7.58$, $p < .001$, partial $\eta^2 = 0.18$. As suggested in Figure 1, Bonferroni-corrected pairwise comparisons indicated that the relative difference in the implicit association between Pakeha and NZ (relative to Maori faces) was significantly smaller than the relative difference in the implicit association between both Pakeha and NZ (relative to Asian faces), and Maori and NZ (relative to Asian faces). However, the Pakeha participants included in our sample appeared to show a comparable implicit association favoring Pakeha + NZ (relative to Asian faces) and Maori + NZ (relative to Asian faces). Although similar trends in implicit and explicit measures of ethnic-national association were observed, it is worth noting that these measures were not significantly correlated, r s ranged from $-.05$ to $.30$, n s in all cases.

Discussion

Explicit beliefs about ethnicity and nationhood displayed similar trends to their implicit counterparts. As shown in Figure 1, Pakeha participants perceived both Pakeha and Maori New Zealanders as being more strongly associated with NZ than they did Asian New Zealanders. This trend was consistent across both explicit and implicit measures, although implicit measures evidenced larger overall effects. Pakeha participants also displayed a significant difference in implicit associations between Pakeha faces and NZ symbols relative to Maori faces and NZ symbols, but the magnitude of this effect was far weaker than implicit ingroup biases shown by majority group members (Whites) in the US. To

summarize, results from Study 1 indicate that to be (perceived as) a New Zealander is to be either Pakeha or Maori (but it seems, *not* Asian). Thus, these results are more consistent with proposition that NZ = bicultural than the proposition that NZ = Pakeha or NZ = Multicultural. These results complement previous self-report research suggesting that the majority of Pakeha are relatively supportive of biculturalism and bicultural policy when their own (material) interests are not seen as being threatened (Sibley & Liu, 2004).

STUDY 2

Study 2 sought to replicate the trends in self-identified Pakeha participants' implicit ethnic-national associations using an independent sample, and further elaborate upon Study 1 by including comparable samples of NZ-born Maori and Asian peoples in order to examine ingroup and outgroup biases in implicit ethnic-national associations.

Method

Participants

Participants were 63 NZ-born undergraduate students who received partial course credit for participation (30 self-identified as Pakeha, 19 self-identified as Maori, and 14 self-identified as Asian). Participants (22 males and 41 females) ranged from 18–37 years of age ($M = 20.70$, $SD = 2.91$). Samples of self-identified Pakeha, Maori, and Asian New Zealanders were comparable in both age and distribution of males and females, $F(2, 60) = 2.92$, $p = .06$, partial $\eta^2 = 0.09$, $\chi^2(2, n = 63) = 1.49$, $p = .47$, respectively.

Procedure

Participants completed the same three IATs following identical procedures to those described in Study 2, in small ethnically heterogeneous groups with individuals assigned to separate cubicles that did not allow social interaction. A male Pakeha research assistant conducted sessions. Participants also completed a brief measure of demographics.

Results

A 3×3 ANOVA revealed a significant (Greenhouse–Geisser corrected) interaction between participants' ethnicity (between-subjects) and inter-ethnic comparisons (within-subjects), $F(3.48, 104.41) = 4.37$, $p < .01$, partial $\eta^2 = 0.13$. The relative strengths of inter-ethnic associations with NZ (IAT D) as a function of participants' ethnicity are presented in Figure 2.

Pakeha–Maori NZ Comparison

There were no significant differences in the implicit association between NZ and Pakeha relative to Maori targets between different ethnic groups, $F(2, 60) = 1.64$, $p = .20$, partial $\eta^2 = 0.05$.

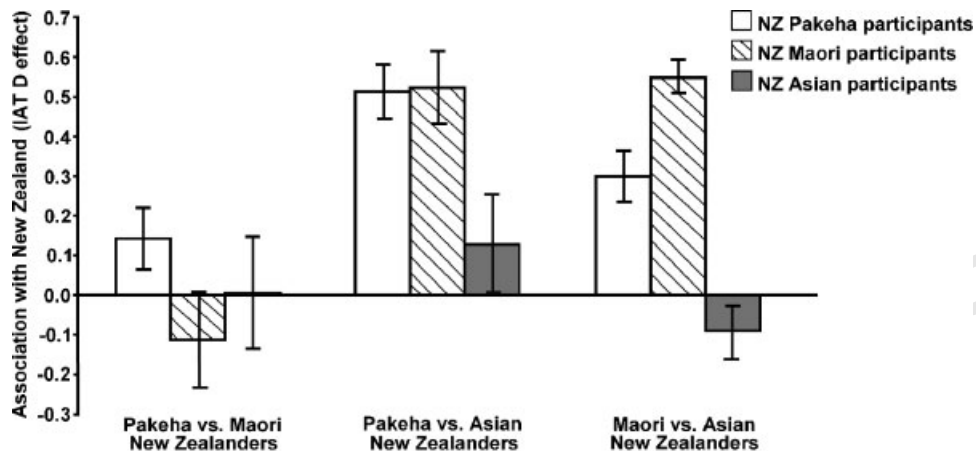


Figure 2. Study 2: Strength of implicit associations with New Zealand (IAT D effect) and pairs of ethnic groups (targets) as a function of participants' self-identified ethnicity. For each pair of ethnic groups (e.g., Pakeha vs. Maori targets), a positive effect size indicates a stronger implicit association between the first ethnic group (e.g., Pakeha targets) and New Zealand, whereas a negative effect size indicates a stronger association between the second ethnic group (e.g., Maori targets) and New Zealand. Error bars represent the standard error of the mean ($n = 63$)

Self-identified Pakeha ($M_{IAT D} = 0.15$, $SD_{IAT D} = 0.48$), Maori ($M_{IAT D} = -0.12$, $SD_{IAT D} = 0.50$), and Asian ($M_{IAT D} = 0.00$, $SD_{IAT D} = 0.55$) participants all tended to associate NZ with both Pakeha and Maori at similar levels. One sample t -tests indicated that the Pakeha–Maori IAT D effect did not differ significantly from 0 for Pakeha, $t(29) = 1.70$, $p = .10$, Maori, $t(18) = -0.99$, $p = .33$, or Asians $t(13) = 0.03$, $p = .98$. Although, in the case of Pakeha, the effect approached significance at $p = .10$.

Pakeha–Asian NZ Comparison

There were significant differences in the implicit association between NZ and Pakeha targets relative to Asian targets between different ethnic groups, $F(2, 60) = 4.25$, $p = .02$, partial $\eta^2 = 0.12$. As seen in Figure 2, Bonferroni-corrected pairwise comparisons indicated that Pakeha ($M_{IAT D} = 0.51$, $SD_{IAT D} = 0.39$) and Maori ($M_{IAT D} = 0.51$, $SD_{IAT D} = 0.43$) participants displayed a stronger implicit association between NZ and Pakeha targets (relative to Asian targets) than Asian participants did ($M_{IAT D} = 0.14$, $SD_{IAT D} = 0.48$).

Maori–Asian NZ Comparison

There were also significant ethnic differences in the implicit association between NZ and Maori targets relative to Asian targets, $F(2, 60) = 18.23$, $p < .01$, partial $\eta^2 = 0.38$. As seen in Figure 2, Bonferroni-corrected pairwise comparisons indicated that Maori ($M_{IAT D} = 0.54$, $SD_{IAT D} = 0.23$) participants displayed a stronger implicit association between NZ and Maori targets (relative to Asian targets) than did Pakeha ($M_{IAT D} = 0.30$, $SD_{IAT D} = 0.35$) and Asian ($M_{IAT D} = -0.10$, $SD_{IAT D} = 0.30$) participants. Pakeha participants also perceived Maori targets as being significantly more strongly associated with NZ than did Asian participants, but to a lesser degree than Maori.

Discussion

Cross-ethnic comparisons replicated and qualified the findings from Study 1. Although the overall pattern supported the interpretation that NZ = bicultural in terms of the strength of implicit associations, each ethnic group also showed signs of ingroup favoritism. The small tendency for Pakeha participants to favor their ingroup relative to Maori targets observed in Study 1 was non-significant in this sample; although it was in the expected direction and of a comparable magnitude to the effect observed previously. Pakeha participants did favor both their ingroup and Maori over Asian New Zealanders. There were also trends suggesting that Asian and Maori New Zealanders each saw themselves as more strongly implicitly associated with NZ symbols when compared against one another, but Maori participants showed much stronger levels of ingroup favoritism than did Asian New Zealanders.

STUDY 3

The results of Studies 1 and 2 indicated that Pakeha students displayed, on average, relatively weak differences in implicit associations between the concept 'NZ' and members of their own ingroup compared to Maori. There remained, however, substantial variation across individual Pakeha participants in the extent to they implicitly perceived NZ as bicultural versus monocultural. Our third study sought to examine the individual difference correlates of such variation in order to examine whether certain characteristics of the individual predispose some people to hold strong pro-ingroup implicit associations.

Duckitt (2001) has argued that individual differences in prejudice and negative intergroup attitudes are the product of two distinct group-based motivational goals, indexed by Social Dominance Orientation (SDO; Sidanius & Pratto, 1999) and Right-Wing Authoritarianism (RWA; Altemeyer, 1996). According to Duckitt (2001), SDO arises from perceptions of the social environment as a competitive dog-eat-dog world, and predicts domains of prejudice motivated by the desire for intergroup dominance and superiority. RWA arises from perceptions of the social environment as dangerous and threatening, and predicts domains of prejudice motivated by the desire for collective security and social cohesion. In the NZ context, for example, meta-analysis indicates that SDO and RWA both predict unique variance in explicit (self-report) measures of negative intergroup attitudes (Sibley, Robertson, & Wilson, 2006). This suggests that prejudice toward ethnic minority groups in NZ (namely, Maori, Pacific Nations, and Asian peoples) is driven by the combination of both competition-driven desires for intergroup dominance, and threat-driven desires for safety and collective security (Duckitt & Sibley, 2007). The degree to which individual differences in these two motivational factors determine prejudice, depends, in turn upon the combination (and possible interaction) of socio-structural conditions and underlying personality traits (Duckitt, 2001).

Research examining the extent to which SDO and RWA predict prejudice and related attitudes has focused primarily on explicit (self-report) measures, and studies examining the extent to which SDO and RWA predict conceptually similar implicit measures of ethnic group attitudes remain limited. This is especially true of research examining the correlates of implicit ethnic-national associations, such as those assessed in Studies 1 and 2. Moreover, to our knowledge, research has not yet assessed the degree to which implicit ethnic-national associations overlap with other commonly employed self-report measures of negative intergroup attitudes expressed toward the same ethnic minority groups (in this case Maori, Pacific Nations, and Asian New Zealanders). In Study 3 we addressed this issue by

examining the degree to which SDO, RWA, and measures of ethnic group attitudes correlated with Maori–Pakeha ethnic-national IAT scores.

We expected that implicit ethnic-national ingroup biases would be predicted by threat-driven needs for security cohesion (RWA) and competitive-driven needs for intergroup superiority and dominance (SDO) in a similar manner to explicit attitude measures. We also expected that stronger pro-ingroup ethnic-national associations (i.e., the automatic tendency to equate Pakeha faces with NZ symbols faster than when pairing Maori faces with NZ symbols) would be positively correlated with both *pro-Pakeha* ingroup attitudes, and *anti-Maori* outgroup attitudes. Finally, combining these two predictions, we test a mediational model examining the extent to which hypothesized associations between RWA and SDO with implicit ethnic-national associations occurred because SDO and RWA predicted *pro-Pakeha* ingroup attitudes and *anti-Maori* outgroup attitudes (as shown in previous research; Sibley, Liu, & Kirkwood, 2006), which then in turn predicted implicit ethnic-national biases. For example, consistent with Duckitt (2001), RWA should predict pro-ingroup biases because people who are highly motivated by threat-driven needs for security cohesion tend to be more ethnocentric and thus more strongly identified with their ingroup at the explicit level. Heightened ethnocentrism expressed at the explicit level should, in turn, correlate with implicit ethnocentrism in the form of faster reaction times when pairing faces of ones ingroup (Pakeha) with national symbols, related to faces of Maori outgroup members.

Method

Participants

Participants were 54 undergraduate students who received partial course credit for participation and who self-identified as NZ European/Pakeha in ethnicity. Participants (21 males and 33 females) ranged from 18–55 years of age ($M = 21.96$, $SD = 7.34$). All participants were born in NZ. On average, participants' families had been in NZ for 3.52 ($SD = 2.13$) generations on their mothers' side, and 3.81 ($SD = 2.48$) generations on their fathers' side.

Stimuli

All stimuli used in this study were identical to those used in the Pakeha versus Maori IAT described in Study 2.

Procedure

SDO was first measured using the balanced 16-item SDO₆ scale (Sidanius & Pratto, 1999). The scale included Likert-type items such as 'Some groups of people are simply inferior to other groups' (protrait), and 'No one group should dominate in society' (contrait). RWA was then measured using a shortened set of 16 balanced items from Altemeyer's (1996) scale (items: 8, 10, 12, 13, 15, 22, 23, 24, 25, 26, 28, 29, 30, 31, 32, and 34), including items as 'The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas' (protrait), and 'Our country *needs* free thinkers who will have the courage to defy traditional ways, even if this upsets many people' (contrait).

Negative attitudes toward Maori, Asian, and Pacific Nations peoples, and positive intergroup attitudes toward Pakeha were each assessed using 8 items from Duckitt and Parra's (2004; see also Duckitt, 2001) ethnic attitudes scale. Example items assessing negative attitudes toward Maori are: 'Too many Maori are abusing the welfare system in this country' (protrait), and 'Much more needs to be done to redress the wrongs that have been done to Maori in this country' (contrait). Example items assessing negative attitudes toward Pacific Nations peoples are: 'Pacific Islanders just don't try hard enough to get ahead in this country' (protrait), and 'An important reason why Pacific Islanders struggle to get ahead in New Zealand is the prejudice and discrimination against them' (contrait). Example items assessing negative attitudes toward Asian peoples are: 'Too often Asians are taking jobs or positions in this country that should go to other New Zealanders' (protrait), and 'Asian culture has helped to make New Zealand a more interesting place' (contrait). Example items assessing positive attitudes toward Pakeha are: 'NZ Europeans/Pakeha with their ideal of mateship are one of the most friendly and generous people in the world' (protrait), and 'New Zealand would in many ways probably be a better country today if the NZ Europeans/Pakeha had never arrived here' (contrait).

All items were rated on a scale ranging from 0 (strongly disagree) to 6 (strongly agree). Descriptive statistics and internal reliability for all measures are shown in Table 1.

In the following week, participants completed an IAT assessing the implicit association between NZ symbols (relative to foreign symbols) and photos of Pakeha and Maori New Zealanders. The procedure and coding used for this IAT were consistent with that of the Pakeha versus Maori IAT described in Study 2. IAT and self-report survey data were matched using confidential student identification numbers.

Results

Implicit Associations Between Ethnicity and Nationhood

Consistent with Study 1, self-identified Pakeha participants reacted more quickly when pairing NZ symbols and Pakeha faces using a single response key ($M = 629$ ms) than when pairing NZ symbols and

Table 1. Study 3: Descriptive statistics and correlations between self-identified Pakeha respondents' levels of SDO, RWA, explicit ethnic ingroup and outgroup attitudes, and implicit Pakeha versus Maori IAT D scores

	1	2	3	4	5	6	7
1 SDO							
2 RWA	.41*						
3 Pro-Pakeha ingroup attitudes	.37*	.44*					
4 Anti-Maori outgroup attitudes	.29*	.24	.71*				
5 Anti-Pacific Nations outgroup attitudes	.40*	.20	.63*	.71*			
6 Anti-Asian outgroup attitudes	.29*	.33*	.37*	.50*	.56*		
7 Pakeha versus Maori IAT D	.05	.25 ⁺	.49*	.38*	.20	.28*	
<i>M</i>	1.76	1.81	3.19	3.52	2.95	2.71	.21
<i>SD</i>	.82	.66	.78	1.12	.86	.74	.43
α	.89	.85	.78	.92	.84	.86	—

Note: ⁺ $p < .07$; * $p < .05$. $n = 54$ for all correlations. Scale scores for all self-report measures ranged from 0 to 6. Higher levels of SDO and RWA reflect higher motivations for intergroup dominance and superiority, and collective security and social cohesion, respectively. Higher levels of pro-Pakeha attitudes reflect a more positive attitude toward Pakeha. Higher scores on the Maori, Pacific Nations, and Asian ethnic attitudes scales reflect more negative attitudes toward these outgroups. Higher IAT D scores indicate a stronger association between New Zealand and Pakeha (relative to Maori).

Maori faces using a single response key ($M = 696$ ms). A one sample t -test indicated that the IAT D effect ($M_{IAT\ D} = 0.21$, $SD_{IAT\ D} = 0.43$) differed significantly from 0 and was medium in effect size, $t(53) = 3.45$, $p < .01$, $d = 0.48$.

Associations Between Explicit and Implicit Measures

Correlations between the implicit association between NZ and Pakeha (relative to Maori) and various explicit measures of ethnic ingroup and outgroup attitude are shown in Table 1. RWA was weakly positively correlated with implicit NZ + Pakeha association ($p = .07$), whereas SDO appeared unrelated to this implicit association. Pakeha participants with a stronger implicit association between NZ and Pakeha also tended to express higher levels of explicit pro-ingroup ethnic attitudes and express more negative explicit attitudes toward Maori, and to a lesser extent Asian and Pacific Nations peoples. SDO and RWA correlated with explicit ingroup and outgroup ethnic attitudes. Explicit pro-Pakeha ingroup attitudes were also positively correlated with more negative explicit attitudes toward ethnic outgroups (i.e., Maori, Asian, and Pacific Nations peoples). These correlations indicate that Pakeha participants who displayed strong NZ = White effects tended to be somewhat higher in the threat-driven security-cohesion motivation indexed by RWA, and also tended to score more highly on standard self-report measures of prejudicial attitudes toward Maori, and to a lesser extent other ethnic minority groups.

We next used multiple regression to examine the unique variance in pro-ingroup ethnic-national associations predicted by RWA and SDO. Consistent with the correlations reported in Table 1, when examined concurrently, RWA was marginally significantly associated with stronger pro-ingroup implicit biases ($\beta = .27$, $t = 1.84$, $p = .07$), whereas SDO was unrelated to IAT scores ($\beta = -.07$, $t = -0.44$, $p = .67$). Pro-Pakeha and anti-Maori, anti-Pacific Nations, and anti-Asian ethnic group attitudes were then entered at Step 2. When these explicit measures were considered concurrently, pro-Pakeha ethnic group attitudes emerged as the only significant predictor of pro-ingroup ethnic-national association ($\beta = .55$, $t = 2.81$, $p < .01$). Furthermore, the effect of RWA was dramatically reduced and was clearly non-significant after controlling for pro-Pakeha ethnic group attitudes ($\beta = .03$, $t = 0.17$, $p = .87$). Sobel's t indicated this drop was significant ($t = 1.96$, $p = .05$), thus indicating that pro-Pakeha ethnic group attitudes mediated the association between RWA and ingroup bias in implicit ethnic-national association.

Discussion

Consistent with Studies 1 and 2, results from Study 3 indicated that Pakeha displayed a significant, but relatively weak pro-ingroup implicit bias. Although this implicit ingroup bias was relatively low overall, individual differences in IAT scores were reliably predicted by RWA and pro-ingroup and anti-outgroup ethnic attitudes. These correlational results indicated that the Pakeha versus Maori IAT provided an implicit measure assessing pro-Pakeha (ingroup), and to a lesser extent anti-Maori (outgroup) attitudes that was highly correlated but distinct from explicit measures of intergroup attitudes used in previous self-report research (Duckitt, 2001; see also Duckitt & Parra, 2004). The correlational data reported here also indicate that individual differences in Pakeha respondents' levels of implicit association between NZ and their ingroup were more closely associated with the motivation for collective security and social cohesion (as indexed by RWA), rather than by the motivation for intergroup dominance and superiority (as indexed by SDO).

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Finally, these results supported a mediational model in which, consistent with previous research (Duckitt, 2001), RWA predicted pro-ingroup ethnic attitudes measured at the explicit level, which were in turn strongly associated with a heightened implicit NZ + Pakeha association measured using the IAT. Thus, this model is consistent with the premise that majority group members who high in threat-driven security-cohesion needs (RWA) tend to be more ethnocentric, which results in similar implicit biases in which the ingroup is more strongly automatically associated with representations of the nation.

STUDY 4

Studies 1, 2, and 3 demonstrated that Pakeha participants held a weak implicit association between NZ symbols and members of their ingroup relative to Maori. Our final investigation aimed to disrupt this weak NZ = Pakeha implicit association by using semi-famous faces from a domain where Maori and Pakeha are both known to excel. When exploring the limits of the American = White effect observed in their research, Devos and Banaji (2005) reasoned that the effect might be attenuated in a domain where African Americans are highly representative of America, namely sports. Although White American students explicitly rated African American athletes as more representative of America than White athletes, their results indicated that the implicit American = White effect remained significant and was of a comparable magnitude to that observed in studies using faces of unfamiliar White and African Americans.

Rugby is NZ's national sport, and supporting the All Blacks (NZ's national team) is one activity where many New Zealanders feel comfortable asserting national identity. In line with the notion that Pakeha displays considerable support for the symbolic aspects of biculturalism (Sibley & Liu, 2004), and contrary to results observed in the USA, we predicted that the use of Maori and Pakeha rugby players in place of unfamiliar faces would entirely remove the weak NZ = Pakeha (relative to Maori) association observed in the previous studies.

Method

Participants

Participants were 32 undergraduate students who received partial course credit for participation and who self-identified as solely NZ European/Pakeha in ethnicity. Participants (11 males and 21 females) ranged from 18–40 years of age ($M = 20.63$, $SD = 4.32$). All participants were born in NZ.

Stimuli

This study used the same symbols representing NZ and foreign countries described in Study 2. However, the picture of the silver fern used in Study 2 was excluded as this symbol is directly associated with the All Blacks and NZ sport. This yielded a set of five NZ symbols. To maintain balance, the foreign symbol depicting a silhouette of a fish and bird on a black and white background was also excluded, yielding a set of five foreign symbols.

All photos were color head-and-shoulder photos of players included in the All Blacks squad at some time during the 4 years prior to when this data was collected in 2005. All photos were of players wearing plain black collared polo shirts (which did not show any symbols of NZ). Four photos were

used to represent All Blacks of Maori ancestry (Rico Gear, Joe McDonnell, Piri Weepu, and Kees Meeuws). These four All Blacks had also all previously played for the NZ Maori (an additional national team comprised of players of Maori descent), and were rated by an independent group of participants as appearing to be of Maori ancestry. Four photos were used to represent Pakeha All Blacks (Simon Maling, Nick Evans, Steven Bates, and James Ryan). These four All Blacks had *not* previously played for the NZ Maori, and were rated by an independent group of participants as appearing to be of European ancestry. All faces were 45 mm wide \times 64 mm high.

Procedure

Explicit Associations Between Ethnicity and Nationhood Explicit beliefs about the degree to which Pakeha All Blacks, $\alpha = .51$, and Maori All Blacks, $\alpha = .70$, represent NZ were each assessed using 5 Likert-type items: '[NZ European/Maori] All Blacks represent what New Zealand is all about,' '[NZ European/Maori] players in the All Blacks contribute significantly to the glory of New Zealand,' '[NZ European/Maori] players in the All Blacks dominate players from other countries', 'Seeing [NZ European/Maori] players in the All Blacks make me feel proud to be a New Zealander,' and 'We should celebrate the triumphs of [NZ European/Maori] players in the All Blacks less' (contrast). Participants were aware that they would be asked to respond to the same series of questions for each ethnic group, and were asked to think about overall groups of Maori and Pakeha All Blacks, rather than specific individuals when completing these items. These items were based on those used by Devos and Banaji (2005), and were worded so as to provide an explicit counterpart to the IAT assessing the implicit association between NZ and Pakeha versus Maori All Blacks. Items were rated on a scale ranging from 0 (strongly disagree) to 6 (strongly agree).

Implicit Associations Between Ethnicity and Nationhood As part of the same testing session, participants then completed an IAT assessing the implicit association between NZ symbols (relative to foreign symbols) and faces of Maori and Pakeha All Blacks. Before completing the IAT, participants were shown NZ and foreign symbols and photos (with names) of the All Blacks used in this study. They were informed that all faces were of players who had been included in the All Blacks squad at some time within the last 4 years. They were also informed that the photos of Maori All Blacks were of players of Maori ancestry who had played previously in the NZ Maori rugby team, whereas the photos of Pakeha All Blacks were of players of European ancestry. Consistent with Studies 2, 3, and 4, participants were then told that the study examined how quickly people could categorize these different symbols and faces into categories.

The category labels 'New Zealand' and 'Foreign' were used to describe NZ and non-NZ symbols. The category labels 'EUROPEAN ALL BLACKS' and 'MAORI ALL BLACKS' were used to describe these two categories of faces⁵. All other aspects of the procedure and scoring methods used in this study were consistent with those described in Study 2. The order of both self-report and IAT measures, and ethnic-nation pairings presented in blocks 3 and 4, and blocks 6 and 7 of the IAT were counterbalanced. Finally, participants rated their level of familiarity with each player on a scale ranging from 0 (not

⁵We chose to use the category labels 'MAORI ALL BLACKS' and 'EUROPEAN ALL BLACKS' rather than alternative labels such as 'NZ MAORI ALL BLACKS' and 'NZ EUROPEAN ALL BLACKS' because pilot testing indicated that in this context the label 'NZ MAORI ALL BLACKS' might be interpreted as referring to players who played rugby for the NZ Maori rugby team rather than the national All Blacks. The term 'NZ' was therefore removed from both category labels to retain consistency across the two categories.

familiar) to 6 (very familiar). Familiarity ratings for both Maori, $\alpha = .92$, and Pakeha, $\alpha = .92$, All Blacks displayed a high internal reliability.

Results

Explicit Ratings of Familiarity

A paired sample *t*-test indicated that participants were, on average, significantly more familiar with the Maori All Blacks included in the study ($M = 3.05$, $SD = 2.15$) than they were with the Pakeha All Blacks ($M = 1.64$, $SD = 1.77$), $t(30) = 0.69$, $p = .49$, $d = 0.72$.

Explicit Associations Between Ethnicity and Nationhood

A paired sample *t*-test indicated that there was no significant difference in self-identified Pakeha participants perceptions of the explicit association between Pakeha All Blacks and NZ ($M = 3.61$, $SD = .84$) and Maori All Blacks and NZ ($M = 3.53$, $SD = .90$), $t(30) = 0.69$, $p = .49$, $d = 0.09$.

Implicit Associations Between Ethnicity and Nationhood

Implicit associations between NZ and Pakeha versus Maori All Blacks were similar to their explicit counterpart. There was no significant difference between Pakeha participants' mean reaction time when pairing NZ symbols and faces of Pakeha All Blacks using a single response key ($M = 587$ ms) than when pairing NZ symbols and Maori All Blacks ($M = 607$ ms). A one sample *t*-test indicated that the IAT D effect ($M_{IAT D} = 0.03$, $SD_{IAT D} = 0.44$) did not differ significantly from 0, $t(31) = 0.42$, $p = .68$, $d = 0.07$. Effect sizes (Cohen's *d*) for analyses of differences in the familiarity, and explicit and implicit association between NZ and Pakeha and Maori All Blacks are presented in Figure 3.

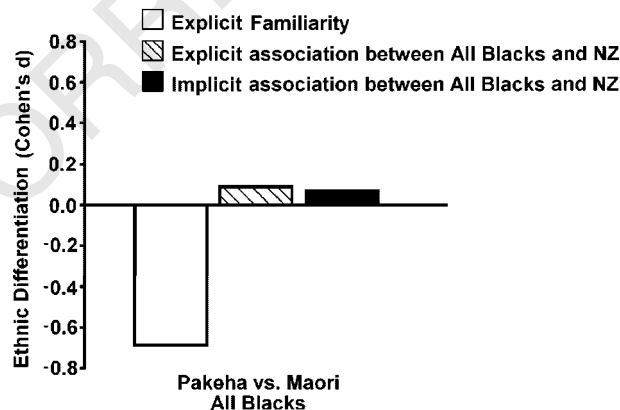


Figure 3. Study 4: Differentiation between Pakeha and Maori All Blacks in terms of explicit familiarity and explicit and implicit associations with New Zealand (Cohen's *d*). A positive effect size indicates increased familiarity with Pakeha relative to Maori All Blacks, and a stronger association between Pakeha All Blacks and New Zealand, respectively ($n = 32$)

Furthermore, differences in explicit familiarity with Maori and Pakeha All Blacks were uncorrelated with the IAT D effect, $r(30) = .15, p = .41$. This result indicated that differences in mean levels of familiarity with the Pakeha and Maori All Blacks used in this study were not responsible for the non-significant IAT D effect. In addition, although similar trends in implicit and explicit measures of ethnic-national association were observed, explicit and implicit measures of strength of association with NZ were not significantly correlated, $r(30) = .17, p = .37$.

Discussion

The small tendency among Pakeha participants to implicitly associate NZ symbols with Pakeha faces was erased by using moderately well-known Maori and Pakeha rugby players. This contrasts sharply with Devos and Banaji's (2005) finding that White Americans exhibit a persistent implicit bias in favor of Whites even in an athletic domain dominated by African Americans. In this comparative context, Maori and Pakeha appear especially unified in terms of their associations with national symbols, perhaps because this domain is invariably invoked to provide contrast to powerful rugby playing outgroups like Australia, South Africa, France, or England, whose players are mainly white.

GENERAL DISCUSSION

Results from four studies indicated that in terms of implicit associations, perceptions of NZ may be most appropriately described as bicultural. Maori and Pakeha were relatively equally associated with national symbols, and far more so than Asian New Zealanders. Studies 1, 2 and 3 yielded an average Pakeha versus Maori effect size of IAT D = 0.19 ($SD = 0.46$) for Pakeha participants. Additional analyses indicated that the effect sizes observed in these three studies were drawn from a homogenous population, and variation in Pakeha participants' IATD scores across studies was due simply to sampling error ($Q(2) = .41, p = .19$).⁶ In addition, although the average IAT D effect for Pakeha participants combined across studies was significant ($t(119) = 4.52, p < .01$), it was considerably smaller than the White versus African American and White versus Asian American IAT D effects reported by Devos and Banaji (2005) for White American students (IAT Ds = 0.40 and 0.55, respectively). Furthermore, as shown in Study 4, in the sporting domain most indicative of national identity, there was no effect whatsoever (IAT D = 0.03). These findings differ dramatically from theoretical predictions and results based on data from the US, which predict that both majority groups *and also* minority groups—especially minority groups such as Maori that are consistently disadvantaged according to national indicators of income and health—should tend to implicitly favor the majority or dominant group (e.g., Devos & Banaji, 2005; Jost et al., 2004). The disjuncture between espoused equality and implicit biases in favor of the majority so prevalent in Devos and Banaji's (2005) American data was little in evidence among Pakeha ('White') New Zealanders.

In both our research (Study 1) and Devos and Banaji's (2005) research, correlations between implicit and explicit measures of ethnic-national association were weak and non-significant (r s of

⁶To test for homogeneity, one sample t -values were first converted to r effect sizes using the formula: $r = \text{square root of } t^2 / (t^2 + df)$. A test for homogeneity of effect sizes was then calculated using the formula: $Q = \sum df_i (z_{ri} - \text{mean } z_r)^2$, where Q is distributed as a χ^2 with $k - 1$ degrees of freedom. Comparable results were also observed using ANOVA (in which study condition was treated as a between-subjects factor), which demonstrated that the magnitude of Pakeha participants ethnic-national implicit associations between Pakeha faces and NZ symbols (relative to Maori faces) did not differ significantly across Studies 1, 2, and 3, $F(2, 117) = 0.17, p = .85, \text{partial } \eta^2 = 0.003$.

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2 approximately .15). As we observed in Study 3, however, the implicit association between Pakeha faces
3 (relative to Maori) and NZ symbols was strongly and significantly positively associated with
4 pro-Pakeha ethnic attitudes ($r = .49$). The lack of correspondence between implicit and explicit
5 measures of seemingly similar constructs has been widely noted in the literature, and led Devos and
6 Banaji (2005) to assert that they may be relatively distinct psychological phenomena. Our data suggest
7 that such a conclusion may be premature, and future research is necessary to examine the factors that
8 moderate such associations. Based on comparison of the associations with self-report measures
9 observed in Study 3, it appears that implicit measures of ethnic-national association may be more
10 strongly tied to measures assessing symbolic or modern forms of racism, than they are to explicit
11 measures that overtly ask participants how much members of the minority group belong to the nation.

12 Taken together, our findings suggest that the 'American dilemma' as outlined Myrdal (1944) is a
13 culturally constructed phenomenon, and a product of the political will of contemporary American
14 society rather than historical circumstances *per se*. Successive governments in NZ from both the right
15 and left have embarked upon a series of projects over the last 30+ years that have brought the Treaty of
16 Waitangi from a dead letter to near constitutional status, and Maori people from the fringes of
17 colonization and assimilation to the symbolic beginnings of a national partnership. These findings are
18 important not simply as a 'quantitative ethnography' of NZ, but because they answer central questions
19 about the meaning of implicit associations between peoples and national symbols (see Fazio & Olson,
20 2003; Greenwald & Banaji, 1995). On most indicators of social and economic well-being, Maori are
21 disadvantaged relative to Pakeha; they form 16% of the total population and 50% of the prison
22 population; they earn 16% less income, and their life expectancy is 8 years lower (The Social Report,
23 2005). As a consequence of these negative statistics, Maori are faced with a plethora of negative
24 stereotypes in NZ society. And yet, Maori and Pakeha have very similar strengths of implicit and
25 explicit association with NZ symbols of national identity.

26 What this tells us theoretically is that the ethnic-national implicit associations reported here are *not*
27 based primarily on asymmetries of power and wealth. Rather, the ethnic-national IAT used in our
28 research measures primarily *symbolic* associations between national identity and ethnicity. These are
29 more likely to be the product of educational practices, artistic performances, representations of history,
30 ceremonial occasions, and cultural/sporting events than the operation of the economy, the distribution
31 of wealth and power, or stereotypes based upon perceived competence and the ability to compete for
32 resources. Moreover, such associations are *not*, as the American case might suggest, necessarily based
33 on immutable socio-historical circumstances or systemic inequality.

34 If the NZ = bicultural phenomenon reflects what Devos and Banaji (2005) refer to as 'socio-cultural
35 realities', these are 'realities' that have been socially constructed by the will of successive governments,
36 institutions, and people over the course of the last 30+ years. As late as 1961, for instance, the
37 comprehensive Hunn report (Hunn, 1961) commissioned by the NZ government described 'Language,
38 arts and crafts, and the institutions of the marae' as the 'chief relics' (p. 15) of Maori culture remaining
39 and that there was 'at least a century of difference between the most advanced and the most retarded
40 Maoris [sic] in their adjustment to modern life' (pp. 15–16). And yet, despite an early history of
41 viewing Maori culture as 'less than' the British colonial way of doing things, and residing structural
42 inequality between Maori and Pakeha in contemporary society, both ethnic groups are seen as
43 contributing symbolically—and relatively equally—to the nation on both explicit and implicit
44 measures.

45 This suggests that that the NZ = bicultural phenomenon is a result of the progression toward a
46 bicultural narrative of ethnic group relations in NZ. This bicultural narrative has emerged as a viable
47 (though frequently contested) ideology organizing the symbolic aspects of national identity (Liu, 2005)
48 and shapes implicit attitudes about the relative contribution of Maori and Pakeha culture to concepts of
49 nationhood. Attitudes among the majority group with regard to the assimilation of Maori changed

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dramatically following the civil rights movements of the late 1960s–early 1980s. Liu (2005) has argued that the high level of Pakeha support for symbols of biculturalism reflects a need for positively distinct symbols of NZ identity following the decision by the United Kingdom in the 1970s to reduce economic ties with its former colonies and enter the European Economic Community. Coupled with the civil rights movement, this has sent NZ on a mission grappling with its national identity. The positive distinctiveness offered by biculturalism, particularly internationally, offers a viable alternative to NZ's traditional status as a loyal colony of Great Britain (see [Pearson, 2005^{Q1}](#)).

The divergent patterns of results observed in NZ and the US emphasize the need for a more comprehensive understanding of the ways in which historical circumstances and socio-cultural realities foster explicit and implicit attitudes toward ethnic-national relations. As we have previously argued, given that the current research used extremely similar measures to those developed by Devos and Banaji (2005), sampled comparable (undergraduate) populations, and administered the IAT in similar conditions, it seems likely that the dramatic differences observed in US and NZ samples are the product of differences in the ways ethnic groups are represented symbolically within the nation. This observation has interesting implications for our understanding of the malleability of implicit stereotypes and prejudice, as a substantial body of literature has emerged in recent years indicating that implicit attitudes are malleable processes that are affected (at least in part) by temporary differences in the salience of specific motivational goals, focus of attention, and the immediate social context more generally (see Blair, 2002).

As such, our findings emphasize the need for detailed cross-cultural research examining the extent to which enduring socio-cultural realities might interact with more transitory factors to produce different patterns of implicit ethnic-national association, and implicit attitudes in general. Researchers interested in such issues, could test whether the degree to which Pakeha implicitly and explicitly perceive Maori culture and symbols as central to national identity and the construction of 'New Zealandness' is affected by manipulations of stereotype threat that vary in the emphasis placed on national distinctiveness. For instance, when faced with a stereotype threat manipulation implying that NZ is inferior to Australia (a close and oft competing nation) in terms of economy, sporting achievements, and such, we expect that the value Pakeha place in the uniqueness of Maori culture and the importance of its role in defining nationhood should increase because manipulations of this type should temporarily heighten motivations for positive national distinctiveness.

As Jost et al. (2004) have convincingly argued; members of both advantaged and disadvantaged groups are often motivated to see the social systems that influence them as legitimate, which results in implicit attitudes that favor majority group members in material or realistic terms. In NZ, we have argued that socio-historical circumstances have created strong institutional support for symbolic aspects of biculturalism that, at the individual level, tends to be embraced by majority group members (at least in part) because it provides a mechanism for promoting the positive distinctiveness of national identity. This raises the interesting possibility that motivations to perceive the system as legitimate (despite the presence of manifest indicators of structural inequality) may be tempered by motivations to achieve positive distinctiveness of national identity at the symbolic level of association.

In conclusion, our research demonstrated that Pakeha (the majority group in NZ) endorsed a bicultural perspective and perceived both their ingroup and the indigenous population (Maori) as strongly associated with representations of the nation. These effects were evident using both explicit measures (Likert attitude scales) and implicit reaction-time measures (the IAT). These results diverge dramatically from those observed in the US by Devos and Banaji (2005), which indicated that although the majority of Americans expressed support for values of equality and inclusion at the explicit level, they display strong and consistent automatic preferences linking representations of America with White Americans relative to African Americans (the American = White effect). What this tells us theoretically is that the degree to which different ethnic groups are included in representations of the

nation is *not* based primarily on asymmetries of power and wealth—as Maori and African American are both disadvantaged relative to majority group members on many socio-economic indicators. Instead, it seems that in the NZ context, Maori culture helps to promote the positive distinctiveness of the nation. As our results suggest, Maori may therefore have considerable symbolic power to validate national identity for many majority group (Pakeha) New Zealanders. The question now then, is how such symbolic power may be best employed to affect material outcomes and hence promote greater equality between advantaged and disadvantaged groups within NZ.

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