A DUAL-PROCESS COGNITIVE-MOTIVATIONAL THEORY OF IDEOLOGY AND PREJUDICE

John Duckitt

1. Introduction

Over the past 4 decades prejudice has been primarily studied as a group or socially shared phenomenon. Important perspectives have been Pettigrew’s (1958, 1960) sociocultural approach; realistic conflict theory (LeVine & Campbell, 1972); and, more recently, social identity and self-categorization theories (Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). However, prejudice can also be viewed as an individual phenomenon in the sense that individuals seem to differ in their propensity to adopt prejudiced and ethnocentric attitudes.

The view of prejudice as an individual phenomenon has an important empirical basis: Prejudice tends to be generalized over targets. Persons who are less favorable to one out-group or minority tend to be less favorable to other out-groups or minorities. This has been documented empirically by strong positive correlations between attitudes to different out-groups. Such findings have been reported for diverse samples and target groups (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Altemeyer, 1981, 1988; Bierly, 1985; Glock, Wuthnow, Piliavin, & Spencer, 1975; Protiro & Jensen, 1950; Ray & Lovejoy, 1986). The effects have typically been quite powerful, with correlations usually around .50 (Duckitt, 1992a), and have even been apparent for social distance to completely fictitious groups (Fink, 1971; Hartley, 1946).
II. Prejudice and Personality

A. THE AUTHORITARIAN PERSONALITY

The finding of the generality of prejudice has been interpreted as suggesting that some stable attribute of individuals, such as personality or enduring beliefs, causes them to hold prejudiced and ethnocentric attitudes in general. This idea was the basis of Adorno et al. ’s (1950) classic theory of the authoritarian personality. Their findings indicated that generalized prejudice, ethnocentric in-group glorification, politicoeconomic conservatism, and profascist attitudes covaried powerfully to form a general attitudinal syndrome. They viewed this attitudinal syndrome as an expression of a basic personality dimension, consisting of nine covarying traits, which they termed the authoritarian personality and which they attempted to measure with their F scale.

Initially their theory of the authoritarian personality and the F scale attracted enormous interest. However, by the early 1960s interest in this perspective had largely collapsed because of its numerous weaknesses. Particularly critical in this respect were the psychometric flaws of the F scale, which largely derived from its lack of reliability and unidimensionality when acquiescent bias due to the all positive formulation of its items was controlled. As Altemeyer (1981) later showed, it appeared to be measuring several poorly related factors.

A second weakness of the F scale attracted much less attention. Whereas the F scale was widely viewed as measuring an authoritarian personality, its items did not pertain to behavioral consistencies or personality trait terms as those of personality scales typically do. Instead, as Stone, Lederer, and Christie (1993, p. 232) point out in their review of the theory, and as other commentators have periodically noted (Feldman & Stenner, 1997; Goertzel, 1987; Verkuyten & Hagendoorn, 1998), the items of the F scale consist of statements of social attitude and belief of a broadly ideological nature. Adorno et al. (1950) seem to have assumed that these statements of ideological beliefs were expressive of underlying personality traits or dispositions, but this was never directly demonstrated.

After 2 decades of obscurity, the idea of an authoritarian personality was revived by Bob Altemeyer in 1981. His research suggested that only three of the original nine facets of authoritarianism described by Adorno et al. (1950)—conventionalism, authoritarian aggression, and authoritarian submission—covaried strongly to form a unitary social attitude dimension, and he developed his Right-wing Authoritarianism (RWA) Scale to measure this dimension.

Subsequent research by Altemeyer (1981, 1988, 1998) and others (cf. Stone, Lederer, & Christie, 1993) has shown that the RWA scale is a unidimensional and reliable psychometric measure of authoritarianism. It powerfully predicts a wide range of political, social, ideological, and intergroup phenomena as well as generalized prejudice to out-groups and minorities and chauvinistic ethnocentrism.

Altemeyer’s work has been important in reestablishing the idea of an authoritarian personality as a central explanatory construct in social and political psychology. However, like the earlier F scale, the RWA scale consisted of items that did not refer to behavior or personality traits, but were statements of social attitude or belief of a broadly ideological nature (see also, e.g., Duckitt, 1989; Feldman & Stenner, 1997; Goertzel, 1987; Saucier, 2000; Stone, Lederer, & Christie, 1993, p. 232). Once again, it was assumed that these relatively stable and enduring social attitudes and beliefs reflected an underlying dimension of personality, but this personality dimension was never directly measured and was merely inferred.

B. SOCIAL DOMINANCE ORIENTATION

During the 1990s an important new perspective on group conflict and ethnocentrism, social dominance theory, was developed (Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius & Pratto, 1993). Sidanius and Pratto suggested that societies minimize group conflict by promoting consensual ideologies that legitimize social and intergroup inequality and discrimination. Their theory centered on an individual difference dimension, social dominance orientation (SDO), measured by their SDO scale. They described SDO as a “general attitudinal orientation toward intergroup relations, reflecting whether one generally prefers such relations to be equal, versus hierarchical” and the “extent to which one desires that one’s ingroup dominate and be superior to outgroups” (Pratto et al., 1994, p. 742).

Research with the SDO scale has shown that it powerfully predicts a range of sociopolitical and intergroup phenomena very similar to that predicted by the RWA scale. Both scales have been particularly powerful predictors of generalized prejudice and ethnocentrism (Altemeyer, 1998; Pratto et al., 1994; Sidanius, Pratto, & Bobo, 1994). Despite this, however, evidence from several sources indicates that the two scales are largely independent of each other.

First, the two scales have shown different patterns of correlation with other social and personal characteristics. Thus, Altemeyer (1998) has pointed out the following:

Most notably, high SDOs are not particularly religious, but high RWAs usually are. Similarly, high scorers on the SDO scale do not claim to be benevolent, but high RWAs do. In contrast, social dominators have a wisp of hedonism about them, but authoritarians disavow such. The former do not need structure nor value conformity and traditions, but the latter do. Social dominators tend to be men; right-wing authoritarians do not. And quite strikingly, high SDOs do not see the world being nearly as dangerous as authoritarians do, nor do they appear to be nearly as self-righteous.... (Altemeyer, 1998, p. 61)
Second, a number of studies have shown that the RWA and SDO scales predict generalized prejudice independently of each other and together account for a very substantial proportion of the variance in prejudice (e.g., this ranged from 48 to 58% for Altemeyer’s six studies) (Altemeyer, 1998; McFarland, 1998; McFarland & Adelson, 1996). A large number of other measures of personality, social attitudes, or values were included in these studies, but added only trivial amounts of explained variance in generalized prejudice to that accounted for by RWA and SDO. And third, the correlations reported between the RWA and SDO scales from a series of studies using large student and parent samples, though invariably positive, have often been nonsignificant and, when significant, relatively weak (Altemeyer, 1998; McFarland, 1998; McFarland & Adelson, 1996; Pratto et al., 1994).

The correlations between RWA and SDO reported in these studies are summarized in Table I and suggest an interesting qualification to their relative independence. Although the correlations for student samples were very weak and mostly nonsignificant, those for parents were somewhat stronger and all significant. A meta-analytic aggregation of these correlations produced an average correlation of .23 (n = 1611) for the parent samples and .125 (n = 1581) for the student samples, with the difference between the two significant (p = .002).

A possible explanation for this apparent age effect could be that the social attitudes expressed in the items of the RWA and SDO scales may be initially acquired relatively independently during socialization, but later come to influence each other over time. This seems plausible because in most western societies politics tends to be organized around a single broad left–right dichotomy with high RWA and SDO associated with the political right and low RWA and SDO with the left. Thus, with political involvement and socialization in late adolescence, the prior acquisition of either authoritarian or social dominance beliefs should generate increasing psychological consistency pressures to adopt the other. This reasoning predicts reciprocal causal effects of RWA and SDO on each other, at least from mid to late adolescence onward. This reasoning would also suggest that RWA and SDO might be more highly correlated in more strongly ideologized sociopolitical systems. For example, this should be the case in societies where party politics is more sharply polarized along a single explicitly ideologically articulated left–right dimension, as seems historically to have been the case in Western Europe, with its powerful socialist labor movements, as opposed to the United States. Consistent with this, Pratto (personal communication, 2/16/00) has found much stronger correlations between SDO and RWA in Germany than have been obtained in the United States.

To sum up, therefore, it seems that two relatively orthogonal to moderately correlated social attitude dimensions independently predict a substantial proportion of the variance in generalized prejudice and ethnocentrism. Altemeyer (1998) has noted that the RWA and SDO scales both seem to relate to different sets of the original nine “trait” clusters listed by Adorno et al. (1950) as descriptive of the authoritarian personality. He therefore suggested that the RWA and SDO scales were measuring two distinct kinds of authoritarian personality: the “submissive” and the “dominant.”

Altemeyer’s suggestion, however, overlooks the point noted here, and by others (Feldman & Sternier, 1997; Goertzel, 1987; Saucier, 2000; Stone, Lederer, & Christie, 1993, p. 232), that the items of both the RWA and the S F scale do not pertain to personality traits or behavior, but to social attitudes and beliefs of a broadly ideological nature. The items of the SDO scale also consist of statements of social attitude and belief, and Pratto et al. (1994) have usually described the SDO scale as a measure of enduring beliefs. This is clearly illustrated by four items randomly selected from each of the scales, which are shown in Table II. Both the RWA and SDO scales therefore would seem more appropriately viewed as measuring social attitude or ideological belief dimensions rather than personality.

Whereas these social attitude or ideological belief dimensions may well reflect distinct underlying personality dimensions, this has never been demonstrated and remains merely a plausible inference. This means that predicting prejudice from the RWA and SDO scales is essentially predicting one set of attitudes (intergroup) from another (social and ideological). It also means that the question of what, if any, personality dimensions may underlie prejudice has not yet been answered. Indeed it suggests that the questions could be profitably broadened to that of what underlying psychological dynamics in individuals, such as personality, might underlie both prejudice and the two ideological belief dimensions of authoritarianism and social dominance.

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample</th>
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<tr>
<td>Altemeyer (1998)</td>
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<tr>
<td>September (1996)</td>
<td>354 students</td>
<td>.22**</td>
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<td>October (1996)</td>
<td>116 students</td>
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<tr>
<td>November (1996)</td>
<td>362 students</td>
<td>.11*</td>
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<td>October (1995)</td>
<td>501 parents</td>
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<tr>
<td>October (1996)</td>
<td>482 parents</td>
<td>.18**</td>
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<td>January (1997)</td>
<td>331 parents</td>
<td>.24**</td>
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<td>McFarland &amp; Adelson (1996)</td>
<td>478 students</td>
<td>.07</td>
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<td></td>
<td>297 parents</td>
<td>.21**</td>
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<td>McFarland (1998)</td>
<td>175 students</td>
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<td>Pratto et al. (1994)</td>
<td>96 students</td>
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*p < .05.

**p < .01.
C. SOCIOPOLITICAL ATTITUDES AND THE TWO DIMENSIONS

The view of SDO and RWA as ideological belief or social attitude dimensions suggests that similar dimensions should have emerged in the research literatures investigating sociopolitical attitudes and sociocultural values. This has been so in both cases. Many investigations, summarized in Section A of Table III, have reported that sociopolitical attitudes and values appear to be organized around two relatively orthogonal dimensions. One dimension has been labeled authoritarianism, social conservatism, or traditionalism, at one pole, versus openness, autonomy, liberalisum, or personal freedom at the other pole. The second dimension has been labeled economic conservatism, power, or belief in hierarchy or inequality at its one pole versus egalitarianism, humanism, social welfare, or concern at its other pole.

Thus, Eysenck (1954) found two orthogonal social attitude factors of radicalism versus conservatism and toughness versus tenderness, with the latter more appropriately relabeled humane versus inhumane attitudes by Brown (1965). A number of investigations have found orthogonal dimensions of social conservatism and economic conservatism (with support for inequality the major component of the latter) (e.g., Hughes, 1975; Middendorp, 1991; Vollebergh, Iedema, & Meeus, 1999). Sauier’s (2000) recent comprehensive study of the structure of social attitudes found that the two most powerful factors, which were orthogonal to each other, were defined by authoritarianism–conservatism (termed “alphpaism”) and social dominance–Machiavellianism (termed “betaisms”). Not surprisingly, therefore, measures of social conservatism have typically been highly correlated with the RWA or F scales (Duckitt, 1993; McHosky, 1996; Ray, 1985b) and scaled together with authoritarianism measures to form a single factor (Saucier, 2000; Raden, 1999), suggesting that the two constructs may be essentially isomorphic. For example, the correlation between conservatism and authoritarianism was .77 in Saucier’s (2000) study.

Many other investigations of sociopolitical attitudes and values have obtained similar findings. Thus, Kerlinger’s (1984) study of sociopolitical critical referents obtained orthogonal factors of conservatism (mainly Protestant ethic and traditionalism) and liberalism (mainly egalitarian and humanitarian referents). Tomkins (1964) similarly found orthogonal ideological belief dimensions of normativism and humanism. Katz and Hass (1988) found that socially conservative Protestant
ethic beliefs were orthogonal to a humanitarism–egalitarianism belief dimension.

Forsyth (1980), studying ethical ideologies, found two orthogonal dimensions of ethical ideology. One dimension was labeled relativism (endorsement of a relativistic as opposed to an absolutist moral code) and the second was labeled idealism (concern for the well-being of others and avoiding harm to them). RWA and conservatism correlated very strongly with the relativism dimension but not at all with idealism (McHosky, 1996). Rokeach’s (1973) classic investigation of values obtained two orthogonal terminal value dimensions, freedom and equality. Braithwaite (1994) found two independent sociopolitical value dimensions of national strength and order on the one hand and international harmony and equality on the other hand. Finally, Ray (1985a) found that the ideological dimension of radical egalitarian–humanism was orthogonal to authoritarianism.

There have also been investigations of the structure of sociopolitical attitudes that on secondary analysis of their primary dimensions have found a single broadly bipolar left–right dimension rather than orthogonality (e.g., Sidanius & Ekehammar, 1976; Wilson, 1970). However, this is not entirely inconsistent with the findings of orthogonality because the orthogonality would tend to be relative and vary according to samples and contexts. Thus, evidence has already been noted suggesting that RWA and SDO seem to be virtually uncorrelated in younger student samples (at least in North America) but are significantly more strongly correlated in older adult North American samples and may also be quite strongly correlated in more highly ideologized sociopolitical systems.

Although these studies of the structure of sociopolitical attitudes have used a variety of measures of the two basic dimensions that have appeared, RWA and SDO seem to have been the most powerful and consistent predictors of political–ideological and intergroup phenomena such as prejudice and ethnocentrism. This has been clearly demonstrated by several recent studies which compared the predictive power of these scales with a large number of other social attitude and value measures over a number of samples (Altemeyer, 1998, pp. 55–60; McFarland, 1998; McFarland & Adelson, 1996). This may be because both are psychometrically highly reliable and unidimensional measures. In contrast, most of the other factors or measures listed in Table III have not been particularly reliable and have frequently been contaminated by response biases (with direction of wording influencing the factors as well as content; see, e.g., Katz & Hass’s, 1988, dimensions).

D. SOCIOCULTURAL VALUES AND THE TWO DIMENSIONS

Research investigating the structure of sociocultural values has also obtained two central value dimensions that directly parallel the two social attitude or ideological belief dimensions of RWA and SDO, with remarkably convergent findings from a number of different investigations (Fiske, Kitayama, Markus, & Nisbett, 1998). These are summarized in Section B of Table III. The most methodologically sophisticated investigation has been that by Schwartz (1992, 1996), whose data from 54 countries and 44,000 participants indicated a circular ordering of value types around two basic dimensions: conservatism (conformity and tradition) versus openness (hedonism and self-direction) and self-enhancement (hierarchy or power) versus self-transcendence (egalitarianism or social concern). These two pivotal dimensions were found to describe both individual differences within cultures or societies and country differences—although the actual structuring of value types was simpler at the societal or global level (with 7 value types for societies as opposed to 10 for individuals).

There is a clear conceptual similarity between Schwartz’s two pivotal dimensions and the two “authoritarian” dimensions of RWA and SDO. This has been empirically confirmed by Altemeyer’s (1998) findings showing that Schwartz’s two conservatism value types of traditionalism and conformity correlated .51 and .40 with RWA, but nonsignificantly with SDO, whereas the two opposing power and egalitarianism values correlated .43 and —.31 respectively with SDO, but nonsignificantly with RWA.

Similar dimensions have emerged from other investigations of cultural values. Hofstede’s (1980) earlier investigation using only country-level data identified dimensions with close similarities to Schwartz’s. The first two factors emerging in his research were individualism–collectivism (corresponding to Schwartz’s conservatism versus openness and RWA) and power distance (the degree to which social inequality and hierarchy are accepted), which corresponds with Schwartz’s power versus egalitarianism and SDO. Trompenaars and his coworkers (Smith, Dugan, & Trompenaars, 1996; Trompenaars, 1993) used data from organizational employees from 43 countries. Their primary dimensions were quite similar to Schwartz and Hofstede’s two primary dimensions, with the first being egalitarian commitment versus power and hierarchy (cf. power distance and SDO) and the second comprising a utilitarian orientation to others versus loyalty to one’s ingroups (cf. individualism versus collectivism or conservatism versus openness and RWA). And finally, Triandis and Gelfand (1998) have reported evidence indicating that cultural values seem to be organized in terms of the two orthogonal dimensions of individualism versus collectivist and vertical (hierarchy) versus horizontal (equality) values.

Collectively these findings suggest that the two dimensions measured by the RWA and SDO scales seem to represent two basic sociopolitical and sociocultural attitude–value–belief dimensions. These dimensions seem to powerfully structure social, political, and intergroup behavior and to have broad cross-cultural validity. This leads to the question, “What could be the psychological bases of such culturally general value–attitude ideological dimensions?”
III. A Theoretical Model of Personality, Ideology, and Prejudice

A. THE TWO DIMENSIONS AS MOTIVATIONAL GOAL-SCHMEAS

Schwartz (1996) has argued that his value dimensions are universal because they directly express basic motivational goals that relate to universal requirements of human existence. This suggests, for example, that the authoritarian-conservatism dimension measured by the RWA scale can be seen as the expression in values and social attitudes of the opposing motivational goals of social control, security, and conformity versus autonomy and individual freedom. The power-inequality-social dominance dimension measured by the SDO scale can be seen as expressing the opposing motivational goals of superiority, dominance, or power over others versus egalitarian and altruistic social concern for others.

The intriguing causal question this raises is why one such motivational goal, rather than its opposite, becomes salient for people. What makes the motivational goal of social control and security salient rather than that of personal autonomy? Two psychological anthropologists, Roy D'Andrade (1992) and Claudia Strauss (1992), have proposed a cultural analysis of motives that suggests an answer in terms of the construct of “motivational goal-schema.” Their analysis proposes that motivational goals are activated or made salient for individuals by schema-driven perceptions or interpretations of reality. Such schemas will typically have been made highly accessible for individuals through cultural socialization. Such chronically accessible schemas about the social world will lead to stable interpretations of, or beliefs about, social reality, which Ross (1993) has termed worldviews and which have the capacity to activate motivational goals and instigate action.

This analysis can be applied to the two dimensions measured by the RWA and SDO scales. It suggests that the two opposing sets of motivational goals expressed in these two ideological belief or social attitude and value dimensions may be activated by the chronic accessibility of corresponding sociocultural schemas that generate particular social worldviews or stable beliefs about the nature of the social world. There are clear indications from the empirical literature of what kinds of opposing schemas or social worldviews seem to underlie these two dimensions.

Thus, strong relationships have been found between indicators of social threat and authoritarianism (e.g., Altemeyer, 1988; Doty, Peterson, & Winter, 1991; Peterson, Doty, & Winter, 1993; Sales, 1973; Sales & Friend, 1973). Most notably, Altemeyer (1988) has reported powerful positive correlations between his RWA scale and the perception of the social world as dangerous and threatening (measured by his Belief in a Dangerous World Scale). A view of the world as dangerous, unpredictable, and threatening, arising from a threat schema made highly accessible through socialization, would activate the motivational goal of social control and security. This motivational goal would be expressed in the collectivist sociocultural values of conformity and traditionalism and in the authoritarian social attitudes of the RWA scale (e.g., the F and RWA scale item: “Obedience and respect for authority are the most important virtues children should learn.”)

The opposite view of the social world as safe, stable, and secure, on the other hand, would derive from a social schema of security. This security schema would have been made highly accessible through socialization and would activate the opposing nonauthoritarian motivational goal of personal freedom or autonomy, which would be expressed in individualistic sociocultural values and nonauthoritarian social beliefs and attitudes (e.g., the contrait RWA item: “Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else”). In terms of D’Andrade’s (1992) goal-schema construct, these could be termed the opposing motivational goal-schemas of threat-control versus security-autonomy.

What kind of opposing worldviews would trigger the motivational goals of superiority-power-dominance versus altruistic social concern? A valuable clue comes from two highly correlated scales (Personal Power, Meanness, and Domination, or PP-MAD, and Exploitive Manipulative Amoral Dishonesty, or EE-MAD) constructed by Altemeyer (1998), which correlated powerfully with SDO but not with RWA. These two scales, like the Machiavellianism scale from which many of these items were drawn, seem conceptually heterogeneous because some items seem to relate to personality and behavior, whereas most express social attitudes and beliefs. A number of the social belief items seem to directly express a belief that the social world is a competitive jungle characterized by a ruthless and amoral Darwinian struggle for survival (e.g., “It’s a dog eat dog world where you have to be ruthless at times”). Sidanius, Pratto, and Bobo (1994), in using a short alternative ad hoc version of the SDO scale, also found that items expressing a ruthlessly competitive view of the world (“Winning is more important than how the game is played”) scaled together with more typical SDO scale items expressing a belief in social inequality.

It is interesting that such a competitive-jungle worldview also permeated Hitler’s speeches and writings. For example, in a speech at Kulmbach in 1928:

The idea of struggle is as old as life itself, for life is only preserved because other living things perish through struggle... In this struggle, the stronger, the more able, win, while the less able, the weak, lose... It is not by the principles of humanity that man lives or is able to preserve himself above the animal world, but solely by the means of the most brutal struggle. (cited in Bullock, 1962, p. 36)

This schema-based view of the world as a competitive jungle characterized by a ruthless, amoral struggle for resources and power in which might is right, and winning everything, seems likely to unleash the motivational goal of seeking power, superiority, and dominance over others. This goal would be expressed in the
sociocultural values of power, dominance, and hierarchy and in the social attitudes expressed in high scores on the SDO scale: a belief in social inequality and a desire that one’s group be superior and dominate others (Pratto et al., 1994). The direct opposite would be a schema-based view of the world as one of cooperative harmony in which people care for, help, and share with each other. This would trigger the altruistic motivational goals of helping and valuing others and sharing with them as equals, which would be expressed in the social attitudes and values of egalitarianism and humanitarianism and reflected in low scores on the SDO scale.

B. SOCIALIZATION, PERSONALITY, AND WORLDVIEW

D’Andrade (1992) and Strauss (1992) suggested that it is cultural socialization that makes particular schemas highly accessible and so generate stable social worldviews. However, they do not address the question of exactly how cultural socialization does this. One possibility is that people’s social worldviews are simply learned directly from others or from their experiences with the social world. This possibility is considered in more detail later. A second possibility, which would presumably operate simultaneously, is that certain culturally favored socialization practices might produce personality-based dispositional tendencies in individuals to interpret and respond to the social world in particular ways.

Some important cross-cultural evidence does suggest that childhood socialization practices may produce personality dispositions that could lead to prejudice and ethnocentrism. Ross (1993) investigated the correlates of internal conflict and external warfare in 90 preindustrial societies. Internal and external conflict were highly associated with each other, and both were significantly and independently predicted by the degree to which two factorially distinct dimensions of childhood socialization practices were characteristic of those societies. One dimension was characterized by punitive, strict, harsh, versus permissive, tolerant, indulgent socialization. Interestingly, this socialization practice dimension is very similar to that which Adorno et al. (1950) suggested would produce authoritarian personalities. Ross’s second socialization practice dimension was characterized by unaffectionate versus affectionate socialization practices (i.e., the degree to which socialization practices lack or involve affection, generosity, and valuing others and children and emphasize honesty and trust toward others).

Ross (1993) suggested that these two socialization practice dimensions create dispositions in people that lead them to interpret their social world in ways that are conducive to ethnocentrism and social conflict. This finding and reasoning suggest a hypothetical causal sequence. First, childhood socialization practices produce or favor particular personality dispositions. Second, these personality dispositions facilitate the adoption of particular social worldviews. Third, both these personality dispositions and their associated social worldviews activate particular motivational goals. And fourth, these motivational goals are expressed in social value—attitude—belief dimensions such as RWA and SDO and impact them on generalized prejudice and ethnocentrism.

Ross (1993) did not address the issue of what kind of personality trait dimensions might be causally conditioned by the two socialization practice dimensions identified in his research. However, it is not difficult to hypothetically extrapolate what kind of personalities these socialization dimensions should produce and how these personalities might causally impact on social worldviews and ideological beliefs. The analysis is summarized in Table IV.

Thus, punitive and strict as opposed to permissive and tolerant socialization seems likely to produce personalities high on social conformity as opposed to individual autonomy. Social conformity would tend to be associated with a strong attachment to conventional society and intolerance of deviance or nonconformity, which should create heightened sensitivity to threats to established society and therefore a greater tendency to see the social world as dangerous and threatening. Both the personality disposition of social conformity and the view of the social world as dangerous and threatening would activate the motivational goal of social control and security, which would be expressed in authoritarian and conservative social attitudes and values. At the other pole of this socialization practice dimension, permissive and tolerant socialization practices should produce personalities high on autonomy, who would be likely to see the social world as safe and secure. This social worldview would activate the motivational goal of seeking personal freedom and would be expressed in nonauthoritarian and individualistic social attitudes and values.

Although no prior research has directly investigated social conformity as a behavioral or personality dimension and RWA, the link seems plausible because the items of the RWA scale express proconformity attitudes and beliefs. A link between punitive childhood socialization and authoritarian attitudes was originally proposed by Adorno et al. (1950) and has been quite extensively investigated.
The correlations obtained have generally been positive but weak and quite often nonsignificant (e.g., Allmeyer, 1981; Milburn, Conrad, Sala, & Carberry, 1995; see also the review by Duckitt, 1992a, pp. 200–202). This would not be inconsistent with the hypothesis here because the link proposed here is one between childhood socialization and social conformity as the personality substrate of authoritarian attitudes. Any effects of socialization on authoritarian attitudes might then be indirect and mediated through personality and could therefore be relatively weak.

The second socialization dimension, affectionate versus affectionate socialization practices, seems likely to produce personalities who are interpersonally hard, tough, ruthless, unfeeling, and cynical; that is, tough-as opposed to tender-mindedness. Such personalities seem likely to be dispositionally inclined to view the social world as a competitive jungle. Both tough-mindedness and a competitive-jungle worldview seem likely to make salient the motivational goal of power and dominance and to be expressed in social dominance attitudes and values of hierarchy and inequality. At the other pole of this socialization practice dimension, affectionate socialization practices should produce personalities high on empathy, compassion, generosity, and caring for others (tender-mindedness), who would be inclined to a view of the social world as a place of cooperative harmony. Viewing the social world as a place of cooperative harmony should make salient the motivational goal of social concern and altruism to others, which in turn would be expressed in low social dominance attitudes and values (egalitarian and humanitarian).

There is some evidence from previous research for a link between a personality dimension of tough-mindedness and the ideological attitude dimension of social dominance. Both Goertzel (1987) and Eysenck (1954) have previously provided evidence that the personality dimension of tough versus tender-mindedness seems to be an important predictor of sociopolitical attitudes. The personality-relevant items contained in Altemeyer’s (1998) PP-MAD scale, which correlated strongly with SDO but not with RWA, tend to express an extreme tough-mindedness and rejection of tender-mindedness and scale together with items expressing a view of the world as a competitive jungle. In addition, a lack of empathy and concern for others has been found to be related to both prejudice (McFarland, 1998) and the SDO scale (Pratto et al., 1994).

In order to more directly test the links hypothesized here between these two personality and ideological attitude dimensions, three pilot investigations were conducted during 1997. These are described in the next section.

C. STUDY 1: PERSONALITY AND IDEOLOGICAL ATTITUDES

1. Samples and Measures of RWA and SDO

Three samples of undergraduate students at McGill University in Montreal, Canada (n = 56); University College London in England (n = 53); and the University of Auckland in New Zealand (n = 51) completed the 14-item version of the SDO scale and shortened 14-item versions of the RWA scale (Duckitt, 1993). Unfortunately, a page was omitted during the printing of the questionnaire used for the Auckland sample so that this sample completed only 4 RWA items. However, this 4-item RWA scale proved reliable enough (α = .54) to be usable. The reliabilities for the 14-item RWA and SDO scales were much higher, ranging from .78 to .87.

2. Measuring Social Conformity as a Personality Trait Dimension

In order to measure social conformity, a personality trait rating scale developed by Saucier (1994) was adapted. Saucier developed a set of personality measures in a series of large-sample multimethod multireplication studies using a large representative set of familiar personality-trait-descriptive adjectives which produced a set of factorially clean and nonevaluative personality trait scales balanced against acquiescence and with high levels of internal consistency. One of his scales, which he named “norm orientation,” provided a direct measure of social conformity as a personality trait dimension.

Testing Saucier’s items for the present research, however, revealed two problems. First, 2 items tended to be unfamiliar to many students and had high nonresponse rates (“reverent” and “unnormilizing”) and were therefore discarded. Second, 5 other items seemed able to be construed as attitudinal rather than personality trait descriptors (conservative, liberal, traditional, religious, and nonreligious). Because this could build in content overlap between personality and attitudinal measures, these items were also discarded and not used in any of the analyses reported in this chapter. This left 13 of Saucier’s personality trait adjectives, with 6 protrait and 7 contrait. To balance the scale, one further protrait item was added that had performed well in item testing showing high item–total correlations with the other items (“respectful”). These 14 items were used in the first pilot study (Montreal) and are listed in Table V (items 1–14). Six further items (items 15–20 in Table V) were not used by Saucier but showed satisfactory item–total correlations with his scale during preliminary item testing and were included with 10 of Saucier’s items (items 1–10) in the next two pilot studies (London and Auckland). These 14- and 16-item social conformity scales showed high levels of internal consistency, with α coefficients ranging from .84 to .87 in the three pilot studies (see Table VI).

The instruction for both this scale and the Tough- versus Tender-mindedness scale, which follows, asked participants to rate “the extent to which you feel each of the following descriptive adjectives is characteristic or uncharacteristic of YOUR PERSONALITY AND BEHAVIOUR” (underlining and capitals in the original). Nine-point response scales ranging from +4 (most characteristic/very strongly agree) to −4 (most uncharacteristic/very strongly disagree) were used for both personality and attitude items.
### Table V

**Items measuring the two personality dimensions**

<table>
<thead>
<tr>
<th>Social conformity</th>
<th>Tough-mindedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rebellious</td>
<td>1. Kind</td>
</tr>
<tr>
<td>2. Unorthodox</td>
<td>2. Compassionate</td>
</tr>
<tr>
<td>3. Conforming</td>
<td>3. Ruthless</td>
</tr>
<tr>
<td>5. Old-fashioned</td>
<td>5. Tough-minded</td>
</tr>
<tr>
<td>7. Non-conforming</td>
<td>7. Forgiving</td>
</tr>
<tr>
<td>8. Moralistic</td>
<td>8. Hard</td>
</tr>
<tr>
<td>10. Unconventional</td>
<td>10. Giving</td>
</tr>
<tr>
<td>11. Unpredictable</td>
<td>11. Merciless</td>
</tr>
<tr>
<td>15. Experimenting</td>
<td>15. Soft-hearted</td>
</tr>
<tr>
<td>17. Individualistic</td>
<td>17. Humane</td>
</tr>
<tr>
<td>18. Respectable</td>
<td>18. Sympathetic</td>
</tr>
<tr>
<td>19. Law-abiding</td>
<td>19. Uncaring</td>
</tr>
</tbody>
</table>

Note: The instruction read “Rate the extent to which you feel each of the following descriptive adjectives is characteristic of your personality and behavior.”

3. **Measuring Tough-mindedness as a Personality Trait Dimension**

Goertzel (1987), in his study of personality and sociopolitical attitudes, used a set of bipolar forced-choice trait adjective items to measure the personality construct of tough-mindedness versus tender-mindedness. Ten of Goertzel’s trait adjectives seemed to fit the construct of tough- versus tender-mindedness conceptualized here as an “interpersonal affective orientation of emotional concern and caring towards others as opposed to one of hard, uncaring, indifference to others’ fate and feelings.” These 10 trait adjectives, with 5 protrait and 5 contrait, were used in a unipolar rating format (i.e., the same format as for the social conformity items) in the first pilot study (Montreal). The α coefficient obtained was .75, indicating an adequate level of internal consistency for a scale of this length. However, four of the items showed quite weak item-total correlations and were therefore discarded for the next two studies. Fourteen new trait adjective items (7 protrait and 7 contrait) were selected on the basis of their fidelity to the construct definition above (rated by two independent judges) and for showing high item-total correlations with the 6 core items from Goertzel’s scale. The resulting 20-item fully balanced tough- versus tender-mindedness scale is shown in Table V and was used in the next two studies (London and Auckland), with α coefficients of .85 and .90, respectively.

4. **Findings**

Table VI shows the α coefficients for the social conformity and tough-mindedness scales and their correlations with the RWA and SDO scales. The findings are clear and completely consistent across the three samples. In each case, social conformity correlated significantly with RWA, but not with SDO. Moreover, these correlations exceeded .50 in each case, indicating very powerful effects (according to Cohen’s, 1988, conventions for effect size). Tough- versus tender-mindedness, on the other hand, correlated significantly with SDO in each case but not with RWA. In this case the effects were not quite as strong, being in the moderate range of effect size according to Cohen’s conventions. Later findings suggest that this difference is because the association of tough-mindedness with SDO is wholly and powerfully mediated by its corresponding social worldview.

RWA and SDO were positively correlated in all three samples, with the correlation being nonsignificant in the Montreal sample ($r = .19$) but significant in the Auckland ($r = .43$) and London ($r = .54$) samples. The stronger correlations in the latter two samples seems consistent with the earlier speculation that RWA and SDO would be more strongly associated in more highly ideologized societies. Both England and New Zealand have been historically characterized by strong labor and socialist movements, with politics powerfulely polarized along a single left-right polarity.
Finally, whereas the correlations between social conformity and tough-mindedness were nonsignificant in all three samples (−.10, Auckland; −.14, London; −.24, Montreal), they were consistently negative. A weak negative relationship seemed plausible because the traits characteristic of high tough-mindedness generally tend to be somewhat socially undesirable and deviant and thus seem less likely to be characteristic of socially conforming persons.

Summing up, therefore, these three preliminary pilot studies showed that two theoretically derived personality dimensions of social conformity and tough-mindedness could be reliably measured and correlated as expected with the two ideological attitude dimensions of authoritarianism and social dominance. This supported the idea that social conformity and tough-mindedness might be the personality bases of these two ideological attitude dimensions. However, the theoretical framework, which was broadly summarized in Table IV, goes well beyond this to propose a systematic set of causal links between socialization, personality, social worldviews, ideological attitudes, and prejudice. The causalities proposed are elaborated in the next section.

D. THE THEORETICAL MODEL

The causal links between socialization, personality, social worldview, ideological attitudes, and ethnocentric attitudes proposed or implied by the theoretical framework summarized in Table IV are diagrammed as a hypothetical causal model in Fig. 1. The core model predictions are that the two socialization practice dimensions, punitive and unaffectionate socialization, impact on the two personality dimensions, social conformity and tough-mindedness respectively, which impact on the two social worldviews, belief in a dangerous and competitive-jungle world respectively. Both personality and worldview then impact on RWA and SDO. This core model thus comprises a theory of the dual psychological bases of the two ideological attitude dimensions of authoritarianism and social dominance. In addition, following the findings of Allmeyer (1998) and McFarland (1998); (McFarland & Adelson, 1996) that RWA and SDO independently predict prejudice and ethnocentrism, it is proposed that these two ideological attitude dimensions would have independent causal impacts on both pro-in-group ethnocentric attitudes and anti-out-group prejudice.

The model, therefore, sees RWA and SDO as being determined by two quite different socialization, personality, and social worldview systems. Tentative links between these two systems can also be proposed, but consistent with the empirically demonstrated relative independence between RWA and SDO, these should mostly be relatively weak. First, the two socialization dimensions, punitive and unaffectionate socialization, seem likely to be positively correlated, with no causal direction indicated. Second, the three pilot studies reported earlier suggested a weak negative relationship between social conformity and tough-mindedness, with causality more likely seeming to be from social conformity to tough-mindedness than the reverse.

Third, it seemed likely that viewing the world as dangerous and threatening and as a competitive jungle might well be positively associated. If so, the more plausible causal direction seems likely to be from seeing the world as a competitive jungle to seeing it as dangerous and threatening rather than the reverse. Fourth, RWA and SDO, as discussed above (cf. Table I), would be expected to impact reciprocally on each other due to pressures toward cognitive consistency, at least in more highly ideologized sociopolitical systems such as New Zealand. In societies such as North America, where politics has not been as strongly organized around a single left-right ideological polarity, these effects might be weak and, particularly in the case of younger, student samples, nonsignificant. The degree of reciprocal causality between RWA and SDO should therefore be sample and context dependent.

Finally, following social identity theory it has been frequently assumed that in-group attitudes should causally influence out-group attitudes (Tajfel & Turner, 1979). Research, however, has suggested that this effect may be variable (Hinkle & Brown, 1990) and hold only when the relationship between groups involves some degree of threat and competition (Duckitt & Mphuthing, 1998). Because this does appear to be the case for majority–minority relations in New Zealand and Afrikaner–African relations in South Africa (cf., e.g., Duckitt & Mphuthing’s, 1998, findings), a causal impact of in-group attitudes on out-group attitudes was tentatively assumed for the studies reported in this chapter. However, reverse and reciprocal effects between in-group and out-group attitudes were also viewed as possible and tested.
IV. Testing the Model

A. INTRODUCTION

A complex causal model relating individual difference variables such as socialization, personality, social worldview, and ideological attitudes is not easily tested experimentally. Such models can, however, be tested using structural equation modeling (SEM) with nonexperimental data in order to assess how well hypothesized causal models fit obtained data. The following sections report such findings from three different samples: two large student samples from Auckland University in New Zealand and a third consisting of White Afrikaans students from a historically White Afrikaans South African university (the University of Pretoria). The first study was only a partial test of the model as measures of the two socialization dimensions and one of the social worldview dimensions, the competitive-jungle social worldview, were not yet available when that study was done. The next two studies, however, tested the entire model diagrammed in Fig. 1.

B. STUDY 2: THE 1998 NEW ZEALAND STUDY

1. Scope and Objectives of the Study

Survey data was obtained from large-enough samples of Auckland University undergraduate students to use SEM with latent variables to test certain core aspects of the proposed causal model. Thus, data from a very large sample (total sample) could be used to test the interrelationships proposed by the model between the two personality dimensions, social conformity and tough-mindedness; one worldview dimension, viewing the world as dangerous and threatening; and the two ideological attitude dimensions, RWA and SDO. Second, a smaller subsample of these participants also completed measures of interethnic attitudes, enabling a test of the same model expanded to include antiminority and promajority ethnic attitudes.

2. Total Sample and Measures of Personality and Ideology

The total sample consisted of 511 undergraduate students (167 males and 343 females) at Auckland University. They completed a questionnaire that included 18 items from Altemeyer’s (1996) RWA scale and 10 items from Pratto et al.’s (1994) SDO scale. In both cases items were randomly sampled from the full scales to give equal numbers of pro and trait items. Both scales proved reliable in this sample with a coefficients of .90 (n = 489) and .78 (n = 504), respectively. Social conformity and tough-mindedness were each measured using 14 of the trait adjectives developed for these scales shown in Table V (items 1–14), again with each 14-item scale consisting of equal numbers of pro- and trait items. The participant instructions and response scales were the same as in the pilot studies. The alpha coefficients for social conformity and tough-mindedness in this sample were .86 (n = 478) and .81 (n = 494), respectively.

3. Conceptualizing Social Worldview and Measuring Dangerous World

The concept of social worldview was defined as a coherent set of beliefs about the nature of the social world, and specifically about what people are like, how they are likely to behave to one, and how they should be responded to and treated. The worldview of a dangerous and threatening social world was conceptualized as having two opposing poles. At one pole was the belief that the social world is a dangerous and threatening place in which good, decent people’s values and way of life are threatened by bad people versus, at the other pole, the belief that the social world is a safe, secure, and stable place in which almost all people are fundamentally good.

The items of Altemeyer’s (1988) Belief in a Dangerous World scale express a belief that the social world is, or is not, a dangerous and threatening place and seemed to fit the theoretical conception of this particular worldview well. The questionnaire contained six items, randomly sampled to give equal numbers of pro- and trait items, from the 12 items of Altemeyer’s (1988) Dangerous World scale. The alpha in this study was .69 (n = 504) and the items are shown in Table IX (items 1–6).

4. European/Pakeha Sample and Promajority and Antiminority Ethic Attitudes

The European/Pakeha sample consisted of a subset of 311 of the participants from the total sample who, in addition to the measures described above, also completed measures of attitudes toward the four main ethnic groups in New Zealand. These were the European origin (locally known as “Pakeha”) politically dominant majority (comprising about 80% of the population) and the three minorities: Asians, Maori, and Pacific Islanders (Polynesians). The ethnic composition of this sample was 224 European/Pakeha, 44 Asian, 13 Maori, 9 Pacific Islanders, and 21 who gave ethnic identity as “other.” Because the analyses for this subsample investigated antiminority prejudice and promajority European/Pakeha attitudes, only the data from the 224 European/Pakeha were used in the analysis.

Promajority (European/Pakeha) and antiminority (Asian, Maori, Pacific Islanders) ethnic attitudes were measured using four eight-item Likert scales with each consisting of four positive and four negative evaluative statements about each of the four groups. Illustrative items are shown in Table X. Earlier research and
pilot testing had shown content validity for these scales and high levels of internal consistency reliability and factorial unidimensionality (Duckitt, 1998).

The α coefficients for these European/Pakeha participants were .80 for the pro-European/Pakeha attitude scale (n = 219), .87 for anti-Asian attitudes (n = 220), .85 for anti-Māori attitudes (n = 218), and .86 for anti-Pacific Islander attitudes (n = 220). The three antinotiminority attitude scales intercorrelated positively and quite substantially (ranging from .48 to .67), suggesting that they could be viewed as tapping a single antinotiminority latent variable.

5. Analysis

The items from each of the two personality and two ideological attitude scales were randomly assigned to create four manifest indicators per scale or latent variable. Thus, the manifest indicators consisted of item sets of two, four, or six items with each item set having been allocated to have equal numbers of pro- and contra item sets. Because the World English scale had just six items, only three indicators were created for it, with each consisting of one pro- and one contra item.

The same manifest indicators were also used for the analysis of the European/Pakeha sample. In addition, for this sample, the eight items of the pro-European/Pakeha scales were randomly allocated to three manifest indicators (consisting of four, two, and two balanced item sets). Finally, the three antinotiminority scales (anti-Māori, anti-Pacific Islander, and anti-Asian) were used as a manifest indicator for the single latent variable of antinotiminority attitudes. In the analysis, all manifest indicators were allowed to relate only to their specific latent variable.

Maximum likelihood estimation was used for both analyses. The theoretical model proposed a reciprocal causal relationship between RWA and SDO, with each influencing the other. It has been recommended that prediction errors between reciprocally related dependent variables should be allowed to correlate in order to remove the influence of any unmeasured external variables affecting their covariation, which might otherwise distort the two reciprocal parameters (Rigdon, 1994; E. Rigdon, personal communication, July, 19, 1999; Shumacker & Lomax, 1996). A correlated error was therefore permitted between these two variables, with no other correlated errors allowed. All analyses were also repeated without this correlated error, with only minor differences being observed in the strength of the two parameters, and none on model fit or any other parameters.

Overall model fit was assessed using Hu and Bentler’s (1999) recent recommendations. Their investigation of the optimal cutoff values of standard maximum likelihood LISREL fit indices suggested that good fit would be best indicated by values close to or better than 0.06 for RMSEA, 0.08 for SRMR, and 0.95 for CFI and GFI. In the case of GFI, Steiger (1989) and others (Mahtani & Mukerjee, 1990) have noted that Joreskog’s widely used index of sample GFI will be biased downward when df are large relative to sample size and proposed a correction to GFI that provides a more robust population estimate. Because the SEM analyses in this study and the next two analyses used mostly very large models relative to sample size, Steiger’s (1989) corrected population GFI was used rather than Joreskog’s sample GFI. Finally, the widely used rule of thumb for very large models, where chi-square values tend to be large, of viewing a χ²/df ratio of less than 2 as a criterion of good fit was also used (Shumacker & Lomax, 1996).

6. Results for the Basic Model: Total Sample

The correlations between the social conformity, tough-mindedness, dangerous world, RWA, and SDO scales for the total sample are shown in Table VII. The correlation between RWA and SDO was .37 (n = 484), which seemed higher than that typically found for student samples in North America (cf. Table I). Despite a truncated age range (over 80% of the sample was between ages 18 and 24 years), the correlation of RWA and SDO was stronger for older students (r = .46 with n = 224 for age > 19 years) than for younger students (r = .28 with n = 224 for age ≤ 19 years). This difference was statistically significant (p = .02).

The covariance matrix for the latent variable analysis for the total sample was based on an N of 444 (with listwise deletion of missing data). Figure 2 shows the standardized path coefficients for the model tested. The overall model fit was good, χ²(144) = 249.8, χ²/df ratio = 1.74, RMSEA = 0.041, SRMR = 0.044, corrected GFI = 0.98, CFI = 0.99, and was clearly superior to the null model in which all parameters were assumed to be uncorrelated, χ²(171) = 4427.7. All predicted paths were significant, and no nonpredicted paths emerged as significant. Thus, social conformity had significant positive paths to dangerous world and RWA and

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. RWA</td>
<td>.37*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. SDO</td>
<td>.56***</td>
<td>.18*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Soc Conf</td>
<td>.03</td>
<td>.30***</td>
<td>-.15***</td>
<td></td>
</tr>
<tr>
<td>4. Tough M</td>
<td>.45***</td>
<td>.15***</td>
<td>.26***</td>
<td>-.09*</td>
</tr>
</tbody>
</table>

Note. RWA = right-wing authoritarianism; SDO = social dominance orientation; Soc Conf = social conformity; Tough M = tough-mindedness; Dang W = dangerous world.

*p < .05.
**p < .01.
***p < .001.
dangerous world a significant path to RWA. Tough-mindedness had a significant positive path to SDO, and the reciprocal paths between SDO and RWA were both positive and significant. In addition, the more tentative expectation that social conformity would have a weak but significant negative path to tough-mindedness was supported. All the manifest indicators, which had been constrained to load only on their latent variables, loaded powerfully on those latent variables. The model accounted for 57% of the variance in RWA and 32% of the variance in SDO.

7. Results for the Extended Model: European/Pakeha Sample

The covariance matrix for the SEM LISREL analysis for the European/Pakeha sample was based on an n of 213 (pairwise deletion of missing data was used because of the relatively low sample size). The correlations between the two personality, one worldview, two ideological attitude, and four ethnic attitude scales are shown in Table VIII. Figure 3 shows the statistically significant standardized path coefficients that were obtained. To simplify the figure the manifest indicators are not shown; however, the paths from latent variables to manifest indicators were all highly significant and generally powerful, with the weakest coefficient being .52 and the remainder all greater than .60. Overall model fit was good, \( \chi^2 (260) = 459.5, \chi^2/df \) ratio = 1.77, RMSEA = 0.060; SRMR = 0.060, corrected GFI = 0.94, CFI = .94, and clearly superior to that of the null model, \( \chi^2 (300) = 2987.5 \).

Once again all paths predicted by the theoretical model were significant (though one path, from RWA to pro-in-group attitudes, was marginally significant). First, the significant paths obtained for the total sample were replicated in this subsample: Social conformity had positive paths to dangerous world and RWA and dangerous world had a positive path to RWA. Tough-mindedness had a positive path to SDO, and social conformity again had the predicted weak negative path to tough-mindedness. RWA and SDO had positive reciprocal effects on each other.

Second, for the extended model, both RWA and SDO had the expected significant positive paths to promajority (European/Pakeha) attitudes and antiminority attitudes. Promajority in-group attitudes had a powerful significant positive path to antiminority attitudes. A model with a reciprocal causal impact of antiminority attitudes on in-group attitudes was also tested but this path was nonsignificant. Thus, the basic pattern of interrelationships that were theoretically expected was supported.

In addition to the relationships predicted by the model, two nonpredicted paths to antiminority prejudice were statistically significant. Social conformity had a significant negative path to antiminority prejudice (i.e., reducing prejudice), and dangerous world beliefs had a significant positive path to antiminority prejudice (i.e., increasing prejudice). Social conformity thus seemed to have two opposing effects on antiminority prejudice: first, the predicted indirect effect mediated
through RWA increasing prejudice (indirect effect = .34) and, second, an unexpected direct effect of reducing prejudice (−.26).

The model accounted for a substantial proportion of the variance in antiminority prejudice ($R^2 = .88$) and in RWA ($R^2 = .54$). In the case of SDO, the proportion of variance accounted for was lower ($R^2 = .35$), but this could well have been due to the absence of a measure of the competitive-jungle worldview.

8. Overview and Implications of the Findings

Overall, both SEM analyses indicated a good fit of data to the theoretical model. The findings thus supported the factorial independence of the latent variable constructs as well as being consistent with the pattern of causal relationships hypothesized between them. In particular, the core predictions about the relationships between the personality, worldview, and ideological attitude variables were clearly supported. Thus, social conformity and dangerous world beliefs had substantial effects on RWA but no effects on SDO. Tough-mindedness, on the other hand, had a reasonably substantial effect on SDO but not on RWA.

In addition, the analysis of the extended model supported the expected independent effects for RWA and SDO on both pro-European/Pakeha majority group ethnocentrism and antiminority prejudice; a finding that is consistent with the prior correlational findings by Altemeyer (1998) and McFarland (1998); (McFarland & Adelson, 1996). The two personality dimensions, social conformity and tough-mindedness, did not increase antiminority prejudice or promajority attitudes directly. They did, however, have significant indirect effects mediated through RWA and SDO of increasing both antiminority prejudice (indirect effects, .34 and .31 respectively, with $p < .05$ for both) and promajority attitudes (indirect effects, .18 and .25 respectively, with $p < .05$ for both).

Although two nonpredicted effects did emerge as significant, both seemed reasonably plausible and did not appear to invalidate the logic underlying the model. Thus, besides its significant indirect effects of increasing prejudice, social conformity also had a significant direct effect of reducing prejudice. Although unexpected, such a direct effect for social conformity would seem plausible in liberal social contexts, such as the one in which this study was done, in which antiminority prejudice was distinctly counternormative. Second, dangerous world beliefs had a significant direct effect of increasing antiminority prejudice. In many societies dominant, majority groups tend to view culturally dissimilar or militant minorities as sources of threat. In such situations, and New Zealand would appear to be one, it seems plausible that viewing the social world as dangerous and threatening would be associated with antiminority attitudes.

Finally, it should be noted that three of the constructs in the theoretical model were not used in the analyses; that is, the competitive-jungle worldview and both childhood socialization measures. Thus, these analyses could only provide a partial test of the model. Nevertheless, the findings provided a useful basis for cross-validation in the next two studies, which tested the complete model.

C. STUDY 3: THE 1999 NEW ZEALAND STUDY

1. Scope and Objectives

Study 3 used data from a new 1999 survey of introductory psychology students at Auckland University to test the complete model diagrammed in Fig. 1. Once again two SEM analyses were done, with the first using all participants to test the core model of socialization, personality, worldview, and ideological attitudes and the second using only European/Pakeha participants to test an extended model including pro-European/Pakeha majority and antiminority ethnic attitudes.

2. Participants and Measures

Survey questionnaires were completed by 381 introductory psychology students, 240 female and 139 male (with 2 not divulging gender). The ethnic
breakdown was 59 Asian, 12 Maori, 16 Pacific Islanders (Polynesian), 237 Pakeha or European-origin New Zealanders, and 57 who gave ethnic identity as "other." The mean age was 20.3 years (SD = 5.19).

The personality, worldview, and ideological attitude measures that had been used in Study 2 were used again, though in some cases with additional items as follows: (1) RWA was measured by the same balanced 18-item version used in Study 2, with an α of .78 (n = 372) in this sample. (2) SDO was a balanced 12-item scale with 2 further items from Pratto et al. (1994) added to the 10 used in Study 2. The α was .52 (n = 376). (3) Belief in a Dangerous World was a balanced 10-item scale with 2 new specially written items plus 2 additional items from Altemeyer’s (1988) scale added to the 6 items used in Study 2 (see Table IX). The α was .81 (n = 376). (4) Social conformity was measured by the same 14 items used in Study 2 with an α of .85 (n = 367). (5) Tough-mindedness was measured by the same 14 items used in Study 2 plus 2 additional items from the item pool in Table V (items 1–16), giving a balanced 16-item scale with an α of .86 (n = 371).

The four balanced 8-item ethnic attitude scales, which had been used in the previous study (Study 2), were used again to measure pro-European majoritarian attitudes and antiminority attitudes using the European/Pakeha participants only. The α were as follows: anti-Asian attitudes, .86 (n = 236); anti-Pacific Islander attitudes, .86 (n = 235); anti-Maori attitudes, .85 (n = 236); and pro-European/Pakeha attitudes, .75 (n = 235).

Once again the correlations between attitudes to the three minorities were positive and substantial (ranging from .45 to .68), justifying using them as manifest indicators for a single antiminority latent variable (Table IX).

3. Measuring a Competitive-Jungle Social Worldview

The broad concept of social worldview was described as a coherent set of beliefs about the nature of the social world, and specifically about what people are like, how they are likely to behave to one, and how they should be responded to and treated. A competitive-jungle social worldview was defined as the belief that the social world is a competitive jungle characterized by a ruthless, amoral struggle for resources and power in which might is right and winning everything (protrait pole) versus a view of the world as one of cooperative harmony in which people care for, help, and share with each other (contrait pole).

A number of the items in Altemeyer’s (1998) PP-MAD and EE-MAD scales (many in turn derived from various Machiavellianism scales) seemed to express this social worldview and were thus used with other specially written items as an item pool. These items were rated by three independent judges for fidelity to the

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**TABLE IX**

**The Construct of Social Worldview and the Two Worldview Dimensions**

| The construct of social worldview | A coherent set of beliefs about the nature of the social world, specifically, about what people are like, how they are likely to behave to one, and how they should be responded to and treated. |
| Dangerous/threatening social worldview | Belief that the social world is a dangerous and threatening place in which good, decent people’s values and way of life are threatened by bad people versus Belief that the social world is a safe, secure and stable place in which almost all people are fundamentally good. |
| Competitive-jungle social worldview | Belief that the social world is a competitive jungle characterized by a ruthless, amoral struggle for resources and power in which might is right and winning everything versus Belief that the social world is a place of cooperative harmony in which people care for, help, and share with each other. |

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**Dangerous world scale items**

1. Although it may appear that things are constantly getting more dangerous and chaotic, it really isn’t so. Every era has its problems, and a persons chances of living a safe, untroubled life are better today than ever before.
2. Any day now chaos and anarchy could erupt around us. All the signs are pointing to it.
3. There are many dangerous people in our society who will attack someone out of pure meanness, for no reason at all.
4. Despite what one hears about “crime in the street,” there probably isn’t any more now than there ever has been.
5. If a person takes a few sensible precautions, nothing bad is likely to happen to him or her; we do not live in a dangerous world.
6. Every day as society become more lawless and belligerent, a person’s chances of being robbed, assaulted, and even murdered go up and up.
7. My knowledge and experience tells me that the social world we live in is basically a safe, stable and secure place in which most people are fundamentally good.
8. It seems that every year there are fewer and fewer truly respectable people, and more and more people with no morals at all who threaten everyone else.
9. The “end” is near. People who think that earthquakes, wars, and famines mean God might be about to destroy the world are being foolish.
10. My knowledge and experience tells me that the social world we live in is basically a dangerous and unpredictable place, in which good, decent and moral people’s values and way of life are threatened and disrupted by bad people.

**Competitive-jungle worldview scale items**

1. Winning is not the first thing; it’s the only thing.
2. The best way to lead a group under one’s supervision is to show them kindness, consideration, and treat them as fellow workers, not as inferiors.
3. If it’s necessary to be cold blooded and vengeful to reach one’s goals, then one should do it.
4. Life is not governed by the “survival of the fittest.” We should let compassion and moral laws be our guide.
5. Money, wealth and luxury are what really count in life.
6. It is much more important in life to have integrity in your dealings with others than to have money and power.

*(continues)*
TABLE IX (continued)

7. It’s a dog-eat-dog world where you have to be ruthless at times.
8. Charity (i.e., giving somebody something for nothing) is admirable, not stupid.
9. You know that most people are out to “screw” you, so you have to get them first when you get the chance.
10. My knowledge and experience tell me that the social world we live in is basically a competitive “jungle” in which the fittest survive and succeed; power, wealth, and winning are everything; and might is right.
11. One should give others the benefit of the doubt. Most people are trustworthy if you have faith in them.
12. We can make a society based on unselfish cooperation, sharing, and people generously helping each other, and not on competition and acquisitiveness.
13. If you have power in a situation, you should use it however you have to get your way.
14. It is better to be loved than to be feared.

Note. All items for the dangerous world scale except 7 and 10 are from Altemeyer’s (1988) scale. All items for the competitive-jungle worldview scale except items 10 and 12 were taken or adapted from Altemeyer’s (1998) PP-MAD and EE-MAD scales.

definition above, and 12 items (6 protrait and 6 contrait) that had been unanimously rated as conforming to the definition were used in the survey. These 12 items, which are shown in Table IX (items 1–12), had an α in this sample of .85 (n = 379), with highly significant item-total correlations for all 12 items.

4. Measuring the Childhood Socialization Dimensions

Two sets of self-report items were written to assess the two socialization dimensions described in Ross’s research (1993) (where they had been studied as societal/cultural level indicators). Seven statements were selected on the basis of judges’ ratings for each scale, with one set of statements expressing childhood experience of punitive, strict, and harsh versus permissive, nonpunitive, and tolerant socialization by parents or caregivers and the other unaffectionate versus affectionate childhood socialization by parents/caregivers.

One of the seven items initially selected for the punitive, strict socialization scale was discarded due to it having weak correlations with the total scale, leaving six items (five protrait and one contrait), which produced an α of .86 (n = 375) in this sample. Five of the seven unaffectionate socialization items were included in the current survey (two protrait and three contrait), producing an α of .81 (n = 379). The items of both these scales are shown in Table XI.

5. Analyses

As in Study 2, two SEM analyses with latent variables were conducted. The first used the total sample to test the basic model of socialization, personality, worldview, and ideological attitudes. The second extended this model to incorporate pro-European majority attitudes and antiminority attitudes and therefore used only the European/Pakeha participants.

Three manifest indicators were used for each hypothesized latent variable. In the case of antiminority attitudes, the three manifest indicators were the full anti-Maori, anti-Asian, and anti-Pacific Islander scales. All the other manifest indicators were constructed by randomly assigning the items of each scale to three subsets, with, where possible, equal numbers of pro- and contrait items in each subset. 

TABLE X

ILLUSTRATIVE ITEMS FROM THE ETHNIC ATTITUDE SCALES USED IN NEW ZEALAND (ATTITUDES TOWARD ASIANS, MAORI, PACIFIC ISLANDERS, AND PAKEHA/EUROPEANS) AND SOUTH AFRICA (ATTITUDES TOWARD WHITE AFRIKANERS AND BLACKS)

Attitudes toward Asians
Asian immigrants are benefiting New Zealand and more should be encouraged to settle here. Young Asian students, through their hard work and perseverance, provide positive role models for the youth of New Zealand.
If many more Asians were allowed into New Zealand they would take over the country.
The prejudice against Asian immigrants in this country is really sick.

Attitudes toward Pakeha (European-origin New Zealanders)
The arrogant and conceited attitude of many Pakeha New Zealanders is really offensive to other ethnic groups in this country. People are living off natural resources of New Zealand and through their greed they are ruining the environment.
In general, Pakeha New Zealanders are treating other ethnic groups very unfairly. Pakeha, with their energy and hard work, are an example that other groups in New Zealand should follow to get ahead.

Attitudes toward Pacific Islanders
More Pacific Islanders should be allowed to immigrate to New Zealand.
Too many Pacific Islanders are taking advantage of the welfare system in New Zealand.
An important reason why Pacific Islanders struggle to get ahead in New Zealand is that there is prejudice and discrimination against them.
Pacific Islanders just don’t try hard enough to get ahead in this country.

Attitudes toward Maori
The main reason why the Maori standard of living is so low is the injustices done to them not only in the past but in the present as well.
Much more needs to be done to redress the wrongs that have been done to Maori in this country.
Maori in New Zealand have a privileged position today that is unfair to other ethnic groups here.
Too much is being done for Maori in New Zealand today.

Attitudes to White Afrikaners/Blacks (Study 4)
It really upsets me to hear someone say something negative about Afrikaners-speaking people/Black people.
White Afrikaners-speaking people/Black people have some very bad characteristics.
I have a very positive attitude to White Afrikaners-speaking people/Black people.
There is very little to admire about White Afrikaners-speaking people/Black people.
TABLE XI
ITEMS OF THE TWO SOCIALIZATION SCALES

Punitive socialization scale items
Harsh socialization subscale
1. I was severely scolded and reprimanded while growing up.
2. I was often physically punished in a painful manner while growing up.
3. I was often physically beaten while growing up.

Strict socialization subscale
1. I would describe my upbringing as very strict.
2. I was strictly disciplined while I was growing up.
3. I grew up in an environment where I was rarely punished.

Unaffected socialization scale items
1. I grew up in an unaffected environment.
2. I grew up in a hard and brutal environment.
3. I was emotionally close to my father (or my primary male caregiver) during my upbringing.
4. I received a great deal of affection from my parents/caregivers during my childhood.
5. I grew up in a caring and loving environment.
6. I did not receive love or affection from my father while I was growing up.
7. I did not receive much loving attention from others during my childhood.

The manifest indicators were thus balanced (consisting of two, four, or six items each) except for the two socialization scales where the unequal numbers of profound contrit indicators meant this was not possible for all their indicators.

Maximum likelihood estimation was used for both analyses. Once again correlated errors were permitted only between the two reciprocally related variables of RWA and SDO (cf. Rigdon, 1994; Rigdon, personal communication, July 19, 1999; Shumacker & Lomax, 1996).

6. Results for the Basic Model Using the Total Sample

The correlations between all the variables for the total sample are shown in Table XII. Once again the correlation between RWA and SDO of .40 (n = 369) was higher than has been reported for North American student samples. Again, despite a truncated age range, this correlation tended to be higher for older than for younger students (r = .28 with n = 175 for age <19 years versus r = .49 for n = 194 for age ≥19 years) with the difference significant (p = .02).

The covariance matrix for the LISREL analysis for the total sample was based on an n of 347 (listwise deletion of missing data). Figure 4 shows the standardized path coefficients for the model tested. The overall fit indices for the model indicated good fit for a model of this size, \( \chi^2(238) = 411.5, \chi^2/df \) ratio = 1.73, RMSEA = 0.046, SRMR = 0.050, corrected GFI = 0.96, CFI = 0.96, which was clearly better than that for the null model, \( \chi^2(276) = 5131.9 \). All the latent variables loaded powerfully on their manifest indicators.

![Fig. 4. Standardized maximum likelihood coefficients from Study 3 (total sample: n = 347) for the structural equation model of two socialization, two personality, two worldview, and two ideological attitude latent variables. Manifest variables are indicated with boxes and latent variables with ovals. A correlated error was permitted between RWA and SDO. All coefficients shown are statistically significant (p < .05). The dashed-line arrow shows a nonpredicted path.](image-url)
All the paths predicted by the model, except one, were statistically significant. Moreover, both the two socialization, personality, and worldview variable sets powerfully predicted their corresponding ideological attitude dimension, almost entirely as expected. Thus, in predicting RWA, punitive, strict socialization had the expected significant paths to social conformity. Social conformity had significant paths to belief in a dangerous world and RWA, and dangerous world belief a significant path to RWA, with these effects mostly in the moderate to powerful range of effect size (Cohen, 1988). The model accounted for 64% of the variance in RWA.

Second, in predicting SDO, unaffectionate socialization had the predicted significant path to tough-mindedness, which had a powerful path to belief in a competitive-jungle worldview, which in turn had a powerful path to SDO. The model accounted for 60% of the variance in SDO. One predicted effect here, a direct effect of tough-mindedness on SDO, was clearly nonsignificant (when its parameter was estimated it was only .01, t = 0.11) and was therefore dropped from the model. There was, however, a highly significant indirect effect of tough-mindedness on SDO (.45, p > .0001) mediated through belief in a competitive-jungle worldview.

Finally, the correlational or causal links hypothesized between these two socialization, personality, worldview, and ideological attitude complexes were confirmed. Punitive socialization and unaffectionate socialization were positively correlated, social conformity had a negative path to (therefore decreasing) tough-mindedness, belief in a competitive-jungle world had a positive path to (therefore increasing) belief in a dangerous world, and RWA and SDO had reciprocal positive effects on each other.

Only one nonpredicted effect emerged as statistically significant. There was a highly significant though not very strong negative effect of unaffectionate socialization on social conformity (t = -2.95, p = .003). Thus, more unaffectionate socialization seemed to lower social conformity.

7. Results for the Extended Model: European/Pakeha Sample

The covariance matrix for the latent variable analysis for the European/Pakeha sample was based on a n of 216 (listwise deletion of missing data). Figure 5 shows the statistically significant standardized path coefficients that were obtained for this model. To simplify the diagram, the manifest indicators, which all had powerful and highly significant paths from their corresponding latent variables (the weakest being .69), are omitted. The fit indices indicated good overall fit for the model: \( \chi^2(385) = 604.2, \chi^2/df = 1.57, \text{RMSEA} = 0.051; \text{SRMR} = 0.058, \text{corrected GFI} = 0.94, \text{CFI} = 0.95, \) which was clearly better than that for the null model, being \( \chi^2(435) = 4569.7. \) The model accounted for a substantial 54% of the variance in antinominy prejudice and for 29% of the variance in pro-European/Pakeha majority attitudes.

Fig. 5. Standardized maximum likelihood coefficients from Study 3-European/Pakeha subsample: n = 216 for the structural equation model of two socialization, two personality, two worldview, two ideological attitude, and pro-European/Pakeha in-group and antinominy out-group attitude latent variables. To simplify, manifest variables and the paths from latent to manifest variables are not shown. A correlated error was permitted between RWA and SDO. The dashed-line arrows show nonpredicted paths. A superscript plus sign denotes a marginally significant (p < .10) path coefficient; all other coefficients shown are significant at the 5% level.

The significant paths for this subsample between the two socialization, personality, worldview, and ideological attitude latent variables were exactly the same as that obtained in the preceding analysis for the total sample. For the extended model, RWA and SDO, again, as in Study 2, had the expected significant positive paths to both antinominy prejudice and pro-European/Pakeha attitudes. Pro-European/Pakeha attitudes again had a strong positive path to antinominy attitudes.

In the previous study (Study 2), two nonpredicted paths to antinominy attitudes had been significant: one a positive path from dangerous world beliefs, and the other a negative path from social conformity. The first of these was clearly replicated in this study. Belief in a dangerous world again had a significant positive path to antinominy attitudes. The second, however, was not replicated. When modeled, the path from social conformity to antinominy attitudes was .08 and nonsignificant and therefore dropped from the analysis.

8. Overview and Implications of the Findings

The findings from both SEM analyses for Study 3 provided good support for the theoretical model. Despite the size and complexity of the model, its overall fit
was good, and all the paths predicted were significant, with only one exception. Tough-mindedness did not have a direct path to SDO; however, it did have a moderate to strong indirect effect on SDO mediated entirely through belief in a competitive-jungle worldview.

The analyses did reveal two nonpredicted significant paths. First, the direct effect of dangerous world beliefs increasing antiminority prejudice observed in Study 2 was replicated. A second nonpredicted path was from unaffectionate socialization to social conformity. Whereas it seems plausible that persons whose childhood socialization lacked affection would be less socially conforming, this path was relatively weak and only marginally significant for the European/Pakeha analysis. This suggests that it needs cross-validation in a new sample. Finally, the nonpredicted finding in the previous study (Study 2), that social conformity had a direct negative path to antiminority prejudice, was not replicated in this analysis, suggesting that it might have been due to chance.

The significant path from punitive socialization to social conformity is particularly interesting because the zero-order correlation between these two variables (see Table XII) was only .05 and clearly nonsignificant. This illustrates the power of SEM to detect effects that would not be apparent using less sophisticated analyses. In this instance, the power derives from both the use of latent variables with measurement error eliminated and multivariate partialing to release spuriously suppressed effects. The spuriously suppressed effects in this case derive from punitive and unaffectionate socialization having a strong positive association with each other, but opposite associations with social conformity. That is, having more punitive parents increases social conformity, but more punitive parents also tend to be less affectionate, which reduces social conformity. This confound therefore results in univariate analyses underestimating the associations of both punitive and unaffectionate socialization with social conformity.

However, although the predicted path from punitive socialization to social conformity was statistically significant, it did seem notably weaker than the model would have expected for both the total and European/Pakeha analyses. This could have been due to weak measurement. However, although the scale to measure punitive socialization was quite short and not fully balanced, this was also the case for the unaffectionate socialization scale, which showed the expected reasonably robust paths to its personality dimension, tough-mindedness.

A possible reason for the relatively weak path coefficients from punitive socialization to social conformity was revealed when the correlations between the individual items of this scale and social conformity were examined. Three punitive socialization items correlated significantly with social conformity, whereas the other three did not, being very close to zero. Inspection of the content of these two item sets suggested a clear content difference, with the set correlating with social conformity seemingly dealing with parental strictness and the other with parental harshness (see Table XI).

An exploratory factor analysis on the six items had originally seemed consistent with unidimensionality, as only one eigenvalue greater than 1 was obtained. However, close inspection of the eigenvalues suggested that a scree test might have located a break between the second and third eigenvalues, which would be consistent with a correlated two-factor solution. This was confirmed using both oblique and varimax rotated two-factor solutions, with the three strictness items loading powerfully on one factor, and the three harshness items on the other. Each of the two item sets produced adequate alpha coefficients despite having only three items (.75 for strict socialization and .79 for harsh socialization). Using the three strict socialization items (with each as a manifest indicator) as a latent variable, instead of the original six-item punitive socialization latent variable, in the two SEM analyses produced clearly stronger paths to social conformity (i.e., .30 and .26 for total and European samples). A harsh socialization latent variable resulted in nonsignificant paths to social conformity (.00 and -.06 for the total and European/Pakeha samples respectively).

However, an important caveat is in order. The distinction between parental harshness and strictness seems intuitively compelling, and it seems theoretically plausible that parental strictness might increase social conformity and parental harshness not. Nevertheless, this distinction was arrived at in post hoc fashion and the analyses separating the two could have been capitalizing on chance variation in the sample. Thus, the same strict and harsh socialization factors were used in the next study to see if their apparently different effects could be replicated.

D. STUDY 4: THE 1999 SOUTH AFRICAN STUDY

1. Objectives, Participants, and Measures

In order to test the model in an entirely new and different sample, a survey questionnaire was administered in late 1999 to introductory psychology students at the University of Pretoria, a predominantly White Afrikaans language university in South Africa. The constructs measured were the same as in the previous study, except that the intergroup attitude measures were pro-White Afrikaner and anti-Black attitudes and punitive socialization was differentiated into strict and harsh socialization scales. The questionnaire was translated into Afrikaans and then backtranslated to check equivalence.

233 White Afrikaans students completed the questionnaire, 145 female and 88 male, average age 19.9 years (SD = 1.87). All the scales produced satisfactory α coefficients, which were as follows: 10 SDO items, .79; 10 RWA items, .67; 10 dangerous world items (Table IX), .82; 14 competitive-jungle world items (Table IX, items 1–14), .76; 14 social conformity items (Table V, items 1–14), .72; 20 tough-mindedness items (Table V, items 1–20), .88; 3 strict socialization
items (Table XI), .74; 3 harsh socialization items (Table XI), .78; 7 unaffectionate socialization items (Table XI), .78; 8 pro-White Afrikaner items (Table X), .72; and 8 anti-Black items (Table X), .84.

2. Analyses, Results, and Conclusions

Three manifest indicators were constructed for each hypothesized latent variable by randomly assigning the items of each scale to three subsets, with, where possible, equal numbers of pro- and contrait items. The indicators for the strict and harsh socialization scales each consisted of three single items.

The correlations between all the variables are shown in Table XIII. The correlation between RWA and SDO was .21, which was lower than the correlations obtained in the New Zealand studies. The correlation between RWA and SDO was also not moderated by age as it had been in the New Zealand samples, with similar correlations for younger (<19 years; r = .24, n = 111) and older students (>19 years; r = .18, n = 114). This seems consistent with the idea that strong RWA-SDO correlations would be characteristic of societies where politics is highly ideologized and a tendency for the correlation to increase with age associated with socialization in societies where politics tends to be ideologically

<p>| TABLE XIII |
| Correlations among the Variables for Study 4 (n's vary from 215 to 233) |</p>
<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tr>
<td>1. RWA</td>
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<td>2. SDO</td>
<td>.21***</td>
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<td>3. Soc Conf</td>
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<td>4. Tough M</td>
<td>-.11</td>
<td>.38***</td>
<td>-.17*</td>
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<td>5. Dang W</td>
<td>.45***</td>
<td>-.29***</td>
<td>-.17*</td>
<td>.12</td>
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<td>6. Comp W</td>
<td>.03</td>
<td>.58***</td>
<td>-.18*</td>
<td>.48***</td>
<td>.19**</td>
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<td>7. Strict Sc</td>
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<td>.16*</td>
<td>-.11</td>
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<td>.14*</td>
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<td>8. Harsh Sc</td>
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<td>.14*</td>
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<td>.13</td>
<td>.18**</td>
<td>.22***</td>
<td>.50***</td>
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<td>9. Unaff Sc</td>
<td>-.08</td>
<td>.08</td>
<td>-.08</td>
<td>.30***</td>
<td>-.15*</td>
<td>.14*</td>
<td>.20**</td>
<td>.21***</td>
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<td>10. Pro-Afr</td>
<td>.49***</td>
<td>.43***</td>
<td>.27***</td>
<td>.06</td>
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<td>.12</td>
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<tr>
<td>11. Anti-Blu</td>
<td>.39***</td>
<td>.49***</td>
<td>.04</td>
<td>.20**</td>
<td>.49***</td>
<td>.29***</td>
<td>.17*</td>
<td>.10</td>
<td>-.00</td>
<td>.50***</td>
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Note. RWA = right-wing authoritarianism; SDO = social dominance orientation; Soc Conf = social conformity; Tough M = tough-mindedness; Dang W = dangerous world; Comp W = competitive-jungle world; Strict Sc = strict socialization; Harsh Sc = harsh socialization; Unaff Sc = unaffectionate socialization; Pro-Afr = pro-White Afrikaner attitudes; Anti-Blu = anti-Blacks attitudes.

**p < .01.  
***p < .001.  

Fig. 6. Standardized maximum likelihood coefficients from Study 4 (n = 206) for the structural equation model of two socialization, two personality, two worldview, two ideological attitude, and pro-White Afrikaner ingroup and anti-Black outgroup attitude latent variables. To simplify, manifest variables and the paths from latent to manifest variables are not shown. All coefficients shown are statistically significant (p < .05). The dashed-line arrows show nonpredicted paths.

All the paths predicted by the model were significant except one: Tough-mindedness once again did not have a direct effect on SDO, but did have a reasonably substantial mediated effect through a competitive-jungle worldview. In this, and indeed almost all, respects, the pattern of significant paths closely replicated those obtained in the previous two New Zealand studies. Thus, the originally nonpredicted effects of unaffectionate socialization in reducing social organized. In South Africa political parties represent ethnic groups and politics is ethnically rather than ideologically organized (see, e.g., Guelke, 1996; Johnson & Schlemmer, 1994).

The covariance matrix for the SEM analysis for the total sample was based on an n of 206 (listwise deletion of missing data). Figure 6 shows the standardized path coefficients for the model tested. To simplify the diagram, the manifest variables and paths from latent to manifest indicators are not shown. The overall fit indices for the model indicated good fit for a model of this size, χ²(386) = 506.4, χ²/df ratio = 1.31, RMSEA = 0.039, SRMR = 0.062, corrected GFI = 0.96, CFI = 0.95, which was clearly better than that for the null model, χ²(435) = 3039.2. All the latent variables loaded powerfully on their manifest indicators (the weakest loading being .53 with no other loading below .65). Overall, the model accounted for substantial proportions of the variance in RWA (62%), SDO (63%), pro-Afrikaner attitudes (56%), and anti-Black attitudes (58%).
conformity, and of dangerous world beliefs in increasing anti-out-group attitudes, were again obtained. Another originally nonpredicted effect, a direct effect of social conformity in reducing anti-out-group prejudice, which had been obtained in the first New Zealand study (Study 2), but not in the second (Study 3), was again significant.

The results of the previous study had suggested that the original six-item punitive socialization measure might have encompassed two strongly related but distinct dimensions, strict and harsh socialization, with only the former relating to social conformity. This was confirmed in this study. Exploratory factor analyses showed the strict and harshness item sets shown in Table XI loading on two separate factors. When modeled as a latent variable (with the three items as manifest indicators) in the SEM, strict socialization had a significant path to social conformity, while harsh socialization, and the full six-item-based punitive socialization latent, did not. However, although both strict and unaffectionate socialization had significant paths to social conformity, both paths were relatively weak.

Finally, whereas in the New Zealand samples RWA and SDO had reciprocal effects on each other, in this White Afrikaner sample only RWA had a significant path to SDO, with the reverse path nonsignificant (-.05, nonsignificant). This is not inconsistent with the model, which had expected the relationships between RWA and SDO to be context dependent. It also seems interpretable in terms of a White Afrikaner nationalism characterized by an intense need for social control and cohesion arising out of an historical experience of extreme insecurity and threat from powerful out-groups (initially British imperialism and later African nationalism). Thus, as historical commentators have suggested, in this society the need to dominate rival groups may have been secondary to, and stemmed from, threat-driven authoritarianism and not the reverse (de Kiewiet, 1957; MacCrone, 1937; see also Duckitt, 2000). The very much more powerful path from RWA to pro-Afrikaner attitudes (.57) in this sample compared to the equivalent paths in the New Zealand samples (.14 and .27) also fits this characterization. Further evidence supporting this characterization is discussed later.

E. OVERALL CONCLUSIONS FROM THE MODEL TESTING STUDIES

1. The Core Model: Personality, Worldview, and Ideology

The results of the three SEM studies indicated good fit of the empirical data to the theoretical model of socialization, personality, worldview, ideological attitudes, and ethnocentrism. Ideally, the model would have been compared to plausible alternative models. In the studies the alternative model was the null or independence model simply because no reasonably plausible alternative models seemed apparent. However, the difficulty of obtaining good fit indices for very large and complex models has frequently been commented on (Potthast, 1993; Yung & Bentler, 1994), and the model tested here was clearly a very large and complex one.

In addition, all but one of the paths predicted by the model were significant across all three analyses. The only consistently nonsignificant path suggested only a minor modification to the model: that the personality dimension of tough-mindedness does not effect social dominance directly, but only indirectly through powerfully facilitating the adoption of a competitive-jungle social worldview.

In contrast, the personality dimension of social conformity had, as expected, a direct effect of facilitating dangerous world beliefs, and both dangerous world beliefs and social conformity had moderate to strong effects on authoritarian attitudes. In essence, therefore, the core of the model, that two ideological attitude dimensions of RWA and SDO will be each determined by two distinct personality and social worldview dimensions, was clearly supported, and the model accounted for very substantial proportions of the variance in both ideological attitude dimensions.

2. Ideology and Intergroup Attitudes

As predicted, the two ideological attitude dimensions both had direct and independent effects on pro-in-group and anti-out-group attitudes, and the model accounted for substantial proportions of the variance in both, but particularly in out-group attitudes. These findings are consistent with the earlier correlational findings by Altemeyer (1998) and McFarland (1998); (McFarland & Adelson, 1996). However, two nonpredicted, but theoretically plausible, paths to anti-out-group prejudice were also significant.

First, seeing the social world as dangerous and threatening had a direct effect of increasing out-group prejudice, over and above its expected indirect effect through increasing authoritarian attitudes. This effect seems plausible for out-groups that would be viewed as threatening by in-group members, as would tend to be the case for majority–minority relations in New Zealand and Afrikaner–Black relations in South Africa.

Second, social conformity, in addition to its expected effect of indirectly increasing prejudice through increasing authoritarianism, also had an unexpected direct effect of reducing prejudice in two of the three studies. Such a direct effect seems plausible in social contexts in which prejudice is non-normative, such as in New Zealand and in the new South African ‘rainbow nation.’ Socially conforming persons should show greater conformity to these general societal norms of non-prejudice. But then, why was the effect not evident in the second New Zealand study?

A possible reason is that the kind of tolerance associated with social conformity may be relatively ‘skin deep.’ Ambivalent and relatively superficial attitudes of racial tolerance have been well documented in the United States in research on
reverse discrimination, symbolic racism (McConahay & Hough, 1976), and “liberal discrimination” (Gaertner, 1973). Rogers and Prentice-Dunn (1981) have also shown that, when angered by a Black, a White’s tolerance may rapidly regress to overt racism and discrimination. In New Zealand there tends to be periodic upsurges of outrage in the media and among the majority general public over “excesses” by Maori activists, “welfare abuse” by minority and immigrant groups, or the “problem” posed by the influx of Asian and Pacific Island migrants. It is possible that at such times social norms of nonprejudice against minorities might weaken and the “tolerance” of more socially conforming majority members evaporate. If so, direct effects of social conformity in reducing prejudice might be situationally variable and fluctuate with shifts in the normative climate.

3. Socialization and the Two Personality Dimensions

The more speculative prediction from the model that two parental socialization dimensions might influence the two personality dimensions of social conformity and tough-mindedness was generally supported, but produced somewhat more complex findings. In one instance the findings were clear-cut. Unaffectation socialization had its expected effect on tough-mindedness, with effect sizes in the moderate to strong range.

The findings for social conformity were less clear. First, unaffectation socialization had a weak but consistent nonpredicted effect of reducing social conformity. This effect seems theoretically quite plausible. Persons who have experienced very little affection from their parents may have generally weaker attachments to others and society in general and thus tend to be lower in social conformity.

Second, the original dimension of punitive socialization was relatively weakly associated with social conformity and seemed to encompass two distinct though quite strongly related subdimensions: strict socialization, which was related to social conformity, and harsh socialization, which was not. Although this was replicated in a second study, the relationship of strict socialization to social conformity, though significant, was relatively weak. This might have been due to the weakness of the measure, which used only three items. The development of a more adequate measure that sampled the domain of strict parental socialization practices more comprehensively might produce stronger relationships.

4. Authoritarianism and Social Dominance as Ideological Dimensions

The research also produced several findings that seemed to support the view of RWA and SDO as measuring ideological or social attitude dimensions rather than personality trait dimensions. First, the tendency for the correlation between RWA and SDO to be stronger in older than younger persons in prior North American research (summarized in Table I) was replicated in the New Zealand samples but not in the South African one. This age effect had seemed explicable in terms of political socialization and participation creating cognitive pressure for ideological consistency in societies in which politics was ideologically organized; that is, with the political right associated with both high RWA and SDO and the left with both low RWA and SDO. Thus, the absence of an age effect in South Africa could have been due to politics being ethnically rather than ideologically organized in that society.

And second, this reasoning also suggested that RWA and SDO should be more strongly associated in more highly ideologized societies. This was supported by their significantly stronger correlation in the New Zealand samples (aggregated r from Studies 1, 2, and 3 was .39, n = 904) and the UK sample (r = .54 in Study 1) than in prior North American research (r’s of .125 and .23 from Table I) and the South African sample (r = .21).

5. Some Methodological Issues

Finally, in concluding, two methodological issues pertinent to these studies seem to merit comment. First, a frequently neglected methodological caution for research using psychometric scales to investigate construct interrelationships should be noted. This is that content overlap between subsets of items in different scales can build in spurious relationships between the scales. A number of steps were taken to control for this.

In pilot testing, items which did not clearly correlate more powerfully with their own scales than other scales were deleted or rewritten. Independent judges carefully checked all the measures used for item content overlap between scales and discarded any dubious items. For example, Saucier (1994) had included items such as liberal, conservative, traditional, religious, and nonreligious in his original norm orientation personality scale, from which the social conformity scale was derived. These were excluded from the social conformity scale because they could be used to describe attitudes as well as behavior and might have spuriously inflated the relationship between conformity and RWA. Exploratory factor analyses were conducted on the data from the three studies to assess scale unidimensionality and the factorial independence of the scales. As Altemeyer (1981) has recommended, the correlations between individual items and other scales were checked to confirm that scale intercorrelations derived from all the items of the scales and were just not created by particular subsets of items. And finally, good fit for structural equation models with latent variables provides a powerful test for the unidimensionality of the latent variables and their factorial independence from each other.

Second, the issue of causality merits comment. SEM can test the fit of hypothesized causal models to empirical data. Good fit will support a causal model, but does not directly demonstrate causality in the unequivocal manner that experimental research can. However, although the evidence from the SEM studies reported here cannot “prove” the model, there are several other considerations that also support the plausibility of its causal propositions. Thus, it seems theoretically reasonable that socialization will influence personality and that personality will
influence social attitudes and beliefs. Moreover, the relatively few relevant experimental or longitudinal research studies that have been done support the causalities proposed by the model. For example, Katz and Hass (1988) showed experimentally that priming two ideological attitude measures similar to RWA and SDO (Protestant Ethic beliefs and a humanitarianism–egalitarianism scale) influenced racial attitudes, but priming racial attitudes did not influence ideological attitudes. Allmeyer (1988) showed that scenarios that depicted threatening and dangerous social changes markedly increased RWA. Several other longitudinal or experimental studies have shown that social threat seems to increase authoritarianism and prejudice (Doty, Peterson, & Winter, 1991; Meloen 1983; Sales, 1974; Sales & Friend, 1973).

V. Dual Dimensions of Ideology and Prejudice

The theoretical model outlined here suggests that there are two different sets of cognitive and motivational dynamics driving prejudice and ethnocentrism: the two motivational goal-schema dimensions of threat-control and competition-dominance, with each expressed in their corresponding ideological belief dimensions of conservative–authoritarianism and social dominance–hierarchy. This has two important implications.

First, the model provides a rudimentary theory of the psychological bases of politics and political ideologies. It suggests that different combinations of these two motivational–ideological belief dimensions would underlie support for or belief in particular political ideologies. Thus, as shown in Table XIV, fascism is generated by a combination of competitive dominance motivation (social dominance or inequality beliefs) and threat-control motivation (authoritarian–conservative beliefs), communism is generated by cooperative altruistic motivation (egalitarianism) together with threat-control motivation (authoritarianism), free-market capitalism is generated by competitive–dominance motivation (social dominance/inequality beliefs) together with security–autonomy motivation (libertarianism), and social democracy is generated by security–autonomy motivation (libertarianism) and cooperative altruistic motivation (egalitarianism).

Second, the model suggests the existence of two qualitatively different kinds of prejudice. One kind of prejudice will be driven by fear and threat generating self-protective, defensive motivational needs for social control and security. Here outgroups will be disliked because they are seen as threatening and dangerous to social or group cohesion, security, order, values, and stability. This would tend to create a particular kind of readiness to categorize in a prejudiced fashion; that is, categorizing the social world into “us,” who are good, normal, moral, decent people and who are threatened by “them,” who are bad, disruptive, immoral, and deviant. This could also be conceptualized as priming a particular kind of intergroup schema.

The second kind of prejudice will be driven by a view of the world as a competitive jungle characterized by a ruthless and amoral struggle for resources and power in which the fittest and most powerful succeed and the unfit and weak fail. This activates self-enhancement motives for power, status, superiority, and dominance. Here out-groups will be derogated because they are seen as inferior, weak, inadequate, and failures. This would create a readiness for a different kind of prejudiced social categorization, with the social world categorized into “us,” who are superior, strong, competent, and dominant (or should rightfully be dominant), versus “them,” who are inferior, incompetent, weak, and worthless.

In practice, despite their origin in different motives, these two kinds of categorization or intergroup schemas could be highly correlated. This would be expected because both dimensions would be expressions of negativity, though different kinds of negativity, to the same out-group. This would be particularly the case when the out-group was viewed as being both “bad and threatening” and “incompetent and inferior,” as has often been the case for those seriously stigmatized social groups who have been most studied in research on prejudice. Nevertheless, if two largely independent personality, world-view, motivational, and ideological systems drive two distinct kinds of prejudice proneness, or readiness to categorize in prejudiced fashion, this should generate two correspondingly different kinds of prejudice, which should be identifiable as distinct factors.

There is a good deal of empirical evidence for the existence of two such dimensions of prejudice. This evidence has emerged in research on intergroup stereotypes, attitudes, and affect as well as from research on discriminatory behavior and racism. The two dimensions that have emerged in each of these different research areas are summarized in Table XV.

A number of studies have identified two clearly distinct dimensions of intergroup stereotypes (Fiske, 1998; Fiske, Xu, Cuddy, & Glick, 1999, Giles & Ryan, 1982; Poppe & Linssen, 1999; Singh, Choo, & Poh, 1998). One dimension, typically...
Two parallel dimensions have also been identified for discriminatory intergroup behavior and racism. First, Kovel (1970), in his classic comparison of racism in the American North and South, differentiated between two distinct kinds of racism. Aversive racism was characterized by dislike of Blacks and a desire to avoid them, whereas domineering racism was characterized by a belief in their inferiority and support for their social subordination. Second, Fiske (1998) has more recently argued that two kinds of discriminatory behavior can be distinguished that are similarly motivated. She suggests that "hot" discrimination is motivated by negative affects such as anger and hostility and that "people high in right-wing authoritarianism might well enact this kind of affect-laden discrimination" (p. 374). On the other hand, "cold" discrimination is motivated by negative stereotypes about "an outgroup's interests, knowledge, and motivations"; that is, it would seem, stereotypes of inferiority.

A number of researchers have made the important conceptual distinction between symbolic or modern and traditional or old-fashioned racism (Kinder & Sears, 1981; McConahay & Hough, 1976; Sears, 1988), which has a clear similarity to that made here. Symbolic or modern racism has typically been described as blending anti-Black affect with conservative ideological beliefs and the feeling that Blacks threaten and violate traditional American values such as individual responsibility and self-reliance, the Protestant work ethic, obedience, and discipline (see, e.g., Kinder & Sears, 1981, p. 416). Traditional racism, on the other hand, has been seen as consisting primarily of beliefs in Black inferiority, White supremacy, and support for racial segregation. Thus, there seems to be a clear similarity between symbolic racism and threat-control authoritarian prejudice. Traditional racism seems to have a clear similarity to competitive–superiority dominance-driven prejudice, although it probably involves a significant component of threat as well.

Although the degree to which the distinction between symbolic and traditional racism has been empirically supported is still controversial (cf. Sniderman & Tetlock, 1986; Weigel & Howes, 1985), there are several important reasons why these findings may have been relatively inconclusive. First, measures of these two kinds of racism have tended to be psychologically weak, typically being short and not balanced against acquiescence. Second, traditional racism probably blends dominance and threat motives, so involving a view of Blacks as both inferior and bad or threatening, which would create significant overlap between the two kinds of racism. And third, measures of symbolic and traditional racism have invariably been confounded with another conceptual and measurement distinction unrelated to the one being made here: the difference between subtle and blatant expressions of prejudice (cf. Pettigrew & Meertens, 1995).

If two distinct forms of prejudice do exist, then an important prediction follows. The two ideological attitude dimensions, authoritarianism and social dominance, should differentially predict these two dimensions of prejudice. There is little evidence bearing on this because of the absence of adequate measures differentiating...
the two prejudice dimensions and because most research has therefore used global intergroup attitude and stereotype measures. However, an important study by Katz and Hass (1988) has reported clearly supportive findings. Their study investigated the relationship between two value orientation dimensions and two factiorally distinct measures of racial attitudes.

The two values dimensions closely resembled RWA and SDO, being respectively a Protestant Work Ethic (PE) scale (largely social conservatism items) and a Humanitarianism–Egalitarianism (HE) scale (beliefs in equality and concern for others). Their two racial attitude measures were described as Anti-Black and Pro-Black scales. The Anti-Black item expressed a view of Blacks as deviant, disruptive, and violating important moral values. The Pro-Black scale's items denied (or asserted) that Black's low status was due to them being disadvantaged or discriminated against (low scores thus implying that their low status was deserved and due to incapacity). Respectively these two scales strongly suggest the two kinds of categorization schemas identified here of first good, decent, and moral versus bad, immoral, and deviant and second superior and competent versus inferior and incompetent.

Katz and Hass's (1988) findings were clear-cut and completely consistent with the prediction here. PE values most powerfully predicted anti-Black attitudes and HE values most strongly predicted pro-Black attitudes. Katz and Hass (1988) also demonstrated that these relationships appeared to be causal. Thus, priming PE values increased anti-Black but not pro-Black attitudes, whereas priming HE values increased pro-Black but not anti-Black attitudes.

Overall, therefore, there is evidence that two distinct dimensions of prejudice can be identified corresponding closely to the two motivationally generated intergroup categorization schemas proposed by the model. Glick and Fiske (this volume) have shown how different combinations of the two stereotype dimensions of competence and warmth provide a fourfold typology of out-group attitudes. These are out-group admiration (out-group competent and warm), envious prejudice (out-group competent, but not warm), contemptuous prejudice (out-group not warm and incompetent), and paternalistic prejudice (out-group warm, but incompetent). The two categorization schema dimensions proposed here (good versus bad paralleling warmth and superior versus inferior paralleling competence) would generate essentially the same typology, but with one important addition.

There should be an intermediate and critically important category of "equal" along the superior versus inferior categorization dimension. This "out-group equal" category, when crossed with the good versus bad categories, adds two further intergroup attitude types. First, the combination of categorizing out-groups as equal and good (supportive) would define an attitudinal zone of tolerance, or genuine nonprejudice. Second, the combination of categorizing out-groups as equal but bad (threatening) would define hostile prejudice, which would be the typical pattern for threat-driven out-group hostility against out-groups relatively equal in status and power with which the in-group is in a directly competitive relationship. The classic exemplar for this type of out-group prejudice was provided by Sherif's (1967) famous studies of intergroup competition between boys attending summer camps.

Two categories (superior and good or superior and bad) concern attitudes of subordinate to dominant groups generating, as Glick and Fiske have proposed, out-group admiration in the former instance and "envious prejudice" in the latter case. The term "resentful dislike" seems preferable to the "envious prejudice" used by Glick and Fiske, since among oppressed groups these attitudes might often be characterized more by a sense of injustice than envy of higher status. Finally, the two categories of inferior and good, and inferior and bad, concern the attitudes of dominant to subordinate groups; that is, following Glick and Fiske, paternalistic and contemptuous prejudice respectively.

This sixfold typology would seem to accommodate most of the kinds of prejudice or intergroup attitude that have been distinguished (cf. the six kinds described in Duckitt, 1992b). For example, symbolic racism would seem to correspond to hostile prejudice (out-group viewed as bad and threatening, but not necessarily as inferior), and traditional racism to contemptuous prejudice (out-group viewed as inferior and bad or threatening).

VI. Prejudice as an Individual and a Group Phenomenon

A. COGNITIVE-MOTIVATIONAL BASIS OF IDEOLOGICAL ATTITUDES

The theoretical core of this model of socialization, personality, worldview, ideology, and ethnocentrism was provided by the concept of motivational goal-schema: a construct developed by psychological anthropologists to explain how sociocultural environments shape and influence the motivational goals of individuals and groups (D'Andrade, 1992; Ross, 1993; Strauss, 1992). As applied in this model, the construct proposes that the socialization experiences and personality dispositions of individuals influence their acquisition of chronically accessible schemas about the social world, which form the basis of reasonably stable and organized social worldviews. These social worldviews activate motivational goals, which, if they are socially shared and collectively held, may be expressed in ideological beliefs and sociocultural values. These ideological attitudes generate a proneness to ethnocentrism and prejudice; that is, a "readiness to categorize" in particular ways by priming particular kinds of intergroup categorizations and identities.

The causal chain proposed by the model and supported by the model testing studies can be seen in cognitive terms as linking four basic kinds of internally consistent belief systems or schemas. First, socialization experiences generate self schemas or beliefs about the self (personality) and in particular how the self
would be likely to respond in given situations. These self schemas influence social schemas (social worldviews); that is, beliefs about social others (what others are like, how they are likely to respond to each other and the self, and how one should respond to them). These social schemas influence ideological beliefs or societal schemas; that is, beliefs about the appropriate structure of society and the relations and roles of individuals and groups toward and within the societal collective. Finally, these ideological beliefs or societal schemas influence people’s readiness to adopt particular kinds of intergroup categorization schemas and social identities (beliefs about how intergroup relations are typically structured and how in-group and out-group are likely to relate to each other).

B. ROLE OF THE INDIVIDUAL: PERSONALITY

The model and these findings have important implications for the old controversy in social psychology over the impact of personality on prejudice. The idea that personality directly affects prejudice has been widely held since the publication of The Authoritarian Personality (Adorno et al., 1950). However, the degree and nature of this influence in relation to the influence of group-level processes has been controversial (cf. Brown, 1995; Pettigrew, 1958, 1960; Turner & Giles, 1981). Moreover, most of the evidence cited for a direct impact of personality on prejudice has rested on the flawed assumption that authoritarianism measures such as F and RWA scales measured personality rather than ideological beliefs (cf. similar critiques by Feldman & Stenner, 1997; Goertzel, 1987; Stone et al., 1993; Verkuyten & Hagendoorn, 1998).

The current model and evidence suggest a more complex picture. Personality does not have direct effects on prejudice, but has substantial impacts on ideological beliefs (with the impact being either wholly or partly mediated through social worldviews), and it is these ideological attitudes that influence prejudice and ethnocentrism. Moreover, personality operates by influencing the kinds of motivational goals that are salient for individuals. Particular kinds of motivational goals will have collective relevance for social groups and therefore tend to be socially shared and be expressed in the form of ideological beliefs or social attitudes such as social dominance or authoritarianism.

More specifically, the empirical findings from the model testing studies suggest that this happens somewhat differently for these two ideological attitude dimensions. Tough-minded personalities have a very powerful tendency to see the social world as a ruthlessly competitive jungle. Presumably, the interpersonal styles likely to be adopted toward others by tough-as opposed to tender-minded persons (i.e., hard, cynical, and brutal as opposed to kind, caring, and compassionate) may be particularly likely to elicit behavioral confirmation that the social world really is a competitive jungle. Once adopted, this worldview seems to powerfully activate power and dominance as motivational goals and their expression in social dominance attitudes and values (cf. Winter, 2000).

On the other hand, whereas socially conforming personalities do tend to see the world as more dangerous and threatening, the effects in the model testing studies were only weak to moderate. However, having a socially conforming personality and holding dangerous world beliefs both had strong direct effects on authoritarian attitudes, suggesting that both operate to make the motivational goals of social control and security particularly salient for individuals.

C. ROLE OF THE SITUATION: SOCIAL WORLDVIEW

An important implication of the model flows from the central role of worldviews in determining ideological beliefs and prejudice. The findings did support Ross’s (1993) hypothesis that social worldviews are influenced by individuals’ personalities; that is, that they would reflect dispositional tendencies to interpret the environment in particular ways. However, it is also plausible that individuals’ direct experience of their social realities will powerfully influence their social worldviews. This suggests that particular social environments will be highly conducive to prejudice and others to tolerance and that these effects will occur primarily through social environments’ impact on individuals’ worldviews.

First, prejudice will be generated when the social environment really is dangerous, threatening, and unpredictable as opposed to being safe, stable, and secure. Second, prejudice will be generated when the social world really is a competitive jungle in which people compete ruthlessly for resources, status, and power and in which the “fittest” and most powerful succeed and the weak and “unfit” fail as opposed to a social world of cooperation, sharing, equality, and altruistic concern for others.

This also means that when social environments change drastically and seemingly irrevocably, sudden and dramatic changes in social worldviews may occur that would produce equally dramatic changes in motivational goals and their expression in ideological beliefs and prejudiced attitudes. For example, Altemeyer (1988) found that when students were given scenarios in which a future Canadian society had experienced a long decline and was in economic and political crisis with escalating crime, unemployment, and terrorism, their RWA scores increased dramatically. This finding has a direct historical parallel with the catastrophic political and economic crisis triggered by the Great Depression in 1930s Germany that catapulted the Nazis from political obscurity to massive electoral support and state power in only a few years and ultimately culminated in world war and the holocaust.

These social worldviews and ideological beliefs are held by individuals but are also socially shared beliefs, or social representations (Moscovici, 1983). Their transformation from individual-level constructs to socially shared ones may
occur largely because worldviews reflect the social environment, which is inevitably a shared environment (D’Andrade, 1992; Strauss, 1992). Particular social worldviews will therefore tend to characterize particular collectivities, cultures, or social groupings and activate shared motivational goals, which will be expressed in shared ideological beliefs and values. Thus, whereas these worldviews and ideological beliefs may operate as individual difference variables influencing prejudice proneness in individuals, because they are typically socially shared beliefs, they will also influence proneness to prejudice in social groups or cultures.

D. ETHNONCENTRIC CULTURES AND SOCIETIES

The model therefore suggests that cultures and societies high on the social worldview and ideological attitude dimensions of threat-control or competitive-dominance should be more prone to ethnocentrism and conflict. Cultures or societies high on both should be particularly so. The relatively little research that has compared cultures and societies on relevant dimensions has produced broadly confirmatory findings.

Ross’s (1993) research, which has already been noted, compared 90 preindustrial societies and found that those characterized by punitive and unaffectionate socialization practices were involved in more violent conflicts. Bonta (1997) studied completely peaceful societies in which aggression, violence, and warfare were almost totally absent and found that their most salient characteristic was a powerful normative emphasis on cooperation, with any kind of competitiveness being completely eschewed. Meloen (2000) compared 63 countries and found that Hofstede’s cultural value dimensions of collectivism and power distance were powerfully associated with undemocratic practices and involvement in military conflict.

A number of ethnographic studies have described violent and ethnocentric cultures and subcultures that are characterized by a view of the social world as a competitive jungle in which power, toughness, machismo, defense of one’s honor, and dominance become important values and goals. These seem to be central features of cultures of honor and warrior cultures. Such competitive-dominance cultures have been documented in the American South by Nisbett and Cohen (1996), in fascist movements (Billig, 1978), in the post-Vietnam paramilitary subcultures of America (Gibson, 1994), and in violent underclass and gang subcultures (Toch, 1992). In such cultures a pervasively salient social categorization therefore seems to be the distinction between those who are strong and superior, and therefore worthy of respect, and those who are weak, inferior, and unworthy.

Threat-control cultures, on the other hand, seem quite different. Altemeyer (1988), for example, has noted how authoritarian beliefs systems are characterized by fundamentalist religiosity, moral self-righteousness, and a pervasive intolerance of nonconformity and deviance. These were prominent features of the White Afrikaner culture that gave rise to Apartheid in South Africa.

MacCrone (1937) has described how this culture was originally forged in the South African frontier situation. Once the Dutch colonists had spread from the original settlement at the Cape to the interior, the frontier situation and an enduring conflict with the more numerous indigenous Black people and the more powerful force of British colonialism developed. The essential characteristics of the frontier situation were isolation, danger, war, and extreme insecurity. In this situation, intensely felt religious beliefs fused with racial distinctions and the dichotomy between Christian and heathen, between good and evil, became the dichotomy between White and Black. This created a society characterized by a sense of omnipresent threat and vulnerability with an intense emphasis on group cohesion, conservatism, conformity, and a pervasive ethnocentrism. In threat-control cultures such as this, the pervasively salient social categorization therefore seems to be between “us” who are decent, normal, and good and who are threatened by “them,” who are bad, disruptive, deviant, and immoral.

The characterization of White Afrikaners as a threat-control culture suggests several hypotheses that might indicate whether the constructs of social worldview and ideological attitudes can be used to describe and explain social group differences as well as individual differences.

E. COMPARING WHITE AFRIKANERS AND EUROPEAN NEW ZEALANDERS

Previous research has shown that White Afrikaners tend to be particularly high on authoritarianism, ethnocentrism, and anti-Black prejudice (Duckitt, 1992a; Hampel & Krupp, 1977; Mynhardt, 1980). European/Pakeha New Zealanders, on the other hand, are generally regarded as being reasonably tolerant, and New Zealand as a society tends to be a reasonably tolerant, multicultural society in which intergroup relations, though strained at times, are not generally viewed as seriously antagonistic.

White Afrikaners should therefore be significantly more ethnocentric than European New Zealanders. Moreover, if White Afrikaners’ ethnocentrism is an expression of a threat-control culture then they should be markedly higher than New Zealanders on authoritarianism and dangerous world beliefs, but not much higher on social dominance and a competitive-jungle worldview. Thus, controlling for authoritarianism and dangerous world beliefs should eliminate the difference between the two groups in ethnocentrism, whereas controlling social dominance and a competitive-jungle worldview should not.

Studies 3 and 4 used measures of these constructs with European New Zealand and White Afrikaner samples, making a comparison between the two groups possible. Unfortunately the pro-in-group and anti-out-group measures in the two studies used different target groups and the content of the items was different, so that a direct comparison was not possible for ethnocentrism. However, the response
TABLE XVI
ETHNOCENTRISM, SOCIAL WORLDVIEW, AND IDEOLOGICAL ATTITUDE ITEM RESPONSE
SCALE MEAN SCORES FOR WHITE AFRIKANERS (n = 224–227) AND EUROPEAN/PAEHA
NEW ZEALANDERS (n = 231–236)

<table>
<thead>
<tr>
<th>Measures</th>
<th>White Afrikaners</th>
<th>NZ Europeans</th>
<th>F</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Ethnocentrism index</td>
<td>1.91</td>
<td>1.69</td>
<td>.03</td>
<td>1.66</td>
</tr>
<tr>
<td>Ideological attitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RWA</td>
<td>1.68</td>
<td>1.20</td>
<td>-1.21</td>
<td>1.23</td>
</tr>
<tr>
<td>SDO</td>
<td>-82</td>
<td>1.45</td>
<td>-1.18</td>
<td>1.14</td>
</tr>
<tr>
<td>Social worldviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dangerous world</td>
<td>1.56</td>
<td>1.43</td>
<td>-1.16</td>
<td>1.24</td>
</tr>
<tr>
<td>Competitive world</td>
<td>-2.15</td>
<td>1.05</td>
<td>-1.51</td>
<td>1.14</td>
</tr>
</tbody>
</table>

Note. All effects significant at p < .01. The item means range from +4 (highest) to -4 (lowest).

scales were the same in both studies (9-point scales from +4 to -4). This meant that summing pro-in-group and anti-out-group attitudes and dividing by the total number of items would give a very crude common index (on a scale of +4 to -4) of the degree to which White Afrikaners and European New Zealanders were endorsing ethnocentric (pro-in-group and anti-out-group) sentiments in general.

Table XVI shows the means for the two groups on this index of ethnocentrism and their means for RWA, SDO, dangerous world beliefs, and competitive-jungle world beliefs (using only those items that were included in both studies). To facilitate interpretation, the means for all the measures were divided by the number of items so that all the means shown are on the same standard response scale of +4 to -4. Because the samples were large, small differences would be statistically significant, so Cohen’s (1988) d was computed to give an index of effect size. Cohen (1988) has suggested that d values of .20, .50, and .80 could be viewed as denoting weak, moderate, and strong effects respectively.

Table XVI shows that Afrikaners’ mean score on the ethnocentrism index was very much higher than that for European New Zealanders, with Cohen’s d indicating a difference of almost 1 pooled standard deviation. As expected, Afrikaners were also much higher on dangerous world beliefs and RWA, with both effects very powerful. In contrast, Afrikaners were moderately lower on the competitive-jungle worldview. Although Afrikaners were significantly higher on SDO, the effect was slight (Cohen’s d indicating a weak effect), and when RWA was statistically controlled using analysis of covariance, the difference on SDO was reversed. Afrikaners’ mean SDO score adjusted for RWA (adjusted M = -1.47) was significantly lower than that for NZ Europeans (adjusted M = -1.18; F = 29.7, p < .0001). In contrast, controlling for SDO left the difference in RWA virtually unchanged (Afrikaner adjusted M = 1.62, NZ European adjusted M = -1.21; F = 694.2, p > .0001).

This suggested that Afrikaners’ higher ethnocentrism than European-origin New Zealanders might be entirely due to their elevated dangerous world beliefs and authoritarianism. This was confirmed by a series of analyses of covariance controlling for different combinations of worldview and ideological attitudes. The adjusted ethnocentrism means obtained are shown in Table XVII. When SDO and competitive world beliefs were controlled, the differences in ethnocentrism between the two groups was little changed, with Afrikaners’ ethnocentrism means still very significantly higher. On the other hand, when RWA and dangerous world beliefs were controlled, Afrikaners’ mean ethnocentrism score was lower than that of European-origin New Zealanders, with the effect marginally significant (p = .07).

This reversal in ethnocentrism level seemed likely to be due to Afrikaners being lower in SDO when RWA was controlled, and being lower in competitive-jungle world beliefs. This was confirmed by controlling for SDO and competitive-jungle world beliefs as well as RWA and dangerous world beliefs, in which case the ethnocentrism means for the two groups were similar and the difference statistically nonsignificant.

These findings therefore go beyond those previous studies that have shown White Afrikaners to be high in authoritarianism and ethnocentrism (Duckitt, 1988; Hampel & Krupp, 1977; Mynhardt, 1980). They support the view that Afrikaner ethnocentrism seems to be specifically threat-control driven and characterized by a view of the world as dangerous and threatening and by authoritarian attitudes and not by a competitive-jungle worldview or by social dominance beliefs. Indeed, with differences in authoritarianism and dangerous world beliefs eliminated, Afrikaners tended to be lower than European-origin New Zealanders in competitive world beliefs, social dominance, and ethnocentrism. More broadly, these findings suggest that the constructs of worldview and ideological attitudes can usefully describe and explain group- and culture-level differences in ethnocentrism and prejudice.

TABLE XVII
MEAN ETHNICENTRISM INDEX SCORES AFTER ADJUSTING FOR SOCIAL WORLDVIEWS AND IDEOLOGICAL ATTITUDES FOR WHITE AFRIKANERS AND EUROPEAN/PAEHA NEW ZEALANDERS

<table>
<thead>
<tr>
<th>Variables adjusted for</th>
<th>Ethnocentrism means</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Afrikaner</td>
<td>NZ European</td>
<td>df</td>
<td>F</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>SDO, CW</td>
<td>1.80</td>
<td>.15</td>
<td>1,441</td>
<td>124.72</td>
<td>&lt;.0001</td>
<td></td>
</tr>
<tr>
<td>RWA, DW</td>
<td>.80</td>
<td>1.17</td>
<td>1,444</td>
<td>3.27</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>SDO, CW, RWA, DW</td>
<td>1.04</td>
<td>.93</td>
<td>1,433</td>
<td>.36</td>
<td>.55</td>
<td></td>
</tr>
</tbody>
</table>

Note. SDO = social dominance orientation; CW = competitive-jungle world beliefs; RWA = right-wing authoritarianism; DW = dangerous world beliefs.
VII. Integrating Individual and Intergroup Dynamics of Prejudice

A. INTERGROUP DYNAMICS AND MOTIVE ACTIVATION

If two kinds of motivational dynamics and their corresponding intergroup categorization schemas drive prejudice promenades in individuals, it seems likely that these motives or schemas would be activated by certain specific situational characteristics of intergroup relationships. Thus, threat–control motivation and authoritarian readiness to categorize as good versus bad seems likely to be activated by social or intergroup threat.

A great deal of research indicates that the perception of threat from out-groups causes negativity to them (e.g., Brewer & Brown, 1998, pp. 565–566; Blake & Mouton, 1984; Stephan, Ybarra, Martinez, Schwarzwald, & Tur-kerstenson, 1998; Struch & Schwartz, 1989). Intergroup threat has also been a primary focus of important group dynamic theories of prejudice and intergroup relations. Thus, the role of “real” threats to group resources and objectives has been articulated by Realistic Conflict theory (Jackson, 1993; LeVine & Campbell, 1972; Sherif, 1967). Contact theory has noted the role of intergroup contact conditions that involve threatening or unpleasant contact with out-group members, and contact involving competing goals and interests in causing and reinforcing prejudiced attitudes (Petitgrew, 1998). Terror Management theory has focused on threats to basic sociocultural values and beliefs (Solomon, Greenberg, & Pyszczynski, 1991; see also Esses et al., 1993; Zanna, 1994), and Social Identity theory on threats to acquiring and maintaining positive social identities (Tajfel & Turner, 1979).

Second, competitive–dominance motivation and the readiness to categorize as superior versus inferior seems likely to be activated by intergroup power and status differentials and intergroup social competition over relative dominance and superiority. The importance of intergroup inequalities in status and power as a fundamental condition for establishing and maintaining intergroup prejudice has been a central tenet of the contact hypothesis (Allport, 1954; Stephan, 1987; Petitgrew, 1998). The role of intergroup social competition over relative status and power in influencing intergroup bias and discrimination has been largely articulated by social identity theorists (Tajfel & Turner, 1979; Turner & Giles, 1981). A great deal of empirical evidence has shown that intergroup status and power differentials and social competition over them do generate intergroup bias and discrimination (Brewer & Brown, 1998, pp. 570–571; Ellemers, 1993; Mullen, Brown, & Smith, 1992; Schachter & Bourhis, 1987).

Moreover, under certain circumstances social competition over relative status and power could also involve social or intergroup threat. This would be particularly likely when the dominance of powerful groups was threatened by competition from subordinate groups or groups relatively equal in power or status were competing for dominance or superiority. In such circumstances, competition over power and status differentials could activate both competitive–dominance and threat–control motivations.

If these two kinds of intergroup dynamics cause intergroup prejudice by activating two corresponding kinds of motivationally based readiness to categorize, as shown in Fig. 7, then three important propositions seem to follow:

1. The two motivational bases of prejudice and their corresponding intergroup dynamics should define two kinds of social groups that will be typical targets of prejudice. This has important implications for understanding prejudiced intergroup attitudes in minority and majority groups.
2. The two intergroup dynamics should specifically elicit the two different dimensions of prejudice summarized in Table XV.
3. The two individual difference determinants of prejudice should be specifically activated by their corresponding intergroup dynamics; that is, these individual difference and intergroup situational dynamics should interact in determining prejudice.

These three propositions are elaborated and evidence bearing on them reviewed in the next three sections.

B. PREJUDICE IN MINORITIES AND MAJORITIES

If prejudice has its roots in threat–control and competitive–dominance motivational goals in individuals, and intergroup dynamics of social threat or power–status differentials in the social context, this suggests that two kinds of social groups should be the typical targets of prejudice.
1. Prejudice deriving from threat-control motivation should be specifically directed at those social groups and categories of persons that are viewed by societies or groups as threatening their stability, cohesion, security, order, traditions, and values. In this case the socially threatening groups are viewed as bad, disruptive, threatening, immoral and deviant, and disliked. In contrast, groups or social categories that are seen as supporting and reinforcing social cohesion, security, and order will be liked and viewed as good, moral, and decent people.

The typical targets of threat-control-motivated prejudice could be threatening out-groups or categories of persons within societies who are culturally dissimilar, seem socially disruptive, do not share the traditional social values and conventional beliefs, or threaten the society in some or other way. Social and cultural minority groups will therefore usually be the targets of this prejudice. Majority groups, on the other hand, will usually be closely identified with and indeed define the conventional norms, values, beliefs, and traditions of society and dominate its social control system (authorities, courts, police, and military) and will therefore be favored.

2. Prejudice deriving from competitive-dominance motivation should be directed specifically against those social groups and categories who are low in power-status (engendered by group inequality) or whom it is believed should be legitimately lower in power-status (engendered by intergroup power-status competition). These social conditions would activate motivational goals of power, superiority, and dominance in individuals. This will result in individuals seeking power and superiority by identifying with dominant groups, or groups that it is believed should be dominant, respecting and admiring them and viewing them as strong, superior, competent, and worthy. This will be accompanied by disidentification with subordinate groups; disrespecting and derogating them; and viewing them as inferior, incompetent, unworthy, and inadequate.

Competitive-dominance-motivated prejudice will therefore be directed against socially subordinate groups and categories of persons, who are low in power and status, and will lead to favoritism toward dominant social groups, who are high in power and status. Once again, therefore, the result will generally be prejudice against minorities, or at least low power-status minorities, and favoritism toward majority groups, or at least high power-status majorities.

A critical implication of this is that both threat-control and competitive-dominance motives should predict the same pattern of prejudiced intergroup attitudes in both majority and minority members. Thus, both minority and majority persons who are high in RWA and SDO should be more negative to minorities and more favorable to majorities despite the irony that the prejudice here is being directed against their in-group and the favoritism toward their out-group. Much evidence has been reported, particularly by Sidanius, Pratto, and their colleagues, that SDO and authoritarianism or conservatism predict promajority and antiminority biases for both majority and minority persons (Levin, Sidanius, Rabinovitz, & Federico, 1998; Mitchell & Sidanius, 1993; Sidanius, 1993; Sidanius, Feshbach, Levin, & Pratto, 1997; Sidanius & Pratto, 1999, pp. 234–246; Sidanius, Pratto, & Mitchell, 1994; Sidanius, Pratto, & Rabinovitz, 1994). Thus, as Sidanius and Pratto (1999) have recently pointed out, whereas the classic pro-majority anti-minority ethnecentrism described by Sumner (1906) seems typical of majorities, reverse ethnecentrism has tended to be more common in minorities.

If competitive-dominance and threat-control motivate promajority and antiminority attitudes, this effect should be qualified by the degree to which the minorities accept the legitimacy of the social structure and stratification system. To the extent that minorities reject the existing social structure as illegitimate, they will be less likely to view deviance from and rejection of its norms and values as threatening. Thus, minority persons high in threat-control motivation will be less likely to be positive toward groups that dominate or are closely associated with that social structure and negative toward groups which reject it. Similarly, if minority members see the relative status of dominant and subordinate groups as undeserved and illegitimate, they will be less likely to satisfy needs for power, superiority, and dominance by identifying with and favoring the dominant groups and disidentifying with and disfavoring the subordinate groups.

This reasoning suggests that, whereas SDO and authoritarianism-conservatism should predict promajority and antiminority attitudes in the same direction for both majority and minority groups, the effect should typically be weaker for minorities and sometimes even absent. A number of studies have demonstrated this “ideological asymmetry effect” (Sidanius & Pratto, 1999), with SDO or authoritarian-conservatism predicting promajority and antiminority attitudes significantly less strongly for minority than majority members (Bahr & Chadwick, 1974; Combs & Conner, 1982; Levin & Sidanius, 1999; Levin, Sidanius, Rabinovitz, & Federico, 1998; Mercer & Cairns, 1981; Mitchell & Sidanius, 1993; Sidanius, Pratto, & Rabinovitz, 1994).

Two studies have directly examined whether perceived legitimacy of intergroup status and power differentials between majority and minority moderates the degree to which SDO predicted promajority and antiminority attitudes in minority members. Both these studies found that at high levels of system legitimacy, SDO predicted promajority and antiminority biases equivalently in majorities and minorities, but when system legitimacy was low the effect vanished for the minority members (Levin, Sidanius, & Rabinovitz, 2000; Rabinovitz, 1999). A finding that is essentially consistent was reported by Federico (1998) for the stability versus instability of intergroup status relationships, a variable that should be closely related to perceived legitimacy and operate in the same manner, at least for minorities. Thus, he found that SDO significantly predicted promajority bias for minority participants when the intergroup status differential was perceived to be stable, but not when it was perceived to be unstable.
This reasoning can be extended to situations of extremely high levels of perceived system illegitimacy (or instability), where an existing social structure and order is totally rejected and a majority or elites’ dominance is seen as completely illegitimate. In such a situation, ideological attitudes expressing competitive–dominance and threat–control motivations might be even associated with prominority and antimajority biases. This should happen for competitive–dominance when a minority believes that the majority’s dominance is illegitimate and believes, not merely that it should be equal to the majority, but that it should rightfully be dominant over it. It should happen for threat–control when the perceived illegitimacy of the majority’s dominance of society is combined with a powerful minority group identification and a view of the majority as threatening the cohesion, security, traditions, and values of the minority. Thus, for the White Afrikaners in Study 4, today a political minority in South Africa, authoritarianism and social dominance both predicted pro-Afrikaner and anti-Black (the new majority) attitudes. In research during the 1960s in the United States, Marx (1967) obtained significant positive correlations between the F scale and anti-White attitudes for radical separatist Black Muslims.

To sum up, it was argued that both the competitive–dominance and threat–control motivational dynamics should generate promajority and antiminority attitudes in minority as well as in majority group members as long as minority members accepted the legitimacy of the social stratification system. The empirical evidence has supported this with authoritarianism– conservatism and SDO predicting pro-majority and antiminority attitudes in minorities, but usually less strongly than for majorities. Finally, several studies have directly shown that the effect does seem to be moderated as expected by perceived system legitimacy.

C. INTERGROUP DYNAMICS AND THE DUALITY OF PREJUDICE

It has been argued that two motivational dynamics in individuals, competitive–dominance and threat–control, create a readiness to apply two different intergroup categorization schemas, which are expressed as two distinct forms or dimensions of prejudiced attitudes and stereotypes. If two different situational intergroup dynamics, social or intergroup threat and power–status differentials and competition, cause prejudice by activating these two motives, then these two situational intergroup dynamics should also generate the two dimensions of prejudiced attitudes and stereotypes, as shown in Fig. 7.

Several studies have reported evidence that support this. Brewer and Campbell (1976), in their classic study of tribal groups in East Africa, found that out-group liking was best predicted by similarity (i.e., presumably more similar groups would be less threatening), whereas respect or evaluation was best predicted by the out-groups’ status or level of technological advancement. Giles and Ryan (1982), who made the original distinction between competence and beneficence stereotypes, also reported evidence indicating that evaluations on the competence stereotype dimension seem to reflect groups’ relative status.

Mullen, Brown, and Smith's (1992) meta-analysis of studies of intergroup bias also produced supportive findings. They found that high-status groups showed bias against low-status groups on directly status-relevant dimensions (i.e., task competence or ability) but not on diffuse, non-status-relevant dimensions (such as liking or moral evaluation). Low-status groups, who would tend to experience social identity threat from high-status groups, on the other hand, showed bias against high-status groups on diffuse, non-status-relevant dimensions of liking and moral evaluation.

More recently a series of studies by Fiske and her colleagues (Fiske, Glick, Cuddy, & Xu, 1999; Fiske, Xu, Cuddy, & Glick, 1999; see also, Glick & Fiske, this volume) have provided compelling evidence that these two kinds of intergroup dynamics do differentially predict the two kinds of intergroup attitudes hypothesized. Their research used a large number of target social groups that were evaluated on the two stereotype dimensions of competence and warmth (liking). The findings indicated that competence evaluations were predicted by group status, whereas warmth evaluations were predicted by the degree to which the out-group was seen as threatening or competitive. More specifically, they demonstrated that high-status but threatening–competing out-groups were evaluated high on competence, but low on warmth. On the other hand, low-status but nonthreatening or cooperatively interdependent groups were rated high on warmth, but low on competence.

Overall, therefore, there is evidence suggesting that two well-established intergroup determinants of prejudice, out-group threat, and out-group power–status inequalities, do seem to relate differentially to two distinct dimensions of prejudiced intergroup stereotypes and attitudes: the dimensions of warmth–(dis-)liking and competence–(dis-)respecting respectively.

D. THE INTERACTION BETWEEN INDIVIDUAL DIFFERENCES AND GROUP DYNAMICS

1. Additive and Interactive Effects

It has been argued that two individual difference factors, in the form of the strength of two motivational goals for individuals, and two corresponding intergroup dynamic factors, which situationally activate these two motivational goals, together determine prejudiced intergroup attitudes. These two processes seem likely to influence intergroup attitudes in both additive and interactive fashion.
First, the nature of the intergroup relationship, that is, how threatening or unequal and competitive in power-status the out-group is, should determine how strongly threat-control or competitive-dominance motivational goals are aroused. Second, individuals’ personalities and worldviews will determine the importance of these two motivational goals for each individual. Thus, when these motivational goals are situational-activated, individual differences in their importance for the individual will modulate their strength and consequently the degree to which their corresponding prejudiced categorization schemas are applied to in-group and out-group.

Thus, both intergroup situational dynamics and individual differences should additively influence the strength of the two motivational goals in relation to any salient out-group and their expression in attitudes to that out-group. However, these individual differences and intergroup situational dynamics should also interact in determining out-group prejudice. If particular motivational goals are not situationally activated, that is, if the nature of an intergroup relationship makes particular motivational goals seem irrelevant, their importance to the individual will not be invoked in the context of that particular intergroup distinction. The less relevant these motivational goals seem to a salient intergroup distinction, the less individual differences in the importance of these motivational goals to the individual should influence attitudes to the out-group.

More specifically, authoritarianism, being threat driven, should be activated by out-group or social threat and therefore more predictive of negativity to threatening than to nonthreatening out-groups or minorities. Social dominance, being motivationally driven by superiority, dominance, and power, should be activated by intergroup inequalities in power and status or competition over them. Thus, social dominance should be more predictive of intergroup attitudes when such power-status inequalities or competitiveness characterize the intergroup relationship than when they are absent. Empirical evidence for such interactive effects is summarized in Table XVIII.

2. Authoritarianism and Intergroup Threat Interactions

Several studies have reported significant interactions between various indices of social or out-group threat and authoritarianism on anti-out-group and ethnocentric attitudes, with authoritarianism being more predictive when threat is higher (Feldman & Sterner, 1997; Rikert, 1998). Downing and Monaco (1986) found that high authoritarians were more negative to a directly competing out-group than low authoritarians, whereas high and low authoritarians did not differ in negativity to noncompeting out-groups. In the high-intergroup-threat context of Apartheid South Africa, correlations between the RWA scale and anti-Black prejudice for English-speaking White students were powerful, ranging from .53 to .69 (Duckitt, 1992a, p. 237). In contrast, the correlations between RWA and antiminority prejudice obtained in Altemeyer’s (1996, p. 25) research in the low-intergroup-threat context of Canada for similar student samples over the same period tended to be markedly lower, ranging from .30 to .43.

Two other findings also suggest that authoritarianism seems to be specifically reactive to threat from out-groups. Esses, Haddock, and Zanna (1993; Haddock, Zanna, & Esses, 1993) found that the association between RWA and out-group prejudice was mediated by the degree to which those groups were seen as threatening in-group values, customs, and traditions and violating important symbolic beliefs of the in-group. And more generally, Lavine et al. (1999) found that high authoritarians were more responsive to threat messages, whereas low authoritarians were more responsive to reward messages.
3. Authoritarianism and SDO in Minimal Groups

Both intergroup threat and power-status inequality or competition should be absent in standard minimal intergroup experiments (Brewer, 1979; Tajfel & Turner, 1979). Thus, authoritarianism and social dominance should not predict intergroup bias for minimal groups or do so only very weakly. On the other hand, they should be more predictive if threat or power and status concerns were introduced in such situations or group distinctions were made highly salient.

Exactly this pattern of findings has been reported. Duckitt, Paton, Machen, and Vaughan (1999) found no association between either SDO or RWA and intergroup bias in a standard minimal intergroup situation. Similarly, Perreault and Bourhis (1999) found no correlation between authoritarianism and discriminatory intergroup behavior in a minimal group experiment. Hillin and McFarland (2000) used large student samples to investigate the relationship between RWA and SDO for a number of different indices of minimal intergroup discrimination. Although more correlations were significant than would be expected by chance (9 of 16), these correlations were weak, with the averaged correlation for RWA being .09 and that for SDO being .15.

Finally, Pratto, Shih, and Orton (1988; see also Pratto, 1999, pp. 234–237) have reported particularly compelling findings. They conducted four minimal group studies and found that SDO did not predict intergroup discrimination in these situations, unless the group distinction was made highly salient or intergroup status concerns were aroused. An earlier study by Sidanius, Pratto, and Mitchell (1994) had obtained similar findings. SDO on its own did not predict intergroup evaluative bias significantly in a minimal group experiment, but SDO did interact significantly with the degree of identification with the minimal group in predicting bias. Thus, SDO predicted significantly only for high identifiers, for whom the intergroup distinction would presumably have been highly salient.

The evidence from minimal group research therefore suggests that RWA and SDO will not predict intergroup bias in standard minimal group situations. However, SDO does seem to predict intergroup bias when status concerns are directly aroused or group distinctions are made highly salient in such situations, conditions which seem likely to arouse social competition over relative status.

4. SDO and Challenged Dominance

Factors that influence intergroup competitiveness over relative status, power, and dominance should also influence the degree to which SDO predicts intergroup biases. For example, instability of status differentials should make high-status groups more competitive, and intensify power and dominance motivational goals for them, in order to defend and maintain their dominance. A recent study by Federico (1998) examined the effects of status instability on the degree to which SDO predicted intergroup biases and obtained significant interactions between stability-instability and group status. Over three studies, the regression coefficients (betas) of SDO on in-group favoritism for the high-status group were more powerful when the intergroup status differential was believed to be unstable (being .55, .50, and .47) than when it was believed to be stable (being .25, .20, and .27).

Overall therefore, the evidence reviewed does seem consistent with the proposition that authoritarianism and social dominance will each predict intergroup attitudes only when the intergroup relationship or situation activates threat-control or competitive-dominance motives respectively.

VIII. Overview and Conclusions

To summarize, the theoretical model proposed here suggests that prejudiced intergroup attitudes result from two motivational goals in individuals, competitively driven dominance-power-superiority motivation and threat-driven social control and group defence motivation. These motivational goals are aroused by two main kinds of situational characteristics of intergroup relationships: social and intergroup threat and inequalities in or competition over power and dominance. These two motivational goals result in two kinds of prejudiced categorization schemas being applied to in-group and out-group, with each expressed in two distinct forms or dimensions of intergroup stereotypes and attitudes, discriminatory behavior, and racism.

The degree to which situational intergroup dynamics arouse these two motivational goals in individuals will be modulated by the importance of these two motivational goals to individuals, with these individual differences determined by their personalities and social worldviews. The personality dimensions of social conformity and a view of the social world as dangerous and threatening influences social control and group defence motivation and its expression in authoritarian-ideological attitudes. Personality tough-mindedness and a competitive-jungle social worldview influence dominance-power-superiority motivation, which is expressed in social dominance ideological attitudes.

The model therefore integrates into one general framework the two most important individual difference theories of prejudice, authoritarian personality and social dominance theory, with important contemporary group-level perspectives on prejudice; specifically, those focusing on intergroup threat, inequalities in status and power, and social competition over status and power. The model is most fundamentally a motivational one, seeing prejudiced social and intergroup attitudes as emerging from powerful and basic human motivational goals. Motivation is therefore not viewed as an intrapsychic given or force, but in terms of motivational goals that are cognitively activated, or made salient, by individuals’
and groups’ perceptions and understandings of their social and intergroup situations.

In concluding, it should be noted that the model does not attempt to encompass all possible kinds of intergroup social categorizations, attitudes, and behavior, merely two particular kinds that seem powerfully associated with prejudiced intergroup attitudes and behavior. For example, the categorizations described here go beyond the simple, basic “us–them” intergroup social categorization studied in minimal groups. This kind of minimal intergroup social categorization seems to be typically associated with in-group enhancement and not out-group derogation; that is, viewing in-group members more favorably but not out-group members more negatively (Brewer, 1979; Perdue, Dovidio, Gurtman, & Tyler, 1990). In contrast, the two modes of categorization described here involve intergroup derogation or prejudice. The categorization and bias obtained in minimal intergroup situations may therefore be more appropriately viewed as a precondition for, or precursor of, prejudice.

Finally, the focus in this chapter has been on how two basic cognitive-motivational dynamics can explain negative intergroup attitudes, prejudice, discrimination, and oppression. Although this was not explicitly explored here, these dynamics would also have relevance for explaining those social and intergroup attitudes and behaviors associated with resistance to oppression, discrimination, and injustice. These would arise out of the two motivational goals—schemata opposite to threat–control and competitive–dominance; that is, security–autonomy and cooperation–altruism and their expression in anti-authoritarian libertarian and egalitarian–altruistic ideological attitudes.

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References


