Nationalism and Patriotism: The Effects of National Identification on Implicit and Explicit In-group Bias

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Abstract

The effects of a positive national identification on implicit and explicit out-group evaluations are explored. We draw the distinction between two varieties of national attachment: nationalism and patriotism. Consistent with past research (e.g., Blank & Schmidt, 2003; Mummendey, Klink & Brown, 2001) we contend that the way in which national identification is constructed (i.e., in terms of nationalism or patriotism) affects negative out-group attitudes. We explore this through three separate yet related issues: 1) by examining the relationship between a positive national identity and implicit and explicit in-group bias; 2) by examining the mean level of implicit and explicit out-group evaluations; and 3) by observing the pattern of correspondence between implicit and explicit measures. A series of correlational (Studies 1a, b, c, d) and experimental (Studies 2b, 3, 4) studies support the argument that the way in which national identification is constructed affects negative out-group evaluations. Specifically, Studies 1a-d illustrated that nationalism and patriotism were separate yet related varieties of national attachment and that they diverged in their prediction of xenophobia. Nationalism, but not patriotism, was reliably related to xenophobia. Studies 2b-4 generally converged in illustrating that nationalism and patriotism lead to differential links between identification and implicit out-group derogation and differential strength of correspondence between implicit and explicit measures. The link between identification and implicit in-group bias and implicit-explicit correspondence were reliably stronger following the nationalism than the patriotism frames. Additionally, we conducted a meta-analytic integration (Study 5) of the current research on implicit-explicit correspondence to ascertain whether a salient inter-group context (as was accessible under our experimental nationalism frames) could reliably predict variation in implicit-explicit correspondence. Amongst other findings, we found a large positive link between the salience of an inter-group context and implicit-explicit correspondence. The implications for current theoretical debate on national identification and in-group bias in general, and for research on implicit-explicit correspondence in particular, are discussed and possible directions for future research are outlined.

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Introduction and Overview

Introduction

The aim of this thesis is to examine the effects of a positive national identification on implicit and explicit out-group evaluations. That is, we wish to explore whether feeling good about one's national group (and ultimately one's self) may come at the expense of negative out-group evaluations, such as the rejection of foreigners, or whether a positive national identity can be achieved without any detrimental consequences. We draw upon research on national identification that distinguishes between nationalism and patriotism as two distinct varieties of positive national attachment (e.g., Blank & Schmidt, 2003; Kosterman & Feschbach, 1989; Schatz, Staub & Lavine, 1999). Nationalism is viewed as a detrimental form of national identification as it represents the view that one's nation should be dominant and is superior to other nations. Patriotism, however, is recognised as a beneficial form of national attachment as it represents feelings of belongingness and love for one's country. Nationalism and patriotism have been shown to be distinct in their differential prediction of xenophobia (Blank & Schmidt, 2003; Mummendey, Klink & Brown, 2001). Experimental work by Mummendey et al. (2001) most clearly illustrates this. Mummendey et al. (2001) experimentally manipulated nationalism and patriotism by equating them with inter-group and temporal comparisons, respectively. Following a nationalism frame there was a reliable positive relationship between identification and xenophobia. Following a patriotism frame, however, there was no such reliable relationship. The mean level of national identification did not differ as a function of identity frame, suggesting that each form of national attachment was equally positive. There were also no mean differences in xenophobia as a function of identity frame.

This thesis will contribute to empirical work on national identity by examining whether social identity processes (i.e., the construction of positive national identity in terms of nationalism and patriotism) will operate at the implicit level. One might expect that there should have been differences in level of prejudice as a function of type of national identity in Mummendey et al's (2001) research. Perhaps no differences emerged because responses were constrained by norms of political correctness and motivations to appear non-prejudiced. Contemporary analyses of the

current nature of in-group bias would support this speculation and suggest that the nature of prejudice is changing (e.g., Gaertner & Dovidio, 1986; McConahay, 1986; Pettigrew & Meertens, 1995). These frameworks suggest that whereas traditional forms of bias are direct and overt, contemporary forms are indirect and subtle. We attempt to advance current research on national identification and out-group evaluations by incorporating implicit measures of in-group bias into an experimental paradigm consistent with Mummendey et al. (2001).

Consistent with past research (e.g., Blank & Schmidt, 2003; Mummendey et al. 2001) we suggest that the way in which national identification is constructed (i.e., in terms of nationalism or patriotism) might affect implicit and explicit negative out-group attitudes or xenophobia. We will explore this primarily through three separate yet related issues: 1) by exploring the relationship between a positive national identification and implicit and explicit in-group bias; 2) by examining the mean level of implicit and explicit in-group bias displayed as a function of type of national identification, and 3) by observing the pattern of correspondence between implicit and explicit measures as a function of the type of national identity. Four correlational and three experimental studies provide substantial evidence that the way in which national identification is constructed affects each of the three issues above (particularly 1 and 3). These findings have important implications for current theoretical debate on national identification and for research exploring implicit-explicit correspondence.

Overview

In Chapter 1 we explore the question of whether a positive attachment to one's nation (i.e., a positive social identity) may be connected to negative out-group evaluations. We draw upon the social identity approach, including both social identity theory (SIT; Tajfel & Turner, 1986) and self-categorisation theory (SCT; Turner, Hogg, Oakes, Reicher & Wetherell, 1987). SIT illustrates how the desire for a positive social identity impacts upon in-group bias. Theoretical and empirical work within this tradition implies the hypothesis of a positive relationship between identification and in-group bias (Hinkle & Brown, 1990). Research has confirmed this – the more one has a positive social identification with their group the greater their level of in-group bias (e.g., Brown, Maras, Masser, Vivian & Hewstone, 2001; Brown, Vivian & Hewstone, 1999). We also see that bias may take many forms (e.g., in-group

favouritism or out-group derogation) with the default usually being a favourable in-group evaluation (e.g., Brewer, 1979, 1999). In-group bias may take the form of out-group derogation, however, when identity construction is based upon favourable inter-group comparisons (e.g., Guimond & Dambrun, 2002).

Both SIT and SCT document the conditions in which social identity may become accessible or salient to influence cognitions and behaviours (i.e., in-group bias). We suggest, however, that there are limitations with these models – they do not account for the full array of identities (e.g., inter-group and group) that may exist. We posit that Hinkle & Brown's (1990) model of groups and group contexts better capture the possible forms of social (and personal) identities that may become salient. In short, we draw a distinction between inter-group and group identity. Empirical evidence suggests that these may be distinct forms of social identities that may have differential effects on in-group bias (e.g., Mummendey, Klink & Brown, 2001). In making the distinction between inter-group and group social identity we speculate that national identity may be constructed in different ways with different outcomes for in-group bias. Consequently, our analysis is refocused to consider whether the way in which identification is constructed affects the link between identification and in-group bias (specifically, negative out-group evaluations).

Research examining the distinction between nationalism and patriotism contributes to this debate. Nationalism and patriotism may be viewed as different constructions of a positive national identity (e.g., Schatz et al. 1999). Correlational (e.g., Kosterman & Feshbach, 1989) and experimental research (e.g., Mummendey et al. 2001) have separated nationalism and patriotism and examined their effects on a variety of outcome variables (including out-group derogation; Blank & Schmidt, 2003). The experimental separation of nationalism and patriotism by Mummendey et al. (2001) provides the clearest picture of how these types of national identification impact on negative out-group attitudes. Nationalism and patriotism were reduced to inter-group and temporal comparisons respectively. We argue that these comparisons correspond to inter-group and group orientations, as outlined in Hinkle & Brown's (1990) model, and make accessible corresponding inter-group and group social identity. Mummendey et al. (2001) showed that these national identity orientations had differential effects on the relationship between identification and xenophobia. Under a nationalism orientation, there was a reliable positive relationship between identification and xenophobia, whereas this relationship was not reliable under a

patriotism orientation. There were no differences in the mean level of xenophobia or identification between identity orientations.

In Chapter 2 we review research on implicit in-group bias. After a definition and explanation of the scope of implicit in-group bias we explore the two main research questions in implicit in-group bias research: 1) whether implicit in-group bias is malleable (e.g., Blair, 2002) or inevitable (e.g., Allport, 1954), and 2) whether there is a relationship between implicit and explicit measures of in-group bias. Research suggests that implicit in-group bias is malleable and that the type of social context defining the inter-group situation is one factor that might moderate implicit in-group biases (e.g., Mitchell, Nosek & Banaji, 2003; Richeson & Nussbaum, 2004; Wittenbrink, Judd & Park., 2001b). Next, we see that there has been much variability in the relationship between implicit and explicit measure and consequently there has been a call for the exploration of moderators of the relationship (e.g., Fazio & Olson, 2003). The importance of implicit and explicit measures tapping into the same memory contents and processes is outlined as a possible moderator (Neumann & Seibt, 2001). We advance a prospective account for the effects of nationalism and patriotism on implicit in-group bias and on the relationship between implicit and explicit measures. Because the salience of the inter-group context had previously been shown to moderate implicit in-group bias, and because nationalism and patriotism may be represented by inter-group and temporal comparisons that make accessible an inter-group and group context (as well as corresponding identity), we suggest that type of national identification will moderate implicit out-group derogation. We speculate that there will be greater bias following an orientation toward nationalism than patriotism. Identification in terms of nationalism dictates that the in-group is of higher status than the out-group. Research suggests that high status groups may display in-group bias (e.g., Mullen, Brown & Smith, 1992; Turner & Brown, 1978). Similarly, Guimond and colleagues (Dambrun & Guimond, 2004; Guimond & Dambrun, 2002; Guimond, Dif & Aupy, 2002) have proposed and shown that favourable inter-group comparisons have a major consequence of out-group derogation. We also speculate that type of national identification will moderate the correspondence between implicit and explicit measures of in-group bias. We propose that correspondence may be greater following an inter-group (nationalism) than a group (patriotism) identity orientation because, under an inter-group orientation, implicit and explicit measures should be tapping into the same memory contents and

processes: an accessible inter-group social identity. It is suggested that explicit measures will make accessible an inter-group context (and corresponding inter-group identity), irrespective of any prior priming experience. Implicit measures, on the other hand are unlikely to make an inter-group context (and thus inter-group identity) accessible. Under a nationalism orientation it is suggested that inter-group identity is made accessible on implicit measures whereas group identity is made accessible following a patriotism orientation. So, following a nationalism (inter-group) orientation, both implicit and explicit measures are completed in accordance with the same accessible inter-group identity whereas following a patriotism (group) orientation implicit and explicit measures diverge in the memory contents and processes that are accessible. Here, explicit measures are likely to be completed in terms of a salient inter-group identity whereas implicit measures are likely to be completed in terms of a salient group identity. Consequently, we expect little or no correspondence between implicit and explicit measures.

Chapter 3 presents our first series of studies (1a, b, c, and d) that explore whether a positive attachment to one's country may be connected to negative out-group evaluations. Studies 1a and 1b respectively present exploratory and confirmatory factor analyses as a means of establishing the content and structure of national attachment. Results showed that national identification is represented by two separate yet related constructs that are identifiable as nationalism and patriotism. Nationalism represented the view that one's country is superior to others and should be dominant Patriotism, on the other hand, represented feelings of attachment and love for one's country. Studies 1c and 1d established the construct validity of nationalism and patriotism. Study 1c examined the relationship between nationalism and patriotism and football fans' out-group related evaluations following their national team's exit from the 2002 Football World Cup finals. Results showed that nationalism but not patriotism predicted the acceptance of out-group derogation. Study 1d provided a more explicit analysis of the link between nationalism and patriotism and the rejection of foreigners – using an already established measure of out-group prejudice (Pettigrew & Meertens, 1995). Nationalism but not patriotism predicted variance in this measure of xenophobia. This latter study, however, raised some concern about the face validity of our measure of nationalism; it may also be considered to be a measure of national prejudice.

Chapter 4 presents the first study (Study 2b) using Mummendey et al's (2001) experimental paradigm. After establishing a measure of implicit national in-group bias (Study 2a) we manipulated nationalism and patriotism by reducing them to inter-group and temporal comparisons respectively. This study was designed to explore: 1) whether the way in which national identity was constructed affected the link between identification and (implicit an explicit) in-group bias, 2) whether type of national identity affected mean differences in implicit and explicit in-group bias, and 3) whether the way in which identity was constructed affected the correspondence between implicit and explicit measures. Results showed that the link between identification and (implicit and explicit) in-group bias did not change as a function of type of national identity. There were mean differences in implicit out-group derogation, however, as a function of type of identity. There was significantly more out-group derogation following the nationalism than patriotism identity frame. Results also showed that the way in which identification was constructed moderated the correspondence between implicit and explicit measures. As expected, we found greater correspondence following the nationalism than patriotism identity frame.

In Chapter 5 we present a study (Study 3) that employed the same experimental paradigm as Study 2b but expanded it to include an inter-personal identity orientation. This was done to specifically assess whether the effects observed in Study 2b were a function of a salient inter-group identity or merely a function of favourable inter-stimulus comparisons. We felt that similar inter-stimulus comparisons at the inter-personal level would provide an adequate comparison standard. We also changed the target out-group to assess the generality and robustness of our paradigm. In addition to these points, we explored the same three issues as before. Results showed that the way in which identification was constructed moderated the link between identification and implicit in-group bias. There was a reliably stronger relationship between identification and implicit in-group bias following the nationalism identity frame than the patriotism frame. Identity frame also moderated the link between implicit and explicit measures. Results converged with Study 2b, there was greater correspondence following the nationalism than patriotism frame. Importantly, this pattern of results also occurred between the nationalism and inter-personal frame. The link between identification and bias and the correspondence between implicit and explicit measures were stronger following the nationalism than inter-personal identity frame. The results indicated that our

effects were likely to be a function of a salient inter-group identity and not merely an artefact of favourable inter-stimulus comparisons. Moreover, that these effects occurred for a different target out-group suggests that our paradigm is robust and has some generality.

Chapter 6 presents our final experimental study (Study 4). We employed the same paradigm as Study 2b but used a different implicit measure of in-group bias (the implicit association test). We did this to further assess the generality of our findings. Again, we explored the three major issues as Study 2b and Study 3. Results showed that the way in which national identification was constructed moderated the link between identification and implicit in-group bias. The link between identification and implicit in-group bias was significantly stronger following the nationalism than patriotism identity frame. Results also revealed a similar trend in the pattern of correspondence between implicit and explicit measures of in-group bias as in previous studies. The relationship between implicit and explicit measures was stronger following the nationalism than patriotism identity frame.

There was some variability in identity frame moderating the link between identification and implicit in-group bias as well as the correspondence between implicit and explicit measures over the three experimental studies (Study 2b, 3, 4). To establish whether, overall, identity frame had these moderating effects we performed two meta-analytic integrations of the studies presented earlier. The first assessed the effects of national identity frame on the link between identification and implicit in-group bias. Results showed that, on average, identity frame did moderate the link between identification and implicit in-group bias. There was a marginally stronger link between identification and implicit in-group bias following the nationalism than the patriotism frame. The second integration examined the correspondence between implicit and explicit measures of in-group bias. Results showed that identity frame moderated implicit and explicit measure correspondence. The average correspondence following the nationalism frame was significantly greater than the average correspondence following the patriotism frame and was marginally greater than the average correspondence following the control frame.

Chapter 7 presents a meta-analytic integration (Study 5) of the existing literature examining the correspondence between implicit and explicit measures of in-group bias. The integration examined whether there is a relationship between implicit and explicit measures and also explored a number of moderators. The moderator of

greatest interest was the salience of an inter-group context (and assumed corresponding inter-group identity). We wanted to examine whether this variable could account for some of the variability previously observed in this research (e.g., Fazio & Olson, 2003). Our previous studies (2b, 3, 4) suggested that inter-group context salience might be a key predictor of the correspondence between implicit and explicit measures. We also examined whether the order of administration of implicit and explicit measures as well as the type of implicit and explicit measures used (including the combination of these measures) moderated implicit-explicit correspondence. Results showed that there is a reliable relationship between implicit and explicit measures (albeit a modest one) and that there is a strong positive link between the salience of an inter-group context and implicit-explicit correspondence. The more an inter-group context was accessible when implicit and explicit measures were completed the greater the correspondence between implicit and explicit measures. The order of administration of implicit and explicit measures also moderated correspondence. Implicit-explicit correspondence was significantly larger when explicit measures were completed prior to implicit measures than when implicit measures were completed prior to explicit measures. The combination of implicit and explicit measures used affected the link between the salience of an inter-group context and implicit-explicit correspondence. This relationship was greatest when the implicit association test and endorsement scales were the measures used.

Chapter 8 summarises the findings of the programme of research presented in the previous chapters. It is argued that the findings clearly and consistently indicate that national identification may be connected to negative out-group evaluations. It is the way in which national identification is constructed that affects out-group evaluations. This was most clearly demonstrated in our three experimental studies (2b, 3, 4). In general, type of national identification moderated the link between identification and implicit in-group bias and moderated implicit-explicit correspondence. There was stronger correspondence between identification and implicit in-group bias as well as stronger implicit-explicit correspondence following a nationalism identity frame than a patriotism identity frame. It is argued that this thesis represents important advances on previous research examining the effects of national identification on in-group bias and on research examining the relationship between implicit and explicit measures. Limitations of the current research are considered and possible directions for future research are outlined.

Chapter 1

Type of National Identification and the Link with Negative Out-group Evaluations: Distinguishing Nationalism From Patriotism

1.0 Introduction

As we outlined in the previous section, our primary thesis considers whether a positive attachment to one's nation (i.e., a positive in-group identification) may be connected to negative out-group evaluations. In making this proposition we imply that there may be potentially detrimental effects of a positive regard for one's country. Additionally, however, we submit the complementary question that considers whether positive national identification may be possible without any rejection of foreigners. In this chapter we explore these issues by drawing upon relevant social psychological research examining in-group identification and in-group bias. Firstly, we outline a popular theoretical approach toward the analysis of the role of social identity in inter-group relations: the social identity approach (e.g., Tajfel, 1978; Tajfel & Turner, 1986; Turner, 1982; Turner et al. 1987). This approach, including both social identity theory (SIT, Tajfel & Turner, 1986) and self-categorisation theory (SCT, Turner et al. 1987), explores how the hypothesised desire for a positive social identity impacts on in-group bias and illustrates how social identities may become salient. When considering the salience issue we suggest that existing approaches may only be able to explain how inter-group identity becomes salient. We argue for the existence of group identity, distinct from inter-group identity, by drawing upon Hinkle & Brown's (1990) taxonomy of groups and group contexts. Next, we explore the concept of in-group bias and focus on whether a positive in-group evaluation necessarily entails a negative out-group evaluation (e.g., Brewer, 1999, 2001). Here, we see that in-group favouritism and out-group derogation are not reciprocally related and that the default form of bias tends to be a positive in-group evaluation (e.g., Brewer, 1979). Under certain conditions, however, (e.g., when favourable inter-group comparisons are made) in-group bias may take the form of negative out-group evaluations (e.g., Guimond & Dambrun, 2002; Guimond et al. 2002). Subsequently, we re-focus our analysis toward the examination of the identification and in-group bias link and

highlight the heterogeneity in research findings. We imply that this variability may be a direct consequence of different facets of social identity being manipulated or measured across the different studies. Our discussion resonates with research examining the multi-dimensionality of social identity and its implications for in-group bias (e.g., Hinkle & Brown, 1990; Jackson & Smith, 1999). From this analysis we conclude that the way in which social identity is constructed affects the manner in which identification is related to in-group bias. Next, we maintain that these conclusions are consistent with national-identity specific research on nationalism and patriotism. In reviewing correlational (e.g., Kosterman & Feschbach, 1989, Schatz et al. 1999) and experimental (Mummendey et al. 2001) research in this tradition, we suggest that nationalism and patriotism are two distinct ways in which social (national) identity may be constructed and that these independent identity constructions may have differential impact on negative out-group evaluations. Because identification is constructed through biased, favourable, inter-group comparisons that maintain the relative high status of the in-group, we see that identification in terms of nationalism tends be more strongly related to negative out-group evaluations than identification in terms of patriotism (Blank & Schmidt, 2003).

1.1 The social identity approach

The social identity approach is composed of both SIT (Tajfel & Turner, 1986) and SCT (Turner et al. 1987). These theories are quite distinct in that they examine different issues and have unique explanatory scope (see Turner, 1999; Turner & Reynolds, 2001). SIT is largely a theory about the role of social identity in inter-group discrimination whereas SCT, an extension and elaboration of SIT, is a theory that more specifically examines the cognitive underpinnings that lead to a particular social identity becoming salient and its impact on a wide range of collective behaviours. Despite their explanatory differences, both SIT and SCT invoke the same concept of social identity and posit the importance of group (vs. personal) identity in a range of group-related behaviours (e.g., inter-nation evaluations). It is not possible here to review all the extant research on SIT and SCT principles. It is also outside the scope of the current thesis to review all research on the many different problems the theories have been used to address (but for reviews see Abrams & Hogg, 1999;

Brewer & Miller, 1996; Brown, 2000; Capozza & Brown, 2000; Ellemers, Spears & Doosje, 1999; Oakes, Haslam & Turner, 1994; Spears, Oakes, Ellemers & Haslam, 1997; Worchel, Morales, Paez & Deschamps, 1998). Here, we focus our attention on the role of social identity in inter-group discrimination (i.e., in-group bias) and the basic mechanisms that make a given social identity salient.

1.1.1 Social identity and inter-group discrimination

Social identity theory began as an attempt to understand and explain the patterns of inter-group discrimination displayed in the 'minimal group paradigm' (e.g., Tajfel, Billig, Bundy & Flament, 1971). In that general paradigm participants were ostensibly categorised into a group based on certain criteria, such as their preference for abstract artwork. In fact, assignment was random. Participants had to divide points (representing monetary rewards) between a fellow in-group member and an out-group member (but not to themselves, ruling out motivation for personal gain). Using 'Tajfel matrices' participants could choose a reward strategy that either granted fairness, a maximum in-group profit (in-group would get the maximum amount of points available), a maximum joint profit (in-group and out-group would both get the maximum points) or maximum difference (in-group would get more points than out-group). In general, findings showed that participants tended to trade off fairness for maximum difference. That is, participants chose a reward strategy that gave the in-group more points than the out-group; this was even at the cost of maximum profit for the in-group. In these minimal conditions, Tajfel et al. (1971) found that mere social categorisation of people into distinct groups fostered inter-group behaviour that resulted in participants favouring the in-group over out-group members. The mere awareness of being in one group over another appeared sufficient to engage processes of inter-group discrimination. Tajfel & Turner (1986) argued that the social categorisation of participants in this minimal paradigm created a social identity for them. Participants accepted the group membership as a relevant self-definition in that situation. Social identity may be thought of as "that part of an individual's self-concept which derives from his knowledge of his membership in a social group (or groups) together with the value and emotional significance attached to that membership" (Tajfel, 1978, p. 63).

SIT (Tajfel & Turner, 1986) also maintained that once individuals define themselves as in-group members (i.e., social identification), there is a psychological requirement that in-groups compare favourably to relevant out-groups. Where people define and evaluate themselves in terms of their group memberships, there is a need for a positive social identity. This need for a positive identity may be expressed through a desire to create, maintain or enhance a positive distinctiveness of one's in-group compared to an out-group on relevant dimensions. Based on these principles, SIT may be viewed as an analysis of the psychological need for a positive social identity that produces a desire for inter-group discrimination (i.e., in-group superiority). SIT proposes that the route to discrimination follows the sequence of social categorisation – social identity – social comparison – positive in-group distinctiveness (Turner, 1999). The core hypothesis of SIT, therefore, is that social comparisons between groups, which are relevant to an evaluation of one's social identity, produce pressures for inter-group differentiation to achieve a positive self-evaluation (a positive social identity). This has been translated into a more testable hypothesis (Brown, 2000; Hinkle & Brown, 1990) that posits a positive relationship between in-group identification and in-group bias. Of particular relevance here, experimental research on national identity and inter-nation attitudes has shown that identification has predicted in-group bias, in the form of xenophobic attitudes (e.g., Brown, et al. 2001; Brown, et al. 1999). We will return to the hypothesis of a positive relationship between in-group identification and in-group bias later after we have discussed the concept of in-group bias itself. First, however, we will continue with our analysis of the role of identification in inter-group discrimination by examining how and when social identity may become salient.

1.1.2 How and when will social identity become salient?

Tajfel (1978) explicated when social identity processes were likely to come into play, or when social identity was likely to become 'salient'. Tajfel developed the "interpersonal-intergroup continuum" to represent his ideas. At one extreme interaction is determined solely by the character and motivations of the individual as an individual (i.e., inter-personal behaviour). At the other extreme behaviour is derived solely from the person's group membership (i.e., inter-group behaviour). In

making this distinction, Tajfel suggested that inter-group and inter-personal behaviour were qualitatively distinct from each other. Tajfel argued that social identity processes come into play to the extent that behaviour is defined at the inter-group extreme of this continuum. That is, people think in terms of their group membership when the context in which they find themselves is defined along group-based lines. As behaviour becomes more inter-group, attitudes toward the out-group members tend to become more consensual and out-group members tend to be seen as homogenous and undifferentiated members of their social category.

Turner (1982) put forward a 'cognitive' hypothesis to explain variation along Tajfel's continuum. He argued that an individual's self-concept can be thought of as a cognitive structure that regulates behaviour under relevant conditions. It is made up of personal identity and social identity. Personal identity refers to self-descriptions in terms of personal or idiosyncratic attributes (e.g., physical attributes), whereas social identity refers to self-descriptions in terms of social category memberships (e.g., nationality). Different situations 'switch on' or make salient different self-conceptions that are used to interpret and make sense of social stimuli and regulate behaviour. According to this development, the change in self-concept functioning from personal to social identity corresponds to and is responsible for a shift from inter-personal and inter-group behaviour.

The personal – social identity continuum was further adapted by SCT (Turner et al. 1987). SCT holds that the self can be categorized at different levels of abstraction related by class inclusion (Rosch, 1978), rather than along a bipolar continuum. For ease of explanation, the self can be categorized at (a) the super-ordinate "species" level as a human being, at (b) the intermediate "social" level as a member of a distinct social group, and at (c) the subordinate "personal" level as a unique individual. Much like the continuum models, SCT maintains that personal and social identities will tend to have opposing effects on self-perception and posits a discontinuity between inter-personal and inter-group behaviour. SCT also posits that the more people define themselves in terms of their membership of their in-group category (i.e., to the extent that they become depersonalised) the less they will see themselves as differing individual persons. In describing how a category is likely to become salient self-categorization theory borrows much of Bruner's (1957) reasoning on category accessibility. It shares the idea that a given category is more likely to

become salient to the extent that it has prior meaning and significance for the perceiver – it is "relatively accessible" (Oakes, 1987). However, whereas Bruner described the fit component of category salience as a unitary construct, self-categorization theory distinguishes two aspects of social category fit. The first aspect refers to "comparative" fit. Comparative fit is determined by the theory's principle of meta-contrast, which states that a given category is more likely to become salient to the extent that differences between members of that category are perceived to be smaller than differences between members of that category and comparison others. The second aspect of social category fit refers to "normative" fit. The principle of normative fit states that a given category is likely to become salient to the extent that the pattern of observed similarities and differences between category members is consistent with perceivers' content-related expectations. SCT predicts that a given category is more likely to become salient to the extent that both comparative fit and normative fit are strong.

1.1.2.1 Is there only one form of social identity?

Although all the above models converge in providing perfectly comprehensible hypotheses delineating the conditions (personal and situational) under which social identity may become salient, they only make reference to inter-group social identity salience. Brown and Turner (1981) suggested that Tajfel's continuum might perhaps be more properly renamed the interpersonal – group continuum. In their view, group behaviour may constitute intra-group as well as inter-group behaviour, both of which are qualitatively distinct from inter-personal behaviour. Here, definition of one's behaviour as intra-group behaviour may be seen as an alternative route to social identity salience. Although we agree that the intra-group behaviour is qualitatively distinct from inter-personal behaviour, we also speculate that intra-group behaviour may be quite distinct from inter-group behaviour (actually, it may be more prudent to refer to intra-group behaviour as a (non-relational) group behaviour, to avoid any parallels being drawn with an SCT analysis of intra-group behaviour, which implies personal-identity becoming salient). The implication here is that self-definitions in terms of non-relational group behaviour may lead to a distinctive group social identity being salient. The qualitative distinction between group and inter-group social

identity salience was not expressed by Brown and Turner (1981) and, to our knowledge, has not been formally explicated in any further research on SIT or SCT. Although somewhat speculative, we believe that the hypothesis of distinct forms of social identity (group vs. inter-group) is tenable.

Research examining the impact of the nature of groups and group contexts on in-group bias provides tangential support for the existence of group and inter-group identity (e.g., Hinkle & Brown, 1990; Mummendey et al. 2001). Hinkle and Brown (1990), for example, proposed a taxonomic model of groups and group contexts. The justification for this typology was the witnessed variability of the relationship between in-group identification and in-group bias (see below for further discussion on this topic and this model's contribution). They suggested that this variability was likely to be a function of the different types of ideological or situational orientations that may exist. They also argued that both SIT and SCT overlooked this possible variation in type of group or group context and were thus limited in their explanatory scope. Hinkle and Brown's (1990) model included two orthogonal dimensions: an individualistic-collectivist dimension and an autonomous-relational ideology/context dimension. The first basically refers to the extent to which individuals emphasise independence or separation from the in-group versus collective attachment and close ties with the in-group. The second dimension refers to whether groups or group contexts invoke a non-comparative or comparative ideology. We speculate that these different individual and situational orientations serve to construct, 'switch on' or make salient corresponding identity. We are only primarily concerned here with groups that are collectivist (i.e., in-group members who have close group ties) in order to differentiate different forms of social identity. We suggest that collectivist group members who have a relational or a non-relational orientation will be motivated to achieve a positive in-group evaluation (viz. social identity) but will achieve this via the prevailing inter-group or group ideology or context. Whatever orientation is accessible will make corresponding identity salient (inter-group versus group) that may serve to regulate cognitions and behaviour.

Empirical evidence provides tangential support for this speculation. Mummendey et al. (2001), for example, showed that under inter-group and group contexts (generated through the use of inter-group and temporal comparisons respectively) national identification was differentially associated with xenophobic

attitudes. Identification was more strongly related to xenophobia under an inter-group than group context. We can assume that the different comparative and non-comparative orientations may have 'switched on' or made salient different self-conceptions (inter-group versus group) that were used to interpret and make sense of social stimuli and regulate behaviour in accordance with the salient social identity. The inter-group comparisons encouraged group members to construct identity in a way that saw the in-group as better than the out-group. Identity was constructed in terms of an inter-group differentiation. The group (or temporal) comparisons did not construct identity in relation to an out-group. Consequently, behaviour was displayed consistent with identity. There was a greater correlation between in-group identification and xenophobia following inter-group than group identification.

We imply that both the continuum models and SCT do not capture all the forms of social identity salience that may be possible. They all (loosely) maintain a comparative dimension (personal or group) in which behaviour is judged upon and which consequently contributes to the awareness of group membership and that shapes cognitions and behaviours consistent with that emergent identity. Group identity, however, need not be relational. The suggestion of a group identity in addition to an inter-group identity, however, is not consistent with SCT. For SCT, 'group' or 'intra-group' salience would imply only interaction between individuals within the in-group and would predict that personal identity would be most likely to become salient. We do not wish to suggest that these models of social identity salience are not useful in predicting when (inter-group) social identity is likely to come to the fore. However, there may be certain social landscapes as well as individual motivations and orientations that may raise the salience of group identity (but not inter-group or inter-personal identity) and that this form of identity may be qualitatively distinct from an inter-group (and inter-personal) identity. For example, signing the national anthem following an orchestral concert at the Royal Albert Hall may raise the salience of national identity but this need not be a relational (inter-group) identity. An inter-group identity (but not group or inter-personal), by comparison, may become salient at an international football match, where inter-group boundaries are marked through the teams' different coloured strips and fans' locations in the stadium. We suggest that, with a small creative leap, Hinkle & Brown's (1990) taxonomic model may be perceived as a useful working framework that identifies the

boundary conditions that make different social identities, such as group and inter-group (as well as personal identities), salient.

In this section we have illustrated that theory and research implies that there is a direct relationship between in-group identification and in-group bias (Tajfel et al. 1971; Brown, 2000). We have also seen how social identities may come into play to affect cognitions and behaviours (such as out-group evaluations). Before we examine in more depth the hypothesised link between identification and in-group bias, and thus provide a more direct analysis of whether identification may be linked to negative out-group evaluations, we firstly focus our attention on the concept of in-group bias itself.

1.2 Definition of and the relationship between different forms of in-group bias

1.2.1 Defining in-group bias

As we saw above when examining SIT, in-group bias may be conceptualised as a form of inter-group differentiation or discrimination that places the in-group in a relatively superior position to the out-group. This differentiation is part of social identity expression. A large body of research now exists that supports SIT's central postulate that group members are motivated to achieve positive distinctiveness for their in-groups in relation to out-groups (see Brewer & Brown, 1998; Hewstone, Rubin & Willis, 2002). This expression of identity may manifest itself in a number of ways. Identity expression may take the form of in-group favouritism: an enhanced favouritism to the in-group without any change in affect toward out-group members. This pattern of discrimination has been widely evidenced both in the minimal group studies and in research using real groups (e.g., Dion, 1973; Rabbie & Horwtiz, 1969; Koomen & Bahler, 1996; Levin & Sidanius, 1999). There is also the suggestion that this form of in-group bias may be default, in that it may be an automatic or unintended expression of in-group identity. Perdue, Dovidio, Gurtman, and Tyler (1990), for example, showed that participants identified positive words quicker than negative words following in-group pronoun descriptors (e.g., 'we', 'us') but did not differ in their response speed for positive and negative words following out-group pronoun descriptors (e.g., 'them', 'their'; see Chapter 2 for in-depth discussion of

implicit measures). Additionally, research on subtle racism (in-group bias) illustrates that in-group bias is characterised by the absence of positive sentiments, and not the presence of strong, negative sentiments, towards out-groups (e.g., Dovidio & Gaertner, 1993; Pettigrew & Meertens, 1995), also illustrating a pattern of in-group favouritism. In-group bias may also take the form of out-group derogation: a devaluation of out-groups (e.g., Rabbie, Benoist, Oosterbaan & Vissier, 1974; Worchel, Andreoli & Folger, 1977), or inter-group bias: both a positive evaluation of the in-group and a devaluation of the out-group (e.g., Hensley & Duval, 1976; Kahn & Ryen, 1972).

1.2.2 The relationship between different forms of in-group bias

In an early theory of in-group, out-group and inter-group relations, Sumner (1906) speculated about the relationship between in-group affect and attitudes toward the out-group. In defining "ethnocentrism", Sumner postulated a direct positive relationship between in-group favouritism and out-group derogation:

> Ethnocentrism is the technical name for this view of things in which one's own group is in the center of everything, and all others are scaled and rated with reference to it.... Each group nourishes its own pride and vanity, boasts itself superior, exalts its own divinities, and looks with contempt on outsiders.... The relation of comradeship and peace in the we-group and that of hostility and war towards others-groups are correlative to each other. The exigencies of war with outsiders are what make peace inside.... Loyalty to the group, sacrifice for it, hatred and contempt for outsiders, brotherhood within, warlikeness without - all grow together, common products of the same situation. (Sumner, 1906, p. 12-13)

Brewer (1999) noted that, probably backed by such theoretical analyses, most contemporary research on inter-group relations, prejudice and discrimination appeared to accept the idea, at least implicitly, that in-group favouritism and out-group derogation were reciprocally related. Brewer, (1999, 2001) argued that this reciprocal relationship was somewhat fallacious. Using Allport's (1954) visionary writings on in-group formation, Brewer (1999, 2001) suggested that, although there may be displays of negative out-group affect these need not necessarily be linked with a positive in-group evaluation. Allport (1954) argued for the psychological

primacy of the in-group, in the sense that familiarity, attachment and favouritism became established before the development of attitudes toward out-groups:

> Although we could not perceive our own in-group excepting as they contrast to out-groups, still the in-groups are psychologically primary.... Hostility toward out-groups helps strengthen our sense of belonging, but it is not required.... The familiar is preferred. What is alien is regarded as somehow inferior, less "good," but there is not necessarily hostility against it.... Thus, while a certain amount of predilection is inevitable in all in-group memberships, the reciprocal attitude toward out-groups may range widely. (Allport, 1954, p. 42)

Later empirical work seems to have confirmed Allport's thesis that in-group favouritism and out-group derogation may not be related (see Brown & Zagefka, 2005, for a critical review of Allport's contribution to this debate). Brewer (1979), for example, pointed out that most research in the tradition of the minimal group paradigm involves favourable treatment of the in-group but little obvious out-group derogation. Struch and Schwartz (1989) also observed that measures of aggressive intention towards an out-group were uncorrelated with measures of in-group favouritism. Arguably, the most convincing evidence that positive in-group and negative out-group attitudes are unrelated comes in the form of the positive – negative asymmetry phenomenon. Recall that, in the minimal group paradigm, when participants were asked to allocate positive stimuli (e.g., points representing monetary values) the typical pattern observed was discrimination in favour of the in-group (e.g., Tajfel et al. 1971). This result virtually disappeared, however, when the rewards distributed were replaced with negative outcomes (e.g., exposure to aversive noise; Mummendey, Simon, Dietzw, Grunert, Haeger, Kessler, Lettgen & Schaferhoff, 1992). Such results suggest that individuals are willing to differentially benefit the in-group compared to an out-group but are reluctant to harm the out-group more directly.

Although theoretical (e.g., Allport, 1954) and empirical research (see above) suggests that there may not be a direct link between in-group favouritism and out-group derogation, some researchers have suggested the existence of and have identified a variety of moderator variables (see Brewer, 1999, 2001; Brown & Zagefka, 2005). Brewer (1999, 2001), for example, conducted a detailed analysis of

the relationship between 'in-group love and out-group hate' and identified a number of factors that might lead in-group members to denigrate out-group members. Societal complexity is one such factor, as more simply structured societies are prone to greater inter-group antagonism than societies that have many crosscutting categories (Gluckman, 1955); moral superiority ideologies may justify mistreatment of out-groups (Sidanius, 1993); realistic group conflict over material commodities that both groups desire may give rise to heightened antagonism (Sherif, 1966); and when groups hold common values and adopt a common measure of relative worth there may be threats over positive distinctiveness that may lead to inter-group competition and out-group derogation (Mummendey & Wenzel, 1999).

Guimond and colleagues (Dambrun & Guimond, 2004; Guimond & Dambrun, 2002; Guimond et al. 2002) put forward favourable (or downward) inter-group comparisons as an antecedent to out-group derogation. These authors suggested that, by perceiving their group to be in a privileged, high status, position, in-group members would experience the psychological need to maintain and justify such privileges. In such a condition of 'relative gratification', out-group derogation would be the strategy used to justify the high-status of the in-group. Guimond et al. (2002) found support for this hypothesis. In one experiment (Guimond & Dambrun, 2002, Study 2), psychology students were led to either believe that their own group was much worse off (relative deprivation) or much better off (relative gratification) than the out-group of law students in terms of job opportunities. Results showed that although there was some out-group derogation, relative to a control condition, for group members who made unfavourable (upward) inter-group comparisons, this effect was even more pronounced for group members who has made favourable (downward) inter-group comparisons. Guimond and Dambrun (2002, Study 2) also showed that the mechanism accounting for this effect of 'relative gratification' was primarily cognitive in nature rather than affective. Feelings of satisfaction experienced by participants who made favourable inter-group comparisons did not mediate the effect of experimental condition on inter-group attitude but the cognitive component did. The perception that the in-group was better than the out-group was the mediating variable. This strongly suggests that a favourable group outcome (relative to another group), regardless of the feelings of gratification or satisfaction that it may generate, may produce greater out-group derogation.

In this section we have seen that in-group bias may take one of three forms: in-group favouritism, out-group derogation, or inter-group differentiation. Whereas in-group favouritism may be the most likely manifestation of identity expression it is not likely to be directly related to negative out-group affect (Brewer, 1999, 2001). There are a number of moderating factors, however, that may lead to the expression of negative out-group affect (see Brewer, 1999, 2001), including the cognitive process of making favourable inter-group comparisons (e.g., Guimond & Dambrun, 2002). Having briefly analysed the concept of in-group bias, and thus implicitly considered when in-group identification may be connected to out-group derogation, we can return our discussion to a more explicit examination of the relationship between in-group identification and in-group bias.

1.3 The relationship between in-group identification and in-group bias

As we mentioned above, in our discussion of SIT and inter-group discrimination, one plausible prediction to infer from SIT is that there should be a positive relationship between in-group identification and in-group bias (Brown, 2000; Hinkle & Brown, 1999; cf. Turner, 1999). This hypothesis has received considerable research interest (see Brown, 2000; Lalonde, 2002). As might be expected with a myriad of empirical investigations, the in-group identification – in-group bias link has received somewhat mixed support (e.g., Abrams, 1984; Branscombe & Wann, 1994; Hinkle & Brown, 1989; Rabbie & Horwitz, 1969; Struch & Schwartz, 1989). Hinkle and Brown (1990), for example, conducted the first review of studies investigating this relationship and found that across the 14 studies reviewed, the average correlation was close to zero. Additionally, study outcomes ranged from .59 to -.79.

Noting such variability, Hinkle & Brown (1990) concluded that in-group identification and in-group bias are not always positively associated. Their conclusion implied that the SIT assumption that social identities are constructed and maintained by inter-group comparisons did not always hold true. They suggested that social identities might be constructed or maintained in other ways. As we saw above, Hinkle and Brown developed a taxonomic model of group and group contexts to account for the variability in the identification – in-group bias link. Their model included an individualistic-collectivist dimension and an autonomous-relational

ideology/context dimension. They hypothesised that the identification – in-group bias relationship was likely to exist only for collectivist (i.e., group oriented) individuals who adopted a relational (inter-group) ideology or who found themselves in an inter-group context. A few studies have tested Hinkle and Brown's hypothesis. The first tests of the model by Brown, Hinkle, Ely, Fox-Cardomone, Maras and Taylor (1992) found some support for it. Across three studies there was a large positive mean correlation between identification and in-group bias (.55) in the collectivist x relational quadrant, and the same relationship was close to zero (.05) in the individualist x autonomous quadrant. As we reported above, experimental research by Mummendey et al. (2001) found a reliable difference in the strength of the relationship between identification and xenophobic attitudes as a function of group orientation. The relationship was significantly stronger when an inter-group than group context was salient. However, a number of studies have found evidence inconsistent with Hinkle and Brown's predictions (e.g., Capozza, Voci and Licciardello, 2000). A recent meta-analytic review of 15 independent hypothesis tests of the Hinkle and Brown model, nevertheless, found an overall reliable positive correlation between identification and in-group bias (.23), which was reliably moderated by a collectivism x relational ideology (Aharpour, 1999). We suggest that Hinkle & Brown's (1990) model provides a useful framework for predicting when identification and in-group bias are likely to be related. We also suggest that this model may be conceived of as documenting when certain social (as well as personal) identities may become salient (see above). Thus, their framework may be perceived as suggesting that the way in which in-group identification is constructed affects the link between in-group identification and in-group bias.

1.3.1 Identity constructions and the link between in-group identification and in-group bias

That different social identity constructions can lead to differential relationships between in-group identification and in-group bias implicates the multi-dimensionality of social identity. Theoretical (e.g., Ashmore, Deaux & McLaughlin-Volpe, 2004) and empirical (e.g., Ellemers, Kortekaas & Ouwerkerk, 1999; Jackson & Smith, 1999) observations have documented that different social identity constructions may

have differential patterns of association with a number of outcome variables including in-group bias (also see Deaux, 1996, for documentation of the multiple components of social identity). For example, Ellemers et al. (1999) suggested that Tajfel's (1978) definition of social identity was actually composed of three component parts – cognitive, evaluative and emotional – that are actually related but distinct aspects of social identification. The cognitive component refers to an individual's awareness of their membership in a social group. The evaluative component refers to a positive or negative value connotation attached to group membership (i.e., group self-esteem). The emotional component refers to a sense of emotional involvement and affective commitment to the group. These authors showed that these aspects of social identity could be distinguished as separate factors in a principal components analysis. They examined whether these three components would differentially predict in-group favouritism. Examining the independent effects of each predictor, results showed that only the emotional component of social identification contributed significantly to the explanation of variance in in-group favouritism. Both the cognitive and evaluative components did not emerge as significant predictors.

Jackson and Smith (1999) highlighted the multi-dimensionality of social identity. They advanced that there may be two basic types of social identity – secure and insecure. Secure social identity is characterised by in-group attraction, moderate levels of depersonalisation, low levels of perceived inter-dependency, and a positive or non-competitive perception of the inter-group context. Insecure social identity is characterised by in-group attraction, relatively high levels of depersonalisation, high levels of perceived inter-dependency, and an unfavourable or competitive perception of the inter-group context. These authors showed that although both forms of social identity were equally positive, reflected in the high correlations with in-group pride, the type of identity produced differential associations with evaluations of the in-group and out-group. Whereas a secure social identity was negatively associated with inter-group differentiation, an insecure social identity was positively related to inter-group differentiation.

This research highlights the complexity of social identity and suggests that social identification may mean different things depending upon how it is constructed. Consequently, these different identity constructions may have differential impact on inter-group evaluations. Along with Hinkle and Brown's (1990) model, these other

social identity frameworks offer convincing evidence that the way in which social identity is constructed affects the relationship between identification and in-group bias. We have a strong preference toward Hinkle and Brown's (1990) model, however, because it allows for the existence of inter-group and group social identities. The other models do not make this distinction. Consequently, we feel that this model better captures the realities of social groups and has much more explanatory scope in accounting for the variations in in-group bias.

1.4 Nationalism and patriotism

From a social psychological perspective, patriotism and nationalism are frequently used terms to describe the relationship between the individual and society (Bar-Tal & Staub, 1997). They have typically been viewed as representing different expressions or manifestations of national identification (e.g., Blank & Schmidt, 2003; Mummendey et al. 2001; Schatz & Staub, 1997) as well as identity-related attitudes (e.g., Kosterman & Feshbach, 1989). The corpus of empirical research examining these types of national affiliations have tended to illustrate the factorial uniqueness of each construct as well as demonstrating their predictive validity (e.g., Blank & Schmidt, 2003; Kosterman & Feshbach, 1989; Schatz et al. 1999). Furthermore, nationalism and patriotism are, at most, moderately correlated (circa .30) implying that although distinct they tap into similar identity-related components such as a positive in-group evaluation (which would support the SIT assumption that in-group identification is followed by a positive in-group evaluation and implies that each national identity construction is psychologically meaningful).

In general, nationalism and patriotism may be thought of as reflecting, respectively, detrimental and valuable facets of national attachment. According to Kosterman and Feshbach (1989), nationalism represents the detrimental facet of national identification as it includes the view that one's country is superior to others and should be dominant. Patriotism, however, represents a positive or valuable aspect of national identification because it represents feelings of attachment and love for one's country. The distinction between positive and negative forms of national attachment can be traced to Adorno, Frenkel-Brunswick, Levinson and Sanford (1950). These authors discussed destructive and constructive types of patriotism,

pseudo-patriotism and 'genuine' patriotism respectively. In differentiating them they wrote that the genuine patriot is able to love their country but still "appreciate the values and ways of other nations, and can be permissive toward much he cannot personally accept for himself. He is free of rigid conformism, out-group rejection and imperialistic striving for power" (p 107-108). This is in contrast to the pseudo-patriot who is compelled by such negative behaviour. More recent research has also drawn the distinction between and examined positive and negative forms of national attachment (see Bar-Tal & Staub, 1997). A now popular distinction between detrimental and beneficial forms of national identification is that offered by Schatz and Staub (1997) who differentiate blind and constructive forms of patriotism. Founded upon the work by Adorno et al. (1950), the former is defined as an attachment to a nation with uncritical loyalty and support of any in-group action. The latter represents a critical awareness of and loyalty toward the in-group. Blind patriotism may be viewed as a conceptual synonym for nationalism - Schatz & Staub (1997) found a large positive correlation (.72) between their measure of blind patriotism and a measure of nationalism approximating that developed by Kosterman & Feshbach (1989).

1.4.1 Correlational evidence for the distinction between nationalism and patriotism

Empirical evidence seems to support the general distinction between valuable and detrimental varieties of national identification. In a number of factor analytic studies similar patterns of results have emerged, revealing different clusters of attitudes (or separate factors) that could be readily identifiable as patriotism and nationalism. In general, one cluster of attitudes tended to reveal a positive but critical appreciation of one's country (patriotism) whereas a separate cluster of attitudes tended to reveal a 'my country right or wrong' orientation that also involved some derogation of other nations (nationalism; e.g., Feshbach & Sekano, 1997; Karasawa, 2002; Kosterman & Feshbach, 1989; Schatz & Staub, 1997; Schatz et al. 1999). The distinctiveness and independence of these factors have been further illustrated through analyses of their predictive validity. For example, nationalism but not patriotism has been shown to predict the support for nuclear armament policy (Kosterman & Feshbach, 1989). Similarly, blind (but not constructive) patriotism was positively associated with

perceptions that there was a threat from foreigners. That is, blind patriotism was positively related to concerns that there would be cultural contamination if the home nation adopted foreign cultural practices (i.e., there would be a threat to the homogeneity and distinctiveness of the home nation) and was also related to concerns that the home nation was vulnerable to foreign aggression (Scahtz et al. 1999).

The above correlational studies all imply that nationalism (but not patriotism) may be related to negative attitudes toward out-group members (i.e., foreigners) or minority groups. The link with pro-nuclear armament implies a proclivity toward protection against foreigners and perhaps a readiness to reject out-groups. The link between nationalism and fear of foreign threat also suggests that there may be potential for such 'nationalistic' individuals to denigrate foreigners. These studies, however, do not reveal whether there is a direct link between nationalism and negative out-group evaluations or out-group derogation. Will holding an orientation to viewing the nation as superior (nationalism) actually be directly related to the derogation of foreigners? Might a positive in-group attachment alone (patriotism) lead to negative out-group evaluations? Blank and Schmidt (2003) were among the first to directly answer these questions by distinguishing nationalism and patriotism and examining their relationships with negative attitudes toward foreigners (also see Mummendey et al. 2001). These researchers operationalised nationalism and patriotism by adapting Schatz et al's (1999) measures of blind and constructive patriotism. They also measured the rejection of foreigners generally (e.g., "with jobs getting scarce, the foreigners living in Germany should be sent to their native country") as well as a more specific measure of minority group devaluation (i.e., anti-Semitism; e.g., "Jews have caused a lot of trouble in history"). Participants from an East German and a West German sample completed these measures. Structural equation modelling showed that both samples converged in the pattern of relationships displayed between type of national identity and attitudes toward out-groups. Nationalism (but not patriotism) was strongly positively related to both the rejection of foreigners (standardised structural $r = .98$ for both sample) and to anti-Semitism (standardised structural $r = .68$ (West German sample) and .81 (East German sample)). This research along with the studies presented above provides strong evidence for the existence of different forms of national attachment: one with detrimental consequences of out-group evaluations (nationalism) and one with only

valuable consequences of a positive in-group attachment, devoid of any link to the rejection of foreigners (patriotism).

1.4.2 An alternative view of national identity

It is worth noting that although the distinction between nationalism and patriotism as varieties of national attachment has been met with much acceptance and is gaining in popularity (see Bar-Tal & Staub, 1997; Schmidt & Blank, 2003) there are researchers who stand in strong opposition to this conceptualisation and analysis of national identification (e.g., Billig, 1995; Kelman, 1997; Reicher & Hopkins, 2001). Billig (1995), for example, posits an ideological approach to the analysis of national identification. He submits the concept of 'banal nationalism', which emphasises the subtle ways in which national identity is made accessible in everyday life through symbols, shared customs, habits of language and silent conventions (such as the flag that hangs unnoticed outside a public building). The implication of nationalism as an ideological process is that a particular category of belonging (i.e., the nation) is offered up as the basis for self-definition (Hopkins, 2001). Nationalism is an ideology or an agenda whose content is constructed through a constant backdrop of symbols and social convention in everyday live. It is a mobilising force that may generate both positive identification along with positive or negative attitudes and perceptions of foreigners – depending upon the content of the ideology that is forever in a state of flux. In Billig's (1995) view, nationalism should not be viewed as a pernicious form of national identification and be contrasted from patriotism (a positive form of identification). He argues there is little evidence to support the distinction of different psychological motivations. The reliable relationship that was reported by Kosterman & Feshbach ($r = .28$) between nationalism and patriotism, for example, indicated that both constructs shared an underlying process (perhaps the motivation for a positive in-group evaluation and thus a positive identification) and this may have been responsible for both love of country and perceptions of superiority of others. Furthermore, both scales were shown to correlate with other variables in similar ways: for example, on both scales right-wing political supporters scored more highly than left-wing political supporters.

Although there may be some veracity in the proposition that nationalism and patriotism, defined as detrimental and valuable forms of identification, are not distinctive psychological motivations, we feel that this should not prevent a distinction being drawn between these varieties of national attachment. It is arguably of great importance to examine whether the way in which national identification is constructed affects national attitudes, especially the derogation of foreigners. As we saw above, different varieties of identity construction (which may or may not imply different psychological motivations), including the individual or contextual orientation to define one's group in inter-group or non-inter-group terms, may lead social (national) identification to have differential relationships with in-group bias (Hinkle & Brown, 1990; Mummendey et al. 2001). It may be more prudent to conceive of nationalism and patriotism as differing identity constructions that are based on different types of comparisons. Moreover, measures of nationalism and patriotism have been shown to have predictive validity witnessed through the differing relationships with negative out-group attitudes (e.g., Blank & Schmidt, 2003), consequently implicating the uniqueness of each construct. Perhaps it is the way in which identity is constructed rather than differing psychological motivations that generate these differential patterns of association with out-group attitudes.

1.4.3 Nationalism, patriotism and types of comparisons

Research has suggested that nationalism and patriotism may be characterised by different comparison processes; inter-group and temporal respectively (Blank & Schmidt, 2003) and has even experimentally reduced nationalism and patriotism to these different types of comparison (Mummendey et al. 2001). This latter research was founded upon Hinkle & Brown's model of groups and group contexts and assumed that a positive national identity may be constructed or sustained in a number of ways other than through favourable inter-group comparisons (as implicated in SIT, Tajfel & Turner, 1986). Owing to the nature of the previously observed relationships between these different forms of national attachment and out-group evaluations, that nationalism but not patriotism tends to be positively linked to negative out-group evaluations (e.g., Kosterman & Feshbach, 1989; Schatz et al. 1999), Mummendey et al. (2001) reasoned that Hinkle & Brown's (1999) taxonomy may have import for

differentiating 'nationalistic' and 'patriotic' identification. As we saw above, a relational (i.e., inter-group) versus non-relational (i.e., group) orientation may lead social identity to have different links with in-group bias. The link between identification and in-group bias is likely to be of a greater magnitude following a relational than non-relational orientation (e.g., Aharpour, 1999; Brown et al. 1992). Applying this framework to the field of nationalism and patriotism, Mummendey et al. (2001) suggested that a relational orientation would lead to national identity that corresponded to nationalism (i.e., a positive identification coupled with a derogation of other nations) whereas a non-relational orientation would lead to national identity that corresponded to patriotism (i.e., a positive identity independent of any negative out-group attitudes). The research by Guimond and colleagues (Dambrun & Guimond, 2004; Guimond & Dambrun, 2002; Guimond et al. 2002) also suggests that national attachment in the form of nationalism is likely to be connected to negative out-group attitudes. As we saw above, the mere perception that one's group is in a relatively favourable position to another group (i.e., there is a favourable inter-group comparisons) may result in out-group derogation.

Mummendey et al. (2001) experimentally manipulated nationalism and patriotism. Nationalism corresponded to downward inter-group comparisons (e.g., Britain is better than other countries), whereas patriotism corresponded to downward temporal comparisons (e.g., Britain is better now than 100 years ago). Both orientations, therefore, implied a positive identification with the nation constructed through biased comparison processes (a prerequisite for a positive social identity according to SIT, Tajfel & Turner, 1986). Participants completed measures of identification (emotional attachment to the group), in-group evaluation and xenophobia. Results showed that there were no mean differences in level of identification or in-group evaluation as a function of identity orientation. Importantly, the identity constructed by each frame resulted in an equally positive attachment to the group as well as an equally positive in-group evaluation. Psychologically, each construction of national identity was 'meaningful' for group members. There were no mean differences in the level of out-group derogation; all participants were equally non-prejudiced. The study did reveal, however, that the way in which identification was constructed impacted upon the relationship between these variables. Of particular note, identification was linked to xenophobia following the 'nationalistic'

identification orientation but not following the 'patriotic' identification orientation. In short, although each identity construction maintained a positive in-group attachment, the psychological associations of that group attachment were quite different.

Drawing upon our extension of Hinkle and Brown's (1990) model of groups and group contexts as a model of social identity salience (see above), we suggest that this outcome of differing psychological associations between in-group attachment and xenophobia may be a result of differences in the group context (generated by the comparative orientation) and subsequent social identity that is made salient. We draw a distinction between inter-group and group social identity. The comparisons used in identity construction represent the type of orientation that is prevalent. Nationalism represents an inter-group orientation and patriotism a group orientation. In these contexts (inter-group and group) corresponding identity (inter-group and group) is likely to be made salient. Individuals may be made aware of their group membership and the prescriptive component for group behaviour or identity expression; the group member may view the in-group as better than others (nationalism) or better than the in-group at some other time (patriotism). This approach is largely consistent with that of Mummendey et al's (2001) – the evaluative outcome is a result of the differences in biased comparisons that construct identity. However, we transmute this approach and further contend that differences in category salience (inter-group vs. group) are an epiphenomenon of these comparison processes. They represent qualitatively distinct psychological states that shape individual's subsequent cognitions and behaviours.

In this section we have seen that nationalism and patriotism may be viewed as two different forms of national attachment, detrimental and beneficial respectively. These varieties of national attachment have been shown to be independent (yet moderately correlated; e.g., Kosterman & Feshbach, 1989; Schatz et al. 1999) although there is some debate about whether they represent distinct psychological motivations (e.g., Billig, 1995). Notwithstanding the repeated demonstrations of these construct's predictive validity, for example, nationalism but not patriotism is related to negative out-group attitudes (Blank & Schmidt, 2003), it is argued that nationalism and patriotism may best be viewed as different constructions of national identification (that do not necessarily imply different psychological motivations). Research by Mummendey et al. (2001) suggested that different comparisons, inter-group and group, correspond to 'nationalistic' and 'patriotic' orientations

respectively. These orientations give rise to corresponding identity (inter-group vs. group) that shape cognitions and behaviour. Mummendey et al. (2001) showed that the link between identification and xenophobia was stronger when identification was constructed in terms of nationalism than patriotism.

1.5 Summary

In this chapter we examined whether national identification may or may not be connected to the rejection of foreigners. Research suggests that the way in which national identification is constructed affects how it is related to xenophobia (e.g., Mummendey et al. 2001). Nationalism and patriotism represent two distinct ways in which national identification may be constructed and are characterised by inter-group and group orientations that consequently raise the salience of corresponding social identity (inter-group vs. group respectively; e.g., Hinkle & Brown, 1990; Mummendey et al. 2001). These qualitatively distinct psychological states shape identity-consistent cognitions and behaviours. Because nationalism is constructed in terms of one's nation being superior to and dominant over other nations, and patriotism is constructed in terms of love for and a sense of belonging to one's nation, national identification in terms of nationalism tends to be more strongly related to xenophobia than identification in terms of patriotism (e.g., Blank & Schmidt, 2003; Mummendey et al. 2001).

Chapter 2

National Identity and Implicit In-group Bias

2.0 Introduction

In the last chapter we saw that the way in which social identity was constructed could affect the manner in which identification is related to in-group bias (Mummendey et al. 2001). Specifically, when a positive social identity was based upon favourable inter-group comparisons, conditions that corresponded to nationalism, identification was linked to out-group negativity. However, when identification was based on favourable temporal comparisons, conditions that corresponded to patriotism, identification was not linked to negative out-group evaluations. In this chapter we consider whether such social identity mechanisms can operate to influence implicit in-group bias. Will identification be linked to negative implicit out-group evaluations? Could this 'nationalistic' form of social identity lead to differences in implicit in- and out-group evaluations, relative to a more 'patriotic' form of national identification? To answer these questions we explore the ever-burgeoning research on implicit in-group bias (attitudes and stereotypes).

Firstly, we briefly examine the concept and scope of implicit in-group bias. Subsequently, we examine the many different measures of implicit in-group bias with particular focus on the two most popular measures, sequential priming with the lexical decision task and the implicit association task. Next, we provide an analysis of what we see as the two major questions being explored in implicit in-group bias research – whether implicit in-group bias is stable or malleable, and whether there is a relationship between implicit and explicit measures of in-group bias. For the former question, we will see that although initial research suggested that implicit in-group bias was a stable construct (e.g., Devine, 1989), more recent research has illustrated that the activation of bias is moderated by a number of idiosyncratic (e.g., Lepore & Brown, 1997, 1999) and social context variables (e.g., Pratto & Shih, 2000). In reviewing the relationship between implicit and explicit measures of in-group bias, we will see that although early research explored whether implicit bias was the 'same' or

'different' from explicit bias, recent research has called for the examination of moderators of the relationship (e.g., Fazio & Olson, 2003).

After reviewing this research we will provide a prospective account for the operation of 'nationalistic' and 'patriotic' identity processes at the implicit level. Drawing on the conclusions made from our analysis of the two main research areas in implicit in-group bias, we argue that the manner in which a positive social identity is constructed may moderate the activation of implicit in-group bias. Furthermore, we also posit that the way in which social identification is constructed may moderate the correspondence between implicit and explicit measures of in-group bias.

2.1 Defining implicit in-group bias and its scope

Implicit in-group bias is the term commonly used by researchers as a synonym for automatic in-group bias. In this respect in-group bias is viewed as an automatic process and may be qualitatively distinguished from in-group bias as a controlled process (see Wegner & Bargh, 1998). Over the years researchers have used different criteria to define an automatic process, with the most common being a lack of awareness or attention, a lack of intention, and uncontrollability (see Bargh, 1989, 1994 for reviews). However, as Blair (2002) noted, a careful definition of what implicit in-group bias is, is impractical. Blair maintained that this is because it is uncommon for a psychological process (such as in-group bias) to meet all the criteria of automaticity (i.e., lack of awareness, attention, intention, control; also see Bargh, 1989, 1994). Furthermore, Blair (2002) argued that there appear to be no clear differences in the outcome of implicit in-group bias where the process is based upon different criteria. Whether implicit bias stems from lack of awareness or lack of attention or uncontrollability the outcome does not appear to be qualitatively different. Blair noted, therefore, that a more practical way to define automatic or implicit in-group bias is to adhere to how it has been consensually viewed and operationalised by researchers. In accordance with this perspective, Blair (2002) argued that the operation of implicit in-group bias can be presumed to be unintended by the research participants (i.e., not deliberate). In-group bias is unintended either because participants are unaware of certain critical aspects of the procedure or because they are operating under conditions that make it difficult to deliberately base responses on

specific evaluations or beliefs. This more general definition trades-off conceptual specificity for a more pragmatic approach to analysing implicit in-group bias; in this way the definition encompasses a greater breadth of research and allows a more 'complete' review of the literature.

Reviews of the implicit in-group bias literature have tended to simultaneously discuss the unintended activation of prejudice and stereotyping (e.g., Blair, 2001, 2002; Fazio & Olson, 2003; Macrae & Bodenhausen, 2000, 2001). Even though these constructs are qualitatively different, respectively assessing the evaluation of (attitude) and beliefs about (or attributes of) in- and out-groups, because they operate in the same manner, they are typically discussed together. That is, in studies using diverse paradigms, the presentation of an in- or out-group category label or some other symbolic representation of the category has been shown to facilitate the activation of associated evaluations (e.g., Fazio, Jackson, Dunton & Williams, 1995) or stereotypes (e.g., Lepore & Brown, 1997) in memory. Consistent with previous reviews we too cover literature that examines unintended prejudice as well as unintended stereotyping under the umbrella term of implicit in-group bias.

We also believe that research on unintended in-group bias has resonance with corresponding research that examines more 'intended' in-group biases. As it does in that domain, we feel that (implicit) in-group bias should refer to a tendency to view the in-group in a better light than the out-group (albeit in an unintended fashion). Similarly, this bias may take a variety of forms, including in-group favouritism, out-group derogation or inter-group differentiation (which is an expression of both in-group favouritism and out-group derogation; see Chapter 1, 1.2.1 for discussion of these forms of in-group bias). For example, when examining racial in-group bias, studies have shown that White participants may have strong positive mental associations with Whites (or elements of the White stereotype) and/or strong negative mental associations with Blacks (or elements of the Black stereotype, e.g., Greenwald, McGhee & Schwartz, 1998; Wittenbrink, Judd & Park, 1997), indicating that these measures can capture different forms of in-group bias. Similarly, research has shown that White participants may activate the negative stereotype of the category Black (e.g., Devine, 1989), illustrating a form of out-group negativity.

The majority of research on unintended in-group bias has examined the evaluation and stereotyping of race (Black vs. White; e.g., Devine, 1989; Fazio et al.

1995; Greenwald et al. 1998; Kawakami, Dion & Dovidio, 1998; Lepore & Brown, 1997, 1999; Vanman et al. 1997; Wittenbrink et al. 1997, 2001a, 2001b). Although there has been little research on national biases (but see Neumann & Seibt, 2001, for German vs. Turkish national bias) there has been considerable research examining a variety of other biases, including age (e.g., Karpinsi & Hilton, 2001; Perdue & Gurtman, 1990), gender (e.g., Blair & Banaji, 1996; Blair, Ma & Lenton, 2001; Rudman & Kilianski, 2000), and religion (e.g., Rudman, Greenwald, Mellott & Schwartz, 1999, for Jewish vs. Christian). Moreover, unintended biases have been shown for generic categories (i.e., 'Us' vs. 'Them', Perdue et al. 1990) and for minimal groups (e.g., Ashburn-Nardo, Voils & Monteith, 2001; Otten & Wentura, 1999). In-group positivity and out-group negativity have been displayed for these diverse social (and minimal) groups. Because of this diversity in the display of implicit biases for a variety of social groups we can have some confidence that categorisation by nation will also produce an equivalent range of in-group biases. Given that most research has been conducted on race biases, this review will primarily be based on such sources. However, we propose that the issues raised herein will be applicable to all forms of in-group bias, including national bias.

2.2 Measures of implicit in-group bias

A variety of implicit measures have been developed and used to capture individual differences in unintended in-group biases (see Fazio & Olson, 2003; Maass, Castelli & Arcuri, 2000). The most common of these measures include those that assess language abstraction (e.g., Maass, Salvi, Arcuri & Semin, 1989), the strength of cognitive associations (e.g., Wittenbrink et al. 1997), or more affective physiological responses (e.g., Vanman, Paul, Ito & Miller, 1997). There is not one single measure that taps each of these forms of in-group bias. Instead, there are a number of variants for each type. Nevertheless, although these multiple measures may differ in their procedure and the form of in-group bias they measure, they all share the communality that they provide an estimate of unintended bias. That is, their procedure obviates having to directly ask research participants their beliefs or attitudes about specific in- or out-groups.

There also exist a number of behavioural measures of unintended in-group bias (e.g., Dovidio, Kawakami & Gaertner, 2002). However, these measures may represent the application of in-group bias. The other groups of measures (above) may represent the activation of in-group bias. Research has separated the activation and application of in-group bias factor analytically (Brauer, Wasel & Niedenthal, 2000) and experimentally (Gilbert & Hixon, 1991). Therefore, behavioural measures assess a qualitatively different form of unintended in-group bias than the other types of measure. Here, we are concerned with the activation of unintended in-group bias.

Measures of language bias. These measures are concerned with how in-group members communicate spoken or written language about in- and out-group members. When in-group members use more abstract language (such as adjectives) rather than concrete language (such as action verbs) to describe positive in-group and negative out-group behaviour they display a linguistic inter-group bias (LIB, e.g., Maass et al. 1989; Franco & Maass, 1999; von Hippel, Sekaquaptewa & Vargas, 1997). Language bias may also arise in the form of a stereotype-expectancy bias (SEB, e.g., von Hippel et al. 1997; Sequaptewa, Espinoza, Thompson, Vargas & von Hippel, 2003). This is a measure of the tendency for an in-group member (e.g., a woman) to explain stereotype-inconsistent events (e.g., a male displaying dependency behaviours; a female displaying assertiveness) more than stereotype-consistent events (e.g., an assertive male; a dependent female). Relatively more explanations for inconsistent behaviours serves as an indication of stereotype use on this SEB measure.

Physiological and neurological measures. Perhaps the most unintended (non-deliberate) form of in-group bias is that captured by physiological and neurological measures. For example, Vanman et al. (1997) used facial electromyography (EMG) to measure race bias. They measured muscle activity for the corrugator supercilii and zygomaticus major muscle groups located in the brow and cheek regions respectively. Activity in the brow represents negative affect whereas activity in the cheek represents positive affect. They found that White participants displayed greater facial muscle activity around the zygomaticus major muscle group, denoting negative affect, when they had to imagine interacting with a Black out-group member than with a White in-group member. This work stems from the research of Cacioppo and colleagues (e.g., Cacioppo, Crites, Bernston & Coles, 1993; Ito & Cacioppo, 1999, 2000) and is predicated on the assumption that for evolutionary purposes the affective

system has become hard-wired over time to form a stimulus-response processor that enables effective ('good' or 'bad'), implicit evaluation of social stimuli and prepares an individual for immediate action. Recent research has also examined in-group bias using more neurological measures (e.g., Cunningham, Johnson, Gatenby, Gore & Banaji, 2003; Phelps et al. 2000). Phelps et al. (2000), for example, examined the evaluation of racial categories through amygdala activation to Black faces relative to White faces, using functional magnetic resonance imaging (fMRI). The amygdala is thought to be involved in the associative learning of rewards and punishments as well as the more abstract concepts of fear and threat. These higher order concepts imply that the amygdala is involved in the implicit process of evaluation. Greater amygdala activation, therefore, suggests that Black faces are implicitly perceived as more threatening than White faces (or are perceived as more negative than White faces).

Although methodologically these types of measure supposedly have an advantage over their implicit measure counterparts in that they provide a less obtrusive estimate of inter-group evaluations (i.e., they are 'more' implicit), practically they may not be the best choice of measure. They do not tell us anything different, or allow us to capture evaluations that other implicit measures cannot tap. For example, the observed positive correlation between amygdala activation and a cognitive association measure (the implicit association test; $r = .58$; Phelps et al. 2000) supports this argument. Physiological and neurological measures are less economical and pragmatic in terms of implementation and use than cognitive measures, for example. It may be more beneficial to trade off this high-level of participant unawareness for easy-to-use measures, such as associative measures (see below) that are still relatively unobtrusive.

Measures of cognitive associations. Undoubtedly, these measures of in-group bias are the most preferred and commonly used by researchers. Within this category, the implicit association test (IAT, Greenwald, McGhee & Schwartz, 1998) and sequential priming procedures (e.g., evaluation task, Fazio, Sanbonmatsu, Powell & Kardes, 1986; lexical decision task, LDT, Wittenbrink et al. 1997), are probably the most well known measures.

The IAT. The IAT measures the strength of mental association between a target concept and a particular attribute dimension (cf. Rothermund & Wentura, 2004). Participants have to discriminate between items belonging to both the target

concept and attribute dimensions by assigning these items to two response keys. For example, in the Greenwald et al. (1998) IAT, concerning race bias, participants were asked to assign typical Black names to one key (e.g., 'A') and typical White names to another key ('5'). This task made participants discriminate the target concept of race (Black vs. White). Participants were also asked to simultaneously assign negative words to one key (e.g., 'A') and positive words on another key (e.g., '5'). Here, participants discriminated on the attribute dimension. So, for this task, Black/negative shared a response key and White/positive shared a response key. Participants completed this critical task twice, once in this manner and once with the response keys for the target concept switched (White/negative shared one response key & Black/positive shared the other response key). The question concerns which mapping participants find easier to use. This is gauged through participant's response latencies. Compatible target and attribute dimensions should be responded to more quickly than non-compatible target and attribute dimensions. The assumption here is that compatible target-attribute pairings should be more strongly associated in the mind than non-compatible target and attribute pairings and thus when the category is activated more strongly linked attributes should be more accessible and should facilitate response speed in categorisation. In the Greenwald et al. (1998) experiment, participants were faster at responding when Black was paired with unpleasant and White with pleasant than when Black was paired with pleasant and White unpleasant.

The measure of in-group bias the IAT provides, however, is unclear. Bias on this measure is a consequence of a contrast between two groups. It is not clear, for example, whether participants find it easier to match in-group and positive attributes, out-group and negative attributes or whether it is easy to match both. This difficulty has been obviated by a variant of the IAT, the go/no-go association task (GNAT, Nosek & Banaji, 2001). The GNAT rests on the same logic of the IAT, that participants should find it easier (i.e., should be quicker/should make less errors) when responding to mentally associated than non-associated concept-attribute pairings. The GNAT, however, separates the response tasks so participants only ever respond to one target (e.g., White) and attribute dimension (e.g., good) at any time (they ignore other stimuli). Response latencies (or errors) on this block are compared to those when the participant must respond to the same target and the alternate

attribute dimension (e.g., bad). This is also the case for the other target (e.g., Black). The GNAT, therefore, is clear on where the locus of in-group bias lays.

Additionally, there exists some debate as to whether the IAT can be considered a measure of in-group bias. It has been criticised for being a theoretically obscure measure that possibly has nothing to do with mental associations. This criticism is derived from research into the cognitive processes that may be responsible for the IAT effect (e.g., Brendl, Markman & Messner, 2001; De Houwer, 2001; McFarland & Crouch, 2002; Mierke & Klauer, 2001, 2003; Rothermund & Wentura, 2001, 2004). In essence, researchers assume that there might be a variety of cognitive confounds with the IAT categorisation task that can also account for the IAT effect. For example, compatible target and attribute pairings (e.g., Black/negative and White/positive) may incidentally represent more salient categories than non-compatible target and attribute pairings (Rothermund & Wentura, 2004). Participants should find it easier to respond when both salient categories are mapped onto one response key and non-salient categories are mapped onto the other response key (which is the case in the compatible block of the IAT). Matching category salience assists in the categorisation of target and attribute stimuli. It simplifies the cognitive task. Some individuals might find it easier than others to 'tune into' the salience asymmetries of the target and attribute dimensions and thus develop a new response strategy. Individuals who have this ability will be likely to have shorter response latencies in the compatible task-set and may be biased to higher in-group bias scores.

Although such studies implicate the lack of internal validity of the IAT, some research exists that supports the general construct validity of the IAT. Research has demonstrated its convergent (e.g., Cunningham et al. 2001; Olson & Fazio, 2003), predictive (e.g., McConnell & Liebold, 2001) and discriminant validity (e.g., Gawronski, 2002; also see Fazio & Olson, 2003; Greenwald & Nosek, 2001, for reviews; see Chapter 6, section 6.02, for greater discussion on the validity of the IAT as a measure of in-group bias).

Sequential priming. This general paradigm also provides a measure of the strength of association between a target concept and associated attributes. For example, researchers may measure the association between the categories White and Black and the evaluation and/or stereotypic traits of those categories. In sequential priming, researchers briefly present category label primes (e.g., BLACK and WHITE)

or pictures of individual exemplars of a category prior to presentation of the attributes of interest (positive or negative words or stereotypic traits). Researchers measure reaction times to these attributes on a particular judgement task (e.g., participants must discriminate between words or non-words, or discriminate between positive and negative words), with shorter latencies indicating a stronger association between a concept and attribute. The logic of this paradigm is that when information is associated in memory (e.g., Black and a negative evaluation) presentation of the prime (e.g., BLACK) should facilitate reaction time responses to associated attribute stimuli (e.g., 'Horrible'). This idea stems from associative network theory (see Carlston & Smith, 1996) and classic research on the automatic activation of associated concepts (e.g., Neely, 1977; Shiffrin & Scheider, 1977).

The concept primes in the sequential priming paradigm are presented either subliminally (outside of awareness) or supraliminally (within awareness). The visual threshold at which the primes are presented does not appear to be of central concern, although supraliminal presentation usually results in greater effect sizes (Bargh & Chartrand, 2000). What is important, however, is that when using supraliminal priming, the time interval between presentation of the prime and presentation of the attribute stimuli (the stimulus onset asynchrony, SOA) must be at such a short interval that deliberative responses cannot be used. It is conventional to use an SOA of approximately 300 ms (Bargh & Chartrand, 2000).

Probably the most versatile of these sequential priming measures is one using the LDT, which enables the researcher to tap into a variety of facets of in-group bias and determines the locus of in-group bias (but also see Dovidio, Kawakami, Johnson, Johnson & Howard's (1997) adjective categorisation task; Fazio et al's (1995) evaluation task, Kawakami, Dion & Dovidio's (1998) pronunciation task, and Locke, MacLeod & Walker's (1994) stroop task, for additional variants of the sequential priming paradigm). Wittenbrink et al. (1997), for example, used the LDT to measure race bias. Participants were subliminally presented with the category labels 'WHITE' and 'BLACK' (amongst other primes) and asked to decide as quickly as possible, by pressing the appropriate response key, whether subsequently presented letter-strings constituted words or non-words. The letter strings that were 'words' comprised positive and negative stereotypic traits associated with the category labels. Wittenbrink et al. (1997) were able to construct a number of in-group bias indices that

measured different facets of the associations between in- and out-group and positive and negative stereotypic associations. For example, they could index out-group derogation. To the extent that participants displayed shorter response latencies for negative relative to positive Black stereotypic traits following the BLACK prime illustrated greater out-group derogation. Indices of in-group favouritism as well as 'stereotypic prejudice' and 'generalised prejudice' (the latter two indices capture simultaneous in-group and out-group evaluation, see Wittenbrink et al. 1997, 2001a) could also be computed.

The popularity of these associative measures over other types of implicit measures implicates their effectiveness at capturing the construct of interest (i.e., in-group bias). Despite the criticism raised above about the validity of the IAT, this category of implicit measures are generally well understood (see Fazio, 2001; Fazio & Olson, 2003) and there appears to be much consensus that they are indeed capturing differences in the strength of mental association between a category and its evaluation and/or stereotype (see Fazio & Olson, 2003).

2.3 Predominant research questions

There have been two primary research agendas in the examination of implicit in-group bias. Researchers have been testing the early assumption that in-group bias is an unavoidable and unbending product of category registration (e.g., Allport, 1954; Devine, 1989). Here, researchers have been motivated to consider whether in-group bias is inevitable (see the special attitudes and social cognition section of Journal of Personality and Social Psychology, 2001). Through the use of implicit measures of in-group bias to test these ideas a secondary strain of research has emerged. Here, researchers have sought to understand the 'nature' of implicit measures of in-group bias. That is, research has considered whether implicit measures are assessing the same 'type' of in-group bias that explicit measures capture. In this regard, much research has examined whether there is a relationship between implicit and explicit measures of in-group bias (see Blair, 2001; Brauer et al. 2000; Fazio & Olson, 2003). In this section, we review these predominant areas of research.

2.3.1 Is implicit in-group bias inevitable?

Since the development of measures of implicit in-group bias, researchers have sought to identify whether categorical representations lead to the activation of memory contents associated with that category (see Blair 2002; Macrae & Bodenhausen, 2000, 2001, for reviews). In one of the first demonstration of implicit in-group bias, Gaertner and McLaughlin (1983) showed, on a LDT, that participants were reliably faster to identify positive stereotypic traits (e.g., 'smart') when they accompanied in-group category labels (WHITE) than when they accompanied out-group category labels (BLACK or NEGROES). A later study by Dovidio Evans and Tyler (1986), however, found that the category primes BLACK and WHITE facilitated response latencies to stereotypic traits associated with that social group (e.g., Black-musical, Black-lazy; White-ambitious, White-stubborn). Furthermore, Dovido et al. showed that presentation of the category WHITE led to faster reaction times to positive than negative traits, indicative of in-group favouritism. The category prime BLACK, however, led to facilitation of negative relative to positive traits, also indicating implicit out-group derogation (cf. Perdue et al. 1990). A few years later, Devine (1989) demonstrated that even category representations presented subliminally could lead to the activation of stereotypes. Furthermore, an ever-burgeoning literature has shown repeated demonstrations that in-group members have implicit positive associations with in-groups and/or negative associations with out-groups (see Blair, 2002; Fazio & Olson, 2003, for reviews).

The apparent prevalence of the mental associations between categories and attitudes and/or stereotypic traits at the implicit level, especially demonstrations that the social perceiver need not be aware of the presence of the out-group member to activate these associations (Devine, 1989), has led some researchers to speculate that implicit biases are inevitable and their influence nearly impossible to avoid (e.g., Bargh, 1999; Devine, 1989). As noted by Fiske (1998), "According to current wisdom, automatic categorization and associations to categories are the major culprits in the endurance of bias" (p. 363). A major reason why implicit biases are assumed to occur so readily is the assumption that implicit processes are unaffected by

perceiver's intentions and goals; "An automatic mental phenomenon occurs reflexively whenever certain triggering conditions are in place... It does not matter where the current focus of conscious attention is, what the individual was recently thinking, or what the individual's current intentions or goals are" (Bargh, 1997, p. 3).

The inevitability of bias argument, however, predates demonstrations of the implicit activation of category associations following a category indicator. Suggestions that the activation of mental associations would be an inevitable consequence of category registration can be traced to the seminal writing of Allport (1954). As Allport (1954) posited, "[t]he human mind must think with the aid of categories... We cannot possibly avoid this process. Orderly living depends on it... Every event has certain marks that serve as a cue to bring the category of prejudgment into action... A person with dark brown skin will activate whatever concept of Negro is dominant in our mind" (p. 20-21). This message states that (to simplify the demands of social life) individuals rely on categorisation between in- and out-group and that mere exposure to an out-group category member (e.g., Black) is sufficient to activate the mental associations, be they attitudes or stereotypic attributes, of that particular category. The inevitable activation of category associations has consequently been echoed in other models of person judgement (e.g., Brewer, 1988; Devine, 1989; Fiske & Neuberg, 1990).

Backed by early theorising (Allport, 1954) and empirical demonstrations of implicit in-group biases (e.g., Dovidio et al. 1986), the inevitability of implicit in-group bias argument appeared quite tenable. Empirical research by Devine (1989) was particularly influential in propagating this assumption. Devine proposed a model that dissociated automatic and controlled processes involved in bias. She argued that through socialisation processes, all group members come to learn the cultural stereotypes of out-groups. Such stereotypes are well-learned associations. Because of this, she argued, that on the mere presence of a member (or symbolic equivalent) of an out-group, stereotypic associations would be automatically activated. Furthermore, Devine argued that irrespective of their level of prejudice endorsement individuals would automatically activate group stereotypes (the proposition of no individual differences in implicit stereotype activation further reinforces the inevitability of in-group bias argument). Individuals high and low in prejudice beliefs are expected to differ, however, when asked to explicitly express their personal

beliefs about an out-group – when controlled processes are operable. Those low in prejudice would be expected to express more egalitarian and less stereotypical views than those high in prejudice.

Devine (1989) found support for her model across three studies examining White's stereotypical knowledge of Blacks. The second study is of primary importance to the inevitability argument. Here, Devine demonstrated that all individuals automatically activated the stereotype 'hostile'; a trait associated with the category Blacks. In this study she subliminally presented category (e.g., Blacks) and stereotype (e.g., lazy) primes to participants (but never the stereotype of 'hostile'). Half the participants were subliminally presented with a list of words that contained 80% of stereotype and category primes related to Blacks. Half of the participants saw a list of words that contained only 20% of stereotype and category primes. Participants were presented these words during what was ostensibly a 'vigilance task', where they had to indicate which side of the screen (left or right) a briefly presented stimulus appeared (this stimulus was the mask for the parafoveal subliminal prime; see Bargh & Chartrand (2000) for discussion of this priming technique). Following this, participants completed an ostensibly unrelated task concerned with impression formation. Participants read about a race-unspecified individual (Donald) that engaged in ambiguously hostile behaviours (Srull & Wyer, 1979) and then judged how hostile the character was. Individual's who had received 80% of the priming stimuli rated the character as more hostile than those who had received only 20% of the priming stimuli. However, in both of the priming conditions there was no difference in the hostility ratings of those high and low in prejudice. Both groups had automatically activated the hostility stereotype.

2.3.2 The malleability of in-group bias

Devine's (1989) research encouraged a myriad of researchers to explore the inevitability of implicit in-group bias (see Blair, 2002; Macrae & Bodenhausen, 2000, 2001). Contemporary wisdom now heralds that unintended stereotyping and attitudes are not an inevitable consequence of category activation (cf. Bargh, 1999). Instead, unintended in-group biases are affected by idiosyncratic factors, such as individual's motivations to hold a positive self-image (e.g., Spencer, Fein, Wolfe, Fong & Dunn,

1998), and social contextual factors in which the group judgements task place (e.g., Wittenbrink et al. 2001b; see Blair (2002) for a detailed review).

2.3.2.1 Idiosyncratic factors.

Self-image motives. One such idiosyncratic factor that has been shown to affect implicit in-group bias is the individual's motivation to hold a positive self-image (e.g., Spencer et al. 1998). The research by Spencer et al. is predicated on the assumption that a threat to a positive self-image can motivate individuals to invoke negative stereotypes of others as a means to feeling better about ones self. Spencer et al. demonstrated that this process occurred at the automatic level. Specifically, non-Black participants were given either positive or negative feedback on an intelligence task, with negative feedback assumed to provoke a threat to a positive self-image (Study 3). Following the feedback, implicit stereotyping of Blacks was assessed with a word-fragment task, completed under cognitive load (a cognitive constraint in which only automatic processes are expected to operate; cf. Gilbert & Hixon, 1991). Participants were briefly presented with African American or European American male faces prior to the critical word fragments for completion. Implicit stereotyping is evidenced on the word fragment completion task if participants complete word strings (e.g., DU__) with stereotypic (e.g., DUMB) rather than non-stereotypic (e.g., DUCK) words associated with the category of interest (e.g., Blacks). Spencer et al. found no evidence for automatic stereotypes among participants who received positive feedback. Those who received negative feedback, however, exhibited more stereotypic word fragment completions following an African American Prime than a European American prime.

Focus of attention. The type of attention an individual pays to another person has also been shown to moderate unintended in-group bias. Macrae, Bodenhausen, Milne, Thorn & Castelli (1997, Study 2), for example, investigated attentional focus in a sequential priming task, in which primes were pictures of women or inanimate objects, and the targets were stereotypical and non-stereotypical traits associated with women. In one condition female participant's focus was drawn to the features of the photographed women by asking them to decide whether the primes were animate or inanimate objects. In another condition, female participants had to merely decide

whether a white dot was present (or not) in the pictures, and thus participant's focus was not on the features of women. Macrae et al. demonstrated that in the former condition pictures of women facilitated responses to the stereotypic (versus non-stereotypic) traits; automatic stereotyping did not occur when participants had to detect a white dot (also see Gilbert & Hixon, 1991; Macre, Bedenhausen, Milne & Calvini, 1999, for other examples of how focus of attention moderates unintended bias)

Level of prejudice. Research by Lepore and Brown (1997) demonstrated that in-group bias following category activation was not inevitable but was dependent upon individual's level of prejudice (also see Lepore & Brown, 1999; Locke, MacLeod & Walker, 1994; Wittenbrink et al. 1997). Lepore and Brown criticised the priming methodology used by Devine (1989). In her study, Devine primed both the category and the stereotype and so it was unclear whether individuals automatically activated the stereotype 'hostility' following a category member (or symbolic equivalent). Lepore & Brown (1997) separated stereotype and category priming and showed that there were no differences between high and low prejudice individuals in the their ratings of a race-unspecified target when the stereotype was primed. This may have been because the negative stereotypic knowledge was semantically associated to other negative traits of the stereotype (not directly primed) and was activated by all individuals, irrespective of their prejudice level. Following category activation, however, individual's high in prejudice rated the target more negatively and less positively than those low in prejudice. Because those high and low in prejudice are likely to differ in the acceptance of positive and negative information over repeated exposure to an out-group, the strength and pattern of mental associations should (and apparently do) differ.

2.3.2.2 Effects of context

The social context defining the inter-group situation has also been shown to affect the activation of implicit in-group biases (see Blair, 2002; Fazio & Olson, 2003). Most of this research has demonstrated that different kinds of situational information given to participants prior to implicit measure exposure has affected the meaning of category labels and the consequent unintended evaluation or stereotyping of those

categories (e.g., Mitchell et al. 2003; Pratto & Shih, 2000; Richeson & Nussbaum, 2004; Wittenbrink et al. 2001b).

For example, Wittenbrink et al. (2001b, Study 1) illustrated that evaluation of Blacks was affected by the valence and stereotypicality of the situational context in which members of that category were encountered. In their study, half of the participants saw a short movie clip that depicted Black targets in a positive stereotypic setting, at a family barbecue, whereas the remaining participants saw Black targets in a negative stereotypic setting, a gang-related incident. Following this exposure, participants completed the IAT. Participants in the positive stereotypic condition produced a significantly larger decrease in their IAT effect (i.e., did not have as strong associations with Black/negative and White/positive), from a baseline IAT completed prior to the experimental manipulation, than participants in the negative stereotypic condition.

In a second study, Wittenbrink et al. (2001b) illustrated clearer in-group bias effects as a function of the stereotypic valence of the social context. Using a sequential priming task, participants were exposed to Black and White face primes that appeared in both a negative stereotypic (i.e., on an urban graffiti-covered street corner) and positive stereotypic context (in a church). Participants had to judge whether subsequently presented stereotypic and non-stereotypic traits of Blacks and Whites were positive or negative words. Results showed that in the negative condition (the urban street scene) Black faces facilitated responses to negative relative to positive traits (indicating the conventionally found out-group negativity effect). In the positive condition (i.e., the church scene), however, the same faces yielded generally stronger facilitation for positive relative to negative traits (indicative of out-group positivity). Additional research by Rudman & Lee (2002, Study 1) showed similar context effects. When primed with violent and misogynous rap music, participants exhibited stronger associations between Black and negative stereotypic traits than participants primed with popular music.

Other situational elements that participants have been exposed to, prior to completion of implicit measures, have also affected their unintended responses. Dasgupta and Greenwald (2001), for example, showed that non-Black participants exposed to admired Black and disliked White exemplars had weaker associations between Black/negative and White/positive, on an IAT, than participants exposed to

admired White and disliked Black or non-racial exemplars. Additionally, research by Mitchell et al. (2003, Study1) examined rapid changes in unintended evaluation depending on which social categorisation perceivers were made aware of. Specifically, participants completed two IATs with the same stimuli appearing in both: names of well-liked Black athletes and disliked White politicians and pleasant and unpleasant words. In one of the tests participants had to categorise names by race (Black vs. White) and in the other test they categorised names by occupation (athlete vs. politician). Results showed that when race was salient, the Black athletes were automatically evaluated more negatively than the White politicians. When occupation was salient, however, Black athletes were rated more positively than White politicians.

Research has also shown that the salience of particular inter-group contexts moderate unintended in-group biases. Richeson and Nussbaum (2004), for example, examined White's unintended racial attitudes following exposure to a colour-blind ideology (ignorance of racial differences) or a multicultural ideology (celebration of racial differences) of inter-group relations. Participants who were exposed to a colour-blind ideology exhibited stronger pro-White/anti-Black associations, on an IAT, than participants exposed to a multicultural ideology. Moreover, Pratto and Shih (2000) highlighted that a salient inter-group context that threatened in-group identity led to unintended out-group negativity. They demonstrated this across two studies. In their first study there was no reference to the inter-group context. Here, on a sequential priming task, participants identified positive words quicker than negative words following the in-group prime 'Our' but did not differ in their response latencies for positive and negative words following the out-group prime 'Them'. Participants demonstrated an in-group positivity effect. In a second study, Pratto and Shih threatened the in-group identity of Stanford university students by having them evaluate an essay that symbolically attacked the students along dimensions that legitimised their high-status and on which they defined their group identity (e.g., the essay argued that Stanford students were not as hardworking or smart as they were reputed to be). When this inter-group context was salient, participants exhibited the in-group positivity effect seen in Study 1 but also displayed out-group negativity, evidenced by shorter response times in identifying negative versus positive words following the out-group prime 'Them' (Pratto & Shih found that this effect was

moderated by participants social dominance orientation – their habitual orientation to support group hierarchy – those high in SDO alone showed this pattern of inter-group bias).

These studies all provide compelling evidence that the context in which the out-group is seen in can affect participant's unintended evaluations and stereotyping of that out-group. By simply viewing positive exemplars of an out-group or seeing them in a positive stereotypic environment can produce more positive implicit out-group judgements. Similarly, the salience of particular inter-group contexts can readily affect the mental associations between in-group, out-group and their evaluation and stereotypes. Such research leaves little doubt about the malleability of in-group bias and provides a strong counter-claim against the inevitability of bias thesis (Allport, 1954; Bargh, 1999; Devine, 1989).

2.3.2.3 Implications for our understanding of implicit in-group bias

Demonstrations of the malleability of implicit in-group bias hold some theoretical implications. Of particular note is what such evidence implies for our understanding of how implicit in-group bias arises. Early research suggested that is was well-learned mental associations (through repeated exposure to cultural attitudes or stereotypes) between a social category and its evaluation and/or stereotype that became internalised and activated on the mere presence of a category member or symbolic equivalent (e.g., Bargh, 1989, 1994, 1997; Devine, 1989). Recent research does not support this view. Instead, an interesting view about how implicit bias arises has been advanced (Mitchell et al. 2003). This view suggests that implicit in-group bias may be temporarily defined or constructed anew within the context that is established by the social situation. That is, unintended in-group bias can be thought of as an on-line construction rather than a stable mental representation. Although this temporary construction may have a stable component that gives the attitude (or stereotype) some coherence from situation to situation, it also reflects the unique attributes of the social situation, including social and motivational factors. According to this perspective, bias is flexible and sensitive to the immediate context (see Blair (2002) for more extensive discussion). From this view, implicit measures appear to be as context dependent as explicit measures (see Schwartz & Bohner, 2001).

Implicit inter-group evaluations arise as part of the situational context and incorporate information present in the environment. For example, when implicit in-group bias toward African Americans is assessed following participant's exposure to a stereotypically positive context, the participant's expressed in-group bias may incorporate some of the positivity associated with that group context (Mitchell et al. 2003). In social cognitive terms, we speculate that the situation affects individual's perceptions of the social categories through making relatively accessible valence-consistent evaluations. Positive or negative connections are likely to be strengthened through the positive or negative information contained within the situational context.

2.3.2.4 Summary of the malleability of in-group bias

The research presented above provided compelling evidence to counter the claim that in-group bias is inevitable (e.g., Allport, 1954; Devine, 1989). Instead, implicit bias was sensitive to a wide range of idiosyncratic and social context effects (see Blair, 2002). From this it has been suggested that implicit bias may be constructed on-line and not retrieved (Mitchell et al. 2003). This conclusion would imply that the degree and valence of implicit in-group bias is likely to be affected by a multitude of social contexts.

2.3.3 Is there correspondence between implicit and explicit measures?

With demonstrations of the prevalence of unintended biases, researchers have often measured respondent's attitudes or beliefs using explicit as well as implicit measures in their research designs. The rationale behind the use of these more direct measures is to provide a comparison standard for the newer implicit measures. That is, researchers have sought to validate the meaning of implicit measures by comparing them with more established and understood measurement techniques. In measurement terms, researchers have examined the convergent validity of unintended bias with explicit bias. In general, an implicit measure such as the IAT or LDT has been correlated with one or a number of explicit measures. The most common explicit measures used have been semantic differential scales, feeling thermometers or stereotype and attitude endorsement scales such as the Modern Racism Scale

(McConahay, Hardee & Batts, 1981) and the Subtle and Blatant Prejudice Scales (Pettigrew & Meertens, 1995). Although there is some variability in these type of explicit measures used (as there is with implicit measures), they are all reactive measures that are open to deliberative responses. Furthermore, respondents are aware that they are being asked for their attitudes or beliefs about specific target out-groups.

The consequent research has endeavoured to assess whether there exists implicit and explicit correspondence (IEC) and has considered whether implicit stereotypes or attitudes are the 'same' or 'different' from explicit stereotypes or attitudes (see Brauer et al. 2000). The degree of IEC indicates the 'uniqueness' or 'sameness' of the bias being measured (Blair, 2001). If correspondence is good, implicit in-group bias ought to have the same general psychological properties as explicit in-group bias; if correspondence is moderate, implicit bias probably shares some of the same psychological properties with explicit bias but also has some unique properties; and if the correspondence is poor, implicit in-group bias is probably a different phenomenon.

There is much variability in IEC. In general, correlations between implicit and explicit measures of in-group bias range from small effect sizes such as .03 (Dovidio, Kawakami, Johnson, Johnson & Howard, 1997, Study 3) to relatively large effect sizes such as .55 (Sensening, Jones & Varney, 1973). Most correlations, however, tend to reside around the .20 mark (e.g., Dasgupta & Greenwald, 2001; Wittenbrink et al. 2001a; Study 1a), indicating small effects and implicating the 'uniqueness' of implicit and explicit in-group bias (as these relationships tend not to be statistically reliable, See Chapter 7, Table 7.1, for evidence of this). Additionally, research on racial bias supports the view that implicit and explicit attitudes are 'different' constructs in reporting IEC approximating zero (e.g., Devine, 1989; Dovidio et al. 1997, 2002; Gaertner & McLaughlin, 1983; Greenwald et al. 1998). Furthermore, a selective meta-analytic review of White's racial attitudes towards Blacks indicated that the average IEC of 27 hypothesis tests was only .25 (a less than moderate effect size; Dovidio, Kawakami & Beach, 2001). Nevertheless, the variability in IEC would suggest that in some cases implicit and explicit measures are tapping into the same construct. Evidence that implicit and explicit measures tap the same construct comes from a number of studies that have found at least moderate IEC (e.g., McConnell & Liebold, 2001; Neumann & Seibt, 2001; Wittenbrink et al. 1997).

These studies (most of which were not included in the aforementioned meta-analysis) found IEC of approximately .40. The variability in IEC suggests that there may be certain moderators. The type of implicit measure used also appears to affect IEC; physiological measures result in greater IEC ($\bar{Z}_{FISHER}$ = .388) than priming measures ($\bar{Z}_{FISHER}$ = .156; Dovidio et al. 2001). Researchers have acknowledged the diversity of effect sizes and have suggested that future research focus on identifying moderators of IEC (Blair, 2001; Fazio & Olson, 2003; see below for more discussion on this).

2.3.3.1 Theoretical accounts of IEC

There are two views discussed in the social cognition literature to explain the relationship between implicit and explicit measures of in-group bias (see Brauer et al. 2000; Nosek & Banaji, 2002). One, the independent constructs approach, considers implicit and explicit attitudes to be distinct constructs (Devine, 1989, Dovidio et al. 1997; Greenwald & Banaji, 1995; Wilson, Lindsey & Schooler, 2000). This view postulates the operation of separate mental processes and emphasises the unique contribution of implicit and explicit modes of evaluation. This view speculates that implicit and explicit attitudes develop and are expressed by different aspects of the cognitive system. For example, as we saw above, Devine's (1989) model proposed that implicit bias corresponds to well-learned negative cultural associations that are internalised and triggered on the presence of a category member, whereas explicit bias corresponds to later-learned personal beliefs that are at odds with cultural associations. These personal beliefs may be elaborated and intentionally accessed. Similarly, Wilson et al. (2000) proposed that individuals hold dual attitudes of an attitude object, an early-learned, often negative, implicit attitude and a later-learned, often positive, explicit attitude. The attitude that an individual endorses depends on whether they have the cognitive capacity to retrieve the explicit attitude and whether this overrides their implicit attitude. Largely because of the operation of different mental processes, this approach implies that there should be little correspondence between implicit and explicit measures of in-group bias.

The dissociation of implicit and explicit responses is consistent with contemporary analyses of the current nature of racial bias such as 'modern racism'

(McConahay, 1986), 'subtle racism' (Pettigrew & Meertens, 1995) and 'aversive racism' (Gaertner & Dovidio, 1986). These frameworks suggest that whereas traditional forms of bias are direct and overt, contemporary forms are indirect and subtle (see Devine, Plant & Blair, 2001 for a review). Aversive racism (Dovidio & Gaertner, 1986), for example, postulates that Whites endorse egalitarian principles and view themselves as non-biased but nevertheless harbour negative feelings and beliefs about Blacks. These negative beliefs may be based on unavoidable cognitive, motivational and socio-cultural processes. These negative beliefs may represent implicit attitudes and the self-reported deliberative responses may represent explicit attitudes (Dovidio et al. 1997).

The second perspective, the single construct approach, proposes that there is only one form of attitude. It is assumed here that what has become implicit is the attitude that was initially consciously, and perhaps intentionally, learned. In other words, implicit measures tap the internalisation of the attitude tapped by explicit measures (Brauer et al. 2000). Fazio and his colleagues (Fazio et al. 1995; Fazio & Olson, 2003) have provided a complimentary view and have suggested that the implicit-explicit distinction refers to the method of measurement rather than to the existence of dissociable constructs. Here, then, the production of an attitude is proposed to follow a single processing stream and implicit measures tap evaluations before intentional control processes can be initiated. Explicit measures tap the outcome of the intentional evaluation process. According to this approach there should be a relationship between implicit and explicit measures unless explicit responses are intentionally altered through deliberative processes (e.g., self-presentation).

As we saw above there are a number of studies that have found relatively large IEC effects and a number of studies that have found IEC approximating zero. These results provide respective support for the one construct and independent constructs approaches to viewing IEC. However, mixed support for both approaches comes from results of a sophisticated analysis of the structure of implicit and explicit bias, conducted by Cunningham, Preacher and Banaji (2001). Cunningham et al. asked participants to complete three implicit measures (the IAT, response window version of the IAT and a response window sequential priming task) and an explicit measure (Modern Racism Scale) of racial bias on four separate occasions. Using

latent variables in confirmatory factor analysis, these authors showed that the latent variables of implicit and explicit bias were related (.45). Nevertheless, the latent implicit and explicit bias constructs remained distinct factors. These results indicate that implicit and explicit measures are not interchangeable but have unique components. Implicit and explicit bias, therefore, is likely to share some of the same psychological properties but also retain unique properties.

2.3.3.2 Predictive validity of implicit and explicit measures

Related to the discussion of whether implicit and explicit measures are the 'same' or 'different', a number of researchers have examined whether implicit and explicit measures predict different forms of behaviour (e.g., Dovidio et al. 1997; Fazio et al. 1995; McConnell & Leibold, 2001; see Fazio & Olson (2003) for a review). In principal, a divergence between implicit and explicit measures in their relationships with different behavioural measures would offer support that these constructs are 'unique'. Existing evidence supports this view. Fazio et al. (1995), for example, showed that implicit race bias (sequential priming paradigm) but not explicit race bias (Modern Racism Scale) was positively related to the (un)friendliness displayed toward a Black experimenter by White participants. In addition, the implicit (but not explicit) measure was positively correlated with participants' judgements of the extent to which Blacks versus Whites were deemed responsible for the escalation in tension and riots that ensued following the not guilty verdict at the Rodney King trial. The explicit measure alone, however, was positively related to White's (un)attractiveness ratings of portraits of Blacks relative to Whites. Similarly, Dovidio and his colleagues (Dovidio et al. 1997, 2002) showed that Whites' implicit and explicit measures of race bias predicted bias in verbal and nonverbal behaviour during interaction with a Black partner. Specifically, Whites' self-reported racial attitudes significantly predicted bias in verbal friendliness toward Blacks whereas Whites' implicit attitudes predicted bias in non-verbal friendliness (e.g., more frequent eye-blink, less eye contact) towards Blacks.

Across these demonstrations of predictive validity the correlation between implicit and explicit measures was essentially zero. Recent research by McConnell and Leibold (2001), however, has shown that even though implicit and explicit

measures may diverge in their associations with behavioural measures (and appear to be distinct) they may still be related. In their study, after a brief interaction with a White experimenter, participants completed a set of questionnaires that included various explicit measures of prejudice, followed by a race bias IAT. Participants then interacted with a Black experimenter. The most interesting results showed that the implicit (but not explicit) measure was significantly associated with a variety of behaviours including more speech errors and more speech hesitations in the interaction with the Black (versus White) experimenter. The implicit and explicit measures were nevertheless significantly and moderately correlated (.42).

2.3.3.3 Call for the exploration of moderators of IEC

Much evidence exists in support of both the one construct and independent construct approaches to IEC. Consequently, it has not been possible to conclude whether implicit and explicit measures are indeed the 'same' or 'different'. Similarly noting such equivocal findings and variability in IEC some researchers have suggested that adherence to the question of whether implicit in-group bias is the 'same' as or 'different' from explicit in-group bias may be unfruitful for expanding our understanding of IEC of in-group bias measures (Blair, 2001; Fazio & Olson, 2003; Maass et al. 2000). Given that there is variability in IEC, it has been suggested that it would be more productive to ask a 'when' question: "When, under what conditions, and for what kind of people, are implicit and explicit measures related?" (Fazio & Olson, 2003, p. 304). From this start point researchers must concede that there is variability in IEC and explore potential moderators.

The two views of IEC drawn out above hold different implications for what moderates IEC. The independent construct approach does not explicitly make any predictions about how and when implicit and explicit measures should be related (Nosek & Banaji, 2002). The one construct view, however, points to self-presentation or social desirability mechanisms (e.g., motivation to control prejudice) as a single moderator of bias. Self-presentation demands are obviated by implicit measures whereas they are likely to impact on explicit measures. When individuals have the motivation or opportunity to control their explicit responses and present themselves in accordance with social norms of egalitarianism then there should be

little correspondence between implicit and explicit measures. When there is little motivation or opportunity to manufacture deliberative responses, or no norms of non-prejudice, however, IEC should be observed (Fazio & Olson, 2003).

Research findings have supported this view. Fazio et al. (1995), for example, illustrated that IEC was moderated by individual differences in Motivation to Control Prejudice (MCP). As scores on a MCP scale decreased there was a stronger relationship between an index of race-bias from a sequential priming paradigm and scores on the Modern Racism scale (also see Dunton & Fazio, 1997). Similarly, Franco & Maass (1999) demonstrated that when the out-group for evaluation was non-normatively protected (Islamic Fundamentalists), and presumably little motivation existed to present oneself in a favourable light, Italian Catholic participants' responses on a measure of LIB and an explicit (dis)liking measure were reliably and positively related. When the out-group for evaluation was normatively protected (Jews), however, the same participants' responses resulted in a zero correlation between the LIB and (dis)liking measure.

That self-presentation demands are sufficient to explain the variation in IEC of in-group bias is unlikely. More than moderate IEC for racial (e.g., Lepore & Brown, 1997; Wittenbrink et al. 1997) and national (e.g., Neumann & Seibt, 2001) groups, groups for which there should exist high self-presentation demands, is problematic for this proposition. It is likely that other factors are affecting IEC. Nosek & Banaji (2002), for example, suggested that there are at least two interactive factors that moderate IEC: self-presentation and elaboration. Elaboration refers to explicit thought about how you feel toward an attitude object (e.g., Blacks, flowers). Across a number of attitude objects varying in self-presentation demands, Nosek & Banaji (2002) illustrated that for those attitude objects for which there are low self-presentation demands (flowers and fruits) thinking more about your attitude (elaboration) predicted IEC. However, for those attitude objects that were high in self-presentation demand, (e.g., racial groups), increases in elaboration did not predict IEC. This is a general model of IEC and not specific to inter-group research. As in-group bias research is largely dealing with attitude objects for which there is great self-presentation demand this model offers little explanation for the variability (observed above) in IEC.

2.3.3.3.1 Importance of implicit & explicit measures tapping the same processes

A small body of research has implicated that IEC is crucially dependent upon implicit and explicit measures activating the same processes (Nemann & Seibt, 2001; Wittenbrink et al. 2001a). This research has demonstrated that how implicit measures are constructed, either by the judgement task used or the type of primes employed – thus affecting how bias is measured – can lead to differential correspondence with explicit measures. Wittenbrink et al. (2001a), for example, showed that IEC was dependent upon the process of evaluation being belief-based or evaluation based on both implicit and explicit measures. In their study they had participants complete either a sequential priming task with a LDT (i.e., categorise stimuli as words or non-words) or a sequential priming task with an evaluative judgement (i.e., categorise stimuli as positive or negative). The former task was believed to measure belief-based (stereotypic) mental associations whereas the latter was believed to measure general evaluative mental associations. From both these judgement tasks two different indices of bias were generated. One form of bias, 'stereotypic prejudice', captured the strength of mental associations between in- and out-group and positive and negative stereotypic traits (a belief based measure). The other form of bias, 'generalised prejudice', captured the strength of mental association between in- and out-group and positive and negative words generally (i.e., not just those traits of the in- and out-group category; an evaluative measure). Participants also completed a variety of explicit measures including the Modern Racism Scale (MRS; a belief based measure) and a feeling thermometer (an evaluation measure). Wittenbrink et al. found that following the lexical decision task there was reliable IEC between the MRS and the stereotypic prejudice index but not the generalised prejudice index. Furthermore, the feeling thermometer was not reliably related to either index. Following the evaluation judgement task, however, the feeling thermometer was reliably related to the generalised prejudice but not stereotypic prejudice index. The MRS, however, was not reliably related to either of the implicit prejudice indices.

Neumann & Seibt (2001) similarly illustrated the importance of implicit and explicit measures activating the same processes. These authors argued that previous inconsistencies in IEC (e.g., Fazio et al. 1995; Wittenbrink et al. 1997) may be due to whether the implicit measure captured exclusively the strength of mental association

between a social category and the evaluation or whether the implicit measure captured this as well as the activation of the social category. The measure of prejudice depends upon the prime used. When category labels are used (e.g., Wittenbrink et al. 1997) the category is activated for everyone and only the strength of association between the category and its evaluation is measured. Conversely, when picture primes are used (e.g., Fazio et al. 1995) the category is not necessarily activated for all individuals as the picture prime may depict multiple social categories. Therefore, when picture primes are used the implicit measure is blurring the activation of the category with the measurement of the mental association between the category and the evaluation. Neumann and Seibt argued that since explicit measures of prejudice activate the relevant social category in all individuals by explicitly naming it, it is associative strength that influences how one answers the items on the questionnaire. They further argued that if both implicit and explicit measures captured the strength of mental association between a social category and its evaluation then IEC should be expected. Neumann & Seibt tested this assumption by asking German students to complete an IAT and the Blatant and Subtle Prejudice Scale (Pettigrew & Meertens, 1995). These measures assessed participant's mental associations between Turks (Germans) and a negative (positive) evaluation. A positive and reliable relationship between these measures emerged (.42). Moreover, a measure of the negativity of the culturally shared knowledge about Turks was not related to either measure, suggesting that the IEC was dependent upon associative strength between category and evaluation and not the contents of the culturally shared stereotype.

A recent meta-analytic review of the IEC between the IAT and a variety of explicit measures, conducted by Hofmann, Gawronski, Gschwende, Le and Schmitt (in press), has interestingly illuminated that the order in which implicit and explicit measures are completed affects the magnitude of IEC (interestingly the overall IEC based on 81 hypothesis tests was .25, after correction for measurement error). Specifically, when explicit measures were completed first IEC was significantly greater (.24) than when implicit measures were completed first (.17). It is possible to infer from this finding that the processes that are operable on explicit measures remain salient or accessible to influence responses on implicit measures. Awareness of reporting associations between a social category and an evaluation on an explicit

measure, for example, may make this structure of bias salient for implicit measures. Numerous other processes may also be made salient to affect implicit bias.

2.3.3.4 Summary of IEC

In this section we have seen that the discussion of whether IEC exists or not is an unproductive one. Given the variability in IEC, researchers (e.g., Fazio & Olson, 2003) have suggested that we should examine moderators. Consequently, two major moderators have emerged that may account for some of the variance in IEC of in-group bias measures. These moderators have focused on the role of self-presentation demand on explicit measures and the importance of implicit and explicit measures activating the same processes.

2.4 Nationalism, patriotism and unintended in-group bias: A prospective account

In this section we will consider how manipulations of nationalism and patriotism, constructed in the same manner as Mummendey et al. (2001, see Chapter 1, section 1.4.3), may impact on the mental activation of unintended in-group bias and on the relationship between implicit and explicit measures of in-group bias. In this vein we will be advancing a social identity based approach to understand these phenomena and examining the role of the different group contexts (and assumed concomitant salience of group membership) that are associated with nationalism and patriotism. Based on the conclusions made about the activation of unintended bias and IEC (above), we believe that the proposition of differing group contexts (and parallel differences in salience of group membership) affecting these phenomena provide both a novel and tenable approach.

2.4.1 Nationalism and patriotism as differing group contexts (and forms of social identity salience)

As we saw in Chapter 1, nationalism and patriotism represent two ways in which an individual can identify with the nation. These forms of identification may be constructed via different types of comparison that result in a favourable in-group evaluation and consequent positive national identity (Mummendey et al. 2001). Nationalism may be based upon favourable inter-group comparisons, whereas patriotism may be based upon favourable temporal comparisons. The comparisons used in identity construction represent the type of orientation that is prevalent. Nationalism represents an inter-group orientation and patriotism a group orientation. According to our adaptation of Hinkle and Brown's (1990) model of groups and group contexts (see Chapter 1, section 1.1.2.1), national identification in terms of nationalism may correspond to a relational (i.e., inter-group) context whereas national identification in terms of patriotism may correspond to a non-relational (i.e., group) context. In these contexts (inter-group and group) corresponding identity (inter-group and group) is likely to be made salient. That is, the different comparative (nationalism) and non-comparative group contexts (patriotism) may 'switch on' or make salient different self-conceptions (inter-group versus group) that may be used to interpret and make sense of social stimuli and regulate behaviour in accordance with the salient social identity (see Chapter 1, section 1.1.2.1 for more discussion on this).

2.4.2 Nationalism and patriotism and the malleability of unintended in-group bias

The social identity approach to in-group bias illustrates that evaluations and stereotyping of out-group members is dependent upon how the self-concept is defined (see Brown, 2000). Identification, and the type of identification in particular, is an important factor for the understanding of in-group bias (Hinkle & Brown, 1990; Mummendey et al. 2001). The social cognition literature has generally ignored identification mechanisms as a path to unintended bias. This may be because earlier assumptions were that automatic processes were impervious to motivations and social context (e.g., Bargh, 1989, 1997, 1994). Recent research has now shown that this is not the case (see Blair, 2002) and that a variety of factors including motivations to

hold a positive self-image (e.g., Spencer et al. 1998) and identification-threatening group contexts (e.g., Pratto & Shih, 2000) moderate the display of in-group bias. Furthermore, because unintended bias may be constructed on-line, and is not the outcome of the retrieval of stored information (e.g., Mitchell, et al. 2003), there appears to exist much more flexibility in the range and magnitude of in-group biases that may arise.

Given these circumstances, it is plausible to assume that identification in terms of nationalism and patriotism (manipulations of inter-group group vs. group context) may lead to different outcomes in the stereotyping and evaluation of out-group members. We predict that there should be mean differences in the magnitude of unintended out-group derogation displayed following nationalism and patriotism orientations. Specifically, we propose that the inter-group context that represents nationalism will lead to more unintended out-group derogation than the group context that represents patriotism. As we saw in Chapter 1, because nationalism sees a positive identity constructed at the expense of out-groups (i.e., it reinforces in-group superiority and out-group inferiority) we perhaps should see greater bias than when identification takes the form of patriotism, which makes no reference to the out-group position. Identification in terms of nationalism dictates that the in-group is of higher status than the out-group. Research suggests that high status groups may display in-group bias (e.g., Mullen, Brown & Smith, 1992; Turner & Brown, 1978). Similarly, Guimond and colleagues (Dambrun & Guimond, 2004; Guimond & Dambrun, 2002; Guimond, et al. 2002) have proposed and shown that favourable inter-group comparisons (placing the in-group in a position of relative gratification) have a major consequence of out-group derogation. We expect this expression of in-group bias because it is consistent with the content of nationalism. It should be noted that although no mean differences on an explicit measure of xenophobia were found between the nationalism and patriotism frames in the Mummendey et al. (2001) study, (only the link between identification and xenophobia differed as a function of the frame), we assume that the explicit measure was likely to be equally open to self-presentational concerns in each frame. As implicit measures obviate such pressures (Fazio & Olson, 2003) we suggest that there should be meaningful differences in implicit in-group bias.

2.4.3 Nationalism, patriotism and IEC

Research examining IEC of in-group bias measures highlighted the need for both implicit and explicit measures to be activating the same processes (e.g., Neumann & Seibt, 2001). We propose that IEC may be greater following an inter-group (nationalism) than a group (patriotism) identity frame because, under an inter-group frame implicit and explicit measures should be tapping into the same memory contents and processes; an accessible inter-group social identity. Explicit measures define an inter-group context and should, therefore, always likely to be responded to in terms of a salient inter-group identity, irrespective of any prior priming experience. Implicit measures, on the other hand are unlikely to make an inter-group context (and thus inter-group identity) accessible. Therefore (as default), implicit and explicit measures should be likely to be responded to in terms of different processes. When a 'nationalistic' (inter-group) identity is made salient, however, the same information (e.g., mental associations determined by the prevailing inter-group context) should be made accessible on implicit measures and, therefore, both implicit and explicit measures should be likely to be responded to in terms of the prevailing inter-group identity. Consequently, we should observe a positive relationship between implicit and explicit measures. When a 'patriotic' (group) identity is made salient, however, implicit measures are likely to be responded to in terms of a group identity whereas explicit measures are likely to be responded to in terms of an inter-group identity; the likely occurrence of different identity processes should result in less correspondence between the implicit and explicit measures of in-group bias.

There exists some preliminary evidence to suggest that an accessible inter-group context (and possible corresponding inter-group identity) prior to completion of implicit measures may lead to greater IEC. Although these studies did not intentionally vary inter-group context salience, we believe that the procedure unintentionally defined (or made accessible) a relevant inter-group context (and even social identity) in which respondents may have used to furnish their evaluations and stereotypes of out-groups. Wittenbrink et al. (1997), for example, had participants identify the ethnicity of people based upon their first name prior to completion of a LDT. To give the subliminal category labels 'BLACK' and 'WHITE' meaning, participants assigned African American names and European American names to the

categories 'BLACK' and 'WHITE'. Furthermore, when explicit measures are completed prior to implicit measures IEC tends to be greater (Hofmann et al. in press). It can be assumed that explicit measures make accessible an inter-group context (and social identity) that remains available to influence consequent implicit responses.

2.4.4 Summary of prospective account

Nationalism and patriotism represent different group contexts, inter-group and group respectively. These contexts likely raise the salience of corresponding social identity (inter-group and group). Because of the nature of these national identity construction nationalism and patriotism is likely to be expressed in different ways (Mummendey et al. 2001). The type of national identification is likely to moderate the activation of unintended negative out-group evaluations. Identification in terms of nationalism should lead to more out-group derogation than identification in terms of patriotism. Type of national identification is also likely to moderate IEC. Only when the same processes are operable on implicit and explicit measures (Neumann & Seibt, 2001; Wittenbrink et al. 2001a) is IEC expected. That is, when an inter-group context (and salient inter-group social identity) is accessible on implicit measures (as it is on explicit measures) then there should be greater IEC than when group identity is salient on implicit measures (as inter-group identity is accessible on explicit measures and thus there is an inconsistency with the memory contents and processes accessible on both types of measures).

2.5 Summary

The main focus of this chapter was to review the two primary research questions being explored in current research on implicit in-group bias: whether implicit in-group bias is inevitable or malleable and whether implicit and explicit measures of in-group bias are related. Research suggests that implicit in-group bias is malleable (Blair, 2002) and may be moderated by a number of variables including the salience of the group context. It is assumed that the group context affects individuals' perceptions of the social categories through making relatively accessible valence-

consistent evaluations. Positive or negative connections with a social category are likely to be strengthened through the positive or negative information contained within the situational context. Malleability implies that implicit attitudes (and stereotypes) are constructed on the spot (Mitchell et al. 2003). Concerning IEC, research suggests that there is much variability and we should focus on identifying moderators of the relationship (Fazio & Olson, 2003). The same memory contents and processes being accessible on both implicit and explicit measures is one factor that affects IEC (Neumann & Seibt, 2001).

We offered a 'social identity salience' approach to speculate about the effects that nationalism and patriotism might have on implicit in-group bias and on IEC. We suggested that the way in which national identification is constructed is likely to moderate the activation of unintended negative out-group evaluations. Identification in terms of nationalism should lead to more out-group derogation than identification in terms of patriotism. Type of national identification is also likely to moderate IEC. Under a nationalism orientation we assume that implicit and explicit measures will be completed using the same accessible memory contents and processes (an inter-group identity) and so we should observe IEC. Under a patriotism frame, however, different memory contents and processes should be accessible for implicit and explicit measure and so we should observe less IEC (if any).

Chapter 3

Distinguishing Nationalism and Patriotism

3.0 Introduction

In this first empirical chapter we begin our examination of whether national identification may be connected to negative out-group evaluations. As we saw in Chapter 1, it may be prudent to differentiate between two varieties of national attachment when pursuing this aim: nationalism and patriotism. Nationalism and patriotism reflect detrimental versus valuable facets of national identification. As we saw in Chapter 1, nationalism and patriotism tend to be only moderately correlated and have unique explanatory power accounting for the variance in different outcome variables (e.g., Kosterman & Feshbach, 1989; Schatz et al. 1999), including the direct rejection of foreigners (Blank and Schmidt, 2003). Interestingly, this latter research was published shortly after we had also decided to examine directly the links between varieties of national identification and out-group derogation. It provides some support and validation for the importance of this type of research question.

In this chapter we report four studies that examine the construction and validation of measures of nationalism and patriotism. Our first two studies report, respectively, on exploratory and confirmatory factor analyses that establish measures of nationalism and patriotism that are appropriate for European, and primarily British, samples. To our knowledge, to date no research has developed such measures relevant for British samples. Our next two studies assess the validity of our national identification measures. The first of which examined the relationship between nationalism and patriotism and football fans' out-group related evaluations following their national team's exit from the 2002 Football World Cup finals. The second provided a more explicit analysis of the link between nationalism and patriotism and the rejection of foreigners – using an already established measure of out-group prejudice (Pettigrew & Meertens, 1995). This latter study raised some concern about the face validity of our measure of nationalism; it may also be considered to be a measure of national prejudice. Discussion focuses on this issue.

British and German samples were used in all studies (apart from Study 1d, in which we used only a British sample). Using two European samples enabled us to assess the generality of the assumed distinction between nationalism and patriotism. It should be noted, however, that the German samples were not used as comparison groups for British samples. Apart from the World Cup study, the data was collected from the German samples following collection of the British data for both exploratory and confirmatory factor analyses. Although we do not wish to make (statistical) comparisons between the two groups, for ease of presentation we report on the data for British and German samples simultaneously for each of the relevant studies.

3.1 Study 1a: Exploratory Factor Analysis

3.1.1 Introduction

In Chapter 1 we saw that nationalism and patriotism have been separated factor analytically for primarily American samples (Kosterman & Feshbach, 1989; Schatz et al. 1999). In an attempt to capture the content and structure of 'patriotic' and 'nationalistic' identification we decided to adapt items based on this previous research and make them more appropriate for a British (and German) sample. We largely borrowed items from Kosterman and Feshbach's (1989) and Schatz et al's (1999) nationalism (or blind patriotism) and patriotism scales. In addition to these items we also generated our own items that we felt were particularly appropriate for a British sample. Consistent with this previous research it was expected that our samples would reveal distinct factors that would be compatible with representations of nationalism and patriotism. Specifically, we expected to reveal a measure of nationalism that would be composed of items that expressed the superiority and dominance of Britain (or Germany) over other countries and a measure of patriotism that would be composed of items that expressed a positive sense of belonging to and love for Britain (or Germany).

3.1.2 Method

3.1.2.1 Participants

The British sample was composed of 127 (40 male and 87 female), first year psychology undergraduates from the university of Kent (mean age = 21 years, SD = 5). The German sample was composed of 102 (87 female and 14 male; 1 person did not record their gender), psychology students from the university of Jena (mean age = 22 years, SD = 3). For both samples individuals participated in the study in partial fulfilment of their course requirements. Participants were also entered into a draw to win £25 (or €40 for German sample) for their participation.

3.1.2.2 Measures and Procedure

For the British sample, participants were recruited at the end of their seminars. Those who wished to participate were handed a booklet containing 22 items measuring their attitudes, opinions and feelings about aspects of Britain and 'British-ness'. The items were adapted from those used by Kosterman & Feshbach (1989) and Schatz et al. (1999), and others were independently constructed. These items were specifically selected and adapted (or constructed) to assess the various dimensions that we believed contributed to patriotism and nationalism (i.e., love for and attachment to one's country and superiority of one's nation). Participants indicated the extent to which they agreed with each statement: 1 = "totally disagree", 7 = "totally agree," and also listed demographic information. After completion of the booklet participants were thanked and debriefed. For the German sample, the materials and procedure generally followed that of the British sample. However, because this data was collected following both exploratory and confirmatory factor analyses of the British samples, the booklet measuring attitudes and opinions about Germany and 'German-ness' contained only the translated 11-items that had tapped nationalism and patriotism in the British sample. Scale items for both studies can be seen in Table 3.1.

3.1.3 Results and Discussion

For both samples, to determine whether nationalism and patriotism were distinguishable varieties of national identification exploratory factor analysis was performed. Principal-components extraction was used along with an orthogonal

(varimax) rotation. Missing data points were replaced by the variable mean-score. Although several factors (6 for the British sample and 3 for the German sample) with eigenvalues greater than 1.00 emerged, the scree-plots suggested two-factor models. An indication of an acceptable cut-off for the number of factors to rotate comes at the point where there is a change in the slope of the plot (i.e., just before the 'elbow' of the plot; Kline, 1999). In both instances, the two factors were readily identifiable as nationalism and patriotism. For the British sample, initial eigenvalues for nationalism was 6.48 and for patriotism was 2.96 and the percentage of the variance explained by each was 26.99 and 12.31, respectively, for a total of 39.30 percent. For the German sample, initial eigenvalues for nationalism was 3.03 and for patriotism was 2.13. These factors accounted for 27.57 and 19.33 percent of the variance, respectively, with a cumulative total of 46.90 percent.

We also performed a constrained two-factor exploratory factor analysis with varimax rotation, for both samples, to determine the credibility of the two-factor model. Results were highly similar to the initial unconstrained exploratory factor analyses. To further determine the orthogonality of these constructs both the original un-rotated pattern matrices were rotated using an oblique rotation method (promax) and the results compared to the corresponding (unconstrained) orthogonal rotation output. Independence should be demonstrated to the extent that the orthogonal and oblique solutions are similar (Kosterman & Feshbach, 1989). Indeed, the factor loadings on the oblique rotation were almost identical to the (unconstrained) orthogonal rotation for both samples.

The following item retention criteria were imposed: a factor loading of at least .50 (or less than -.50) and a difference in factor loadings (across the nationalism and patriotism factors) of at least .20 (Schatz et al. 1999). According to these criteria, nationalism was composed of six items (α = .78) and patriotism five items (α = .85) for the British sample, whereas both nationalism (α = .77) and patriotism (α = .67) were composed of four items for the German sample. Factor loadings for nationalism and patriotism for both samples can be seen in Table 3.1. Consistent with the factor loadings, scores on the two scales were largely orthogonal and only moderately correlated (British: $r = .43$, $p < .01$; German: $r = .28$, $p < .01$).

Table 3.1. Exploratory Factor Analyses of Nationalism and Patriotism Items For British and German Samples (study 1a)

Item	Sample			
	Britain		Germany	
	Nat.	Pat.	Nat.	Pat.
1. The more {The less} influence Britain [Germany] has over other nations the better off those nations will be (KF).	(.51)	.24	-.12	-.06
2. It is not {It is} right to criticise Britain [Germany] (SSL).	(.64)	.25	.26	.17
3. Foreigners who come to Britain [Germany] looking to improve their lifestyle should be made to go back home, even when their home country has inadequate resources (A).	(.71)	-.02	(.85)	.19
4. British [German] people should stand up for themselves by rejecting foreigners who dislike Britain [Germany] (A).	(.74)	.02	(.82)	.03
5. Britain [Germany] is always right (SSL).	(.67)	.25	(.75)	.21
6. People who do not wholeheartedly support Britain [Germany] and respect its culture should live somewhere else (SSL).	(.62)	.13	(.54)	-.18
7. I {I don't} feel a strong sense of commitment to the welfare of my country (KF).	.13	(.59)	-.15	.07
8. It is right to have a certain degree of emotional attachment to Britain [Germany] and be emotionally affected by its actions (KF).	-.02	(.64)	.38	(.58)
9. I am {I am not} proud to be British [German] (KF).	.28	(.71)	-.01	(-.60)
10. I love Britain [Germany] (KF).	.25	(.76)	-.19	(.82)
11. Being British [German] is a very important aspect of who I am (KF).	.15	(.80)	.33	(.73)
12. It is crucial that British football teams beat all their national competitors (KF).	-.02	.14	--	--
13. If Britain were under-performing in sporting competitions it would be ok not to support them (A).	-.09	-.02	--	--
14. When I see the flag of the union jack flying I feel good (KF).	.51	.47	--	--
15. If British institutions are not meeting the standards set then it is the duty of the citizens to complain and campaign until standards are raised (A).	-.16	.10	--	--
16. Everything that Britain stands for and represents is good and proper (A).	.63	.50	--	--
17. In general, I have little respect and appreciation of British people and their ways (A).	-.04	-.42	--	--
18. My attachment to Britain means that I'm prepared to speak out against popular but potentially destructive policies (SSL).	-.18	.09	--	--
19. It is not important for British people to serve their country (KF).	-.07	-.22	--	--
20. People should strive to move the image of Britain in a positive direction (SSL).	.20	.26	--	--
21. Generally, all the people who protest and demonstrate against British policies are good, upstanding individuals (SSL).	.17	-.08	--	--
22. It is the duty of a British citizen to critically evaluate British policy for the betterment of the country (SSL).	-.26	.17	--	--

Note: ( ) Indicates retention of item on factor, { } Indicates new phraseology of item for German sample, [ ] Indicates that 'British' or 'Britain' was substituted with German equivalent for German sample. Because the items for the German sample were borrowed from the established British sample scales, only 11 items were explored.
(KF) = item adapted from Kosterman & Feshbach, 1989; (SSL) = item adapted from Schatz et al. 1999;
(A) = item generated by author. Nat. = nationalism; Pat. = patriotism.

We conducted this study as a first step toward development of 'patriotic' and 'nationalistic' measures of national identification, appropriate for a British (and German) sample. Results revealed distinct varieties of national attachment for both samples that were readily identifiable as nationalism and patriotism. Patriotism tapped the affective component of one's love for and feelings of attachment toward

the nation. Nationalism, in comparison, reflected perceptions of national superiority and dominance over other nations and foreigners. These findings are consistent with previous research examining the distinction between forms of national identification and national attitudes (e.g., Kosterman & Feshbach, 1989; Schatz et al. 1999). Also consistent with this past research, we observed a positive moderate relationship between patriotism and nationalism. As implied elsewhere (e.g., Mummendey et al. 2001) this correlation likely reflects a shared positive in-group evaluation. Both a positive attachment to one's nation and perceptions of relative superiority over foreigners may imply that individuals feel good about their in-group (national) identity. It is also worth noting that to date these are the first measures of nationalism and patriotism developed for a British sample.

3.2 Study 1b: Confirmatory Factor Analysis

3.2.1 Introduction

The purpose of Study 1b was to replicate the two-dimensional structure of national identification (nationalism and patriotism) using confirmatory factor analysis (CFA). We used CFA to directly compare the fit of a correlated two-factor model of national identification (as emerged in exploratory factor analysis) to that of a two-factor model in which nationalism and patriotism are separate (i.e., uncorrelated) constructs and a one-factor model in which nationalism and patriotism are conceived of as a single construct (see Schatz et al. 1999 for similar model testing). We expected, consistent with results from exploratory factor analysis, that the model of nationalism and patriotism as separate yet related constructs to provide the best fit relative to the two other models of national identification.

3.2.2 Method

3.2.2.1 Participants and Procedure

For the British sample, two hundred and fifty seven (212 female, 46 male), first-year undergraduates at the university of Kent completed the 11-item 'attitudes toward Britain' scale contained within a battery of pre-test measures distributed at the

beginning of the academic year. Participants had to complete this battery in full or in part to fulfil course requirements. Eighty-five percent of the participants were aged between 18 and 25 years, with the remainder older than 25 years. For the German sample, one hundred and fourteen (97 female, 17 male), psychology students at the university of Jena completed the 8-item scale within a battery of measures (Mean age = 21 years, SD = 2).

3.2.2.2 Measures

The booklet examining participants' attitudes toward their country contained the nationalism (British $\alpha = .65$; German $\alpha = .47$) and patriotism (British $\alpha = .79$; German $\alpha = .57$) scales that emerged from the exploratory factor analyses. We offer two explanations for the comparatively low scale reliabilities in this study compared to Study 1a. Perhaps changing the phraseology of some of the items (see below) incidentally adapted the meaning of these items and therefore they did not correlate with other items (however this cannot account for the very low reliability of the nationalism scale for the German sample). A more parsimonious explanation may be that because both sets of scales were completed within a larger battery of measures (over 40 for the British sample) participants simply were not as focused in their responses which increased the likelihood of 'random' responses to the items and greater statistical noise.

For the British sample the phraseology of some of the items (see items 1, 2, 7 and 9, in Table 3.1) was adapted so as to reduce the likelihood of response acquiescence that may occur when using only unidirectional items. Participants from both samples responded to the scale items by circling a number on a 7-point scale, 1 = "disagree," 7 = "agree." The scale anchors were made less extreme than in the previous study (i.e., "totally disagree," "totally agree") because there the scales yielded overall low item means (this was particularly the case with the nationalism scale in the British sample: mean = 2.69). This shift to more moderate anchors was anticipated to elevate the variability of responses. As before, scores on the two measures were only moderately correlated for both samples (British $r = .37$, $p < .01$; German $r = .32$, $p < .01$).

3.2.3 Results and Discussion

To examine whether our theoretical models that conceptualised of patriotism and nationalism as separate yet related constructs, completely independent constructs, or one factor, best fitted the data of both the British and German samples, we used EQS 5.1 (Bentler, 1995) to estimate parameters of each of the three models. The results can be seen in Table 3.2. A good fitting model is indicated by a small chi-square value (and ideally a non-significant p value). Fit indices should be approximately .90 and the root mean square error of approximation (RMSEA) should encompass zero. An additional indicator of fit is the χ^2/df; scores between 1 and 2 are considered to illustrate a good fit (Byrne, 1989, cited in Schatz et al. 1999).

As can be seen in Table 3.2, the models that represented nationalism and patriotism as separate yet related constructs provided the best fit to the data of all three models. To examine whether this correlated model provided a significantly better fit to the data than the independent and one-factor model, we subtracted the chi-square values and degrees of freedom for the correlated model away from the corresponding values for the other two models. For the British sample, the correlated model provided a significantly better fit to the data than did the independent model [χ^2 (df = 1) = 32, $p < .001$] and the one-factor model [χ^2 (df = 1) = 155.45, $p < .001$]. For the German sample, the correlated model also provided a significantly better fit to the data than did the independent model [χ^2 (df = 1) = 16.16, $p < .001$] and the one-factor model [χ^2 (df = 1) = 11.56, $p < .001$].

These results indicated that national identification might be best represented as separate yet related constructs: nationalism and patriotism. As we saw above, these varieties of national attachment captured detrimental and beneficial facets of national identification. Whereas nationalism represented the perception of national dominance and superiority, patriotism represented feelings of belongingness and love for one's nation. The correlation between these two measures likely reflects a shared positive in-group evaluation (Mummendey et al. 2001). These results confirmed the factor structure that emerged from the exploratory factor analysis in Study 1a and are consistent with other factor analytic distinctions of nationalism and patriotism (e.g., Kosterman & Feshbach, 1989; Schatz et al. 1999).

Table 3.2. Goodness of Fit Measures For Three Structural Models of Nationalism and Patriotism For British and German Samples (Study 1b)

Sample	Model Description	χ^2	df	p	χ^2/df	CFI	NFI	RMSEA
British (N = 257)	Correlated	67.57	43	< .01	1.57	.96	.90	.05
	Independent	99.57	44	< .001	2.26	.92	.87	.07
	One	223.02	44	< .001	5.07	.74	.70	.13
German (N = 114)	Correlated	14.41	19	.76	.76	1.0	.88	.00
	Independent	30.57	20	< .10	1.53	.89	.75	.07
	One	25.97	20	.17	1.30	.94	.79	.05

Note: CFI= comparative fit index; NFI= Bentler-Bonett normed fit index; RMSEA= root mean square error of approximation.

3.3 Study 1c: Construct Validity – A study of Football Fans' Acceptance of Out-group derogation Following Japan/Korea 2002 World Cup Finals

3.3.1 Introduction

Study 1c was conducted to assess the construct validity of our national identification measures and to provide a direct assessment of whether different forms of in-group (national) identification might be linked to the rejection of out-groups. The context of the Japan and Korea 2002 World Cup finals provided us with an opportunity to assess the validity of the British and German nationalism and patriotism scales in a naturalistic setting. The purpose of this study was to examine whether our measures of nationalism and patriotism could be separated in predicting the acceptance of out-group derogation (i.e., negative evaluations of and behaviours toward an opposing group of football teams and fans). The study was designed and compiled in conjunction with another researcher whose focus was related to the identity and attitudes of English and German football fans. Our measures were handed out following the national teams' exit from the finals. We decided to examine evaluations immediately following the exit from the competition (rather than before or during)

simply because we believed that participants would be more engaged with the national team and other supporters and that the evaluation task would be more relevant and meaningful. In line with previous research (e.g., Blank & Schmidt, 2003) we expected that nationalism but not patriotism would be related to the acceptance of out-group derogation.

3.3.2 Method

3.3.2.1 Participants

For the English sample, thirty-nine (27 male, 12 female) non-student, football fans (ages ranged from 15 – 64 years, mean age = 35 years, SD = 15) from the Lincolnshire area were recruited to take part in a study on their attitudes and opinions of the England football team. For the German sample, ninety-six (74 female, 22 male) students from the University of Dortmund (ages ranged from 19 to 64 years, mean age = 25 years, SD = 10) were recruited at the end of their lectures. For their participation, all participants were entered into a draw to win £50 (or €75 for German sample). Both sample sizes were much smaller than was ideal for our planned analyses. As such, we will treat them with caution.

3.3.2.2 Measures

Measures of nationalism (English $\alpha = .73$; German $\alpha = .71$) and patriotism (English $\alpha = .81$; German $\alpha = .80$) were identical to those from exploratory and confirmatory factor analyses above (see Table 3.1) although 'British/Britain' was substituted with 'English/England'. For the English sample nationalism and patriotism were moderately related ($r = .39$, $p < .05$) whereas for the German sample nationalism and patriotism were only weakly related ($r = .20$, $p < .06$). Additionally, participants completed three items assessing the acceptability of derogatory behaviours toward out-group national teams (e.g., "How acceptable is it to "boo" and shout abuse at the players on the opposing team to England (Germany) during the football match"; "How acceptable is it to jeer, shout and whistle during the national anthem of England's (Germany's) opponents"; "If opposition fans are watching the match in the

same bar as you, how acceptable is it to buy them a beer and compliment them on the performance of their team"). Responses were made on 1-7 scales, totally unacceptable – totally acceptable (the last item was reverse scored, English α = .52; German α = .40).

3.3.2 Results and Discussion

Nationalism and patriotism were entered into a standard multiple regression analysis so that we could assess the independent contribution of each identification variable on the acceptance of out-group derogation. The results from both samples were consistent with our prediction (see Table 3.3). Nationalism but not patriotism was a significant predictor of the acceptance of out-group derogation. Results indicated that nationalism and patriotism could be viewed as distinct constructs. The demonstration of predictive validity is consistent with the research of Blank and Schmidt (2003). National identification in terms of nationalism was connected to (the acceptance of) negative out-group evaluations whereas national identification in terms of patriotism was not connected to (the acceptance of) out-group derogation.

Table 3.3. Effects of Nationalism and Patriotism on the Acceptance of Out-group Derogation for English and German Samples (Study 1c)

Sample	English (N = 39)				German (N = 96)			
	Nationalism		Patriotism		Nationalism		Patriotism	
	r	β	r	β	r	β	r	β
Acceptance of out-group derogation	.40*	.46**	.03	-.15	.25*	.23*	.15	.10

Note. * $p < .05$, ** $p < .01$.

3.4 Study 1d: Construct Validity – A Study Exploring British people's Attitudes toward Foreigners.

3.4.1 Introduction and Method

Although our previous validation study illustrated that nationalism and patriotism were distinct in their prediction of out-group derogation, this measure was questionable. The scales had low internal reliabilities and lacked face validity. For

example, the acceptability to (not) buy opposition fans a beer during the match and the acceptability of abusing opposition team players may not necessarily capture the same construct of interest. In order to provide a more explicit test of whether national identification may be connected to out-group derogation, and to better assess the predictive validity of our measures of nationalism and patriotism, we adapted an already established measure of out-group prejudice, Pettigrew and Meerten's (1995) subtle and blatant prejudice scale, to capture xenophobic attitudes. We expected nationalism but not patriotism to reliably predict variance in xenophobia.

We used participants' data on nationalism and patriotism from Study 1b (N = 257). As part of the same pre-test in which participants completed the nationalism and patriotism scales, they also completed a short xenophobia scale adapted from Pettigrew and Meerten's (1995) subtle and blatant prejudice scale (German participants did not receive this scale). We report their data as a separate study merely for ease of presentation. For information on participant demographics and internal consistencies of nationalism and patriotism see Study 1b (section 3.2.2.1) above. The xenophobia scale was composed of seven items ("Most politicians in Britain care too much about foreigners and not enough about the average British person"; "Foreigners have jobs that the British should have"; "I would not mind if a foreigner who had a close background to mine joined my family through marriage"; "I would be willing to have a sexual relationship with a foreigner"; "Foreigners living in Britain should not push themselves where they are not wanted"; "I often feel sympathy for foreigners living here" "It is just a matter of some people not trying hard enough. If foreigners would only try harder they could be as well off as British people"). Responses were made on 1-7 scales, disagree – agree, and all appropriate items were reverse scored. We performed exploratory factor analyses on these items to determine whether they loaded onto one 'xenophobia' factor. Principal components extraction was used along with orthogonal (varimax) rotation. Although two components with eigenvalues greater than 1 emerged, the scree-plot suggested a one-factor model (see section 3.1.3 above for algorithm to determine number of factors to rotate). The eigenvalue of 3.08 accounted for 44 percent of the variance. Constrained exploratory analysis (i.e., request for one factor) supported this model. Consequently, we integrated the 7-items into a xenophobia scale ($\alpha = .77$).

3.4.2 Results and Discussion

Nationalism and patriotism were entered into a standard multiple regression analysis so that we could assess the independent contribution of each national identification variable. Results were consistent with our prediction (see Table 3.4). Although both nationalism and patriotism were reliably positively correlated with xenophobia, nationalism alone predicted xenophobic attitudes. This result indicates that nationalism and patriotism are distinct varieties of national attachment and is consistent with previous research that has shown the differential prediction of negative out-group attitudes (e.g., Blank & Schmidt, 2003). We build on our previous study (Study 1c) by showing that nationalism and patriotism have differential effects on a valid out-group derogation measure. These results also strengthen the conclusions drawn from Study 1c.

The strong relationship between nationalism and xenophobia, however, raises some concern about the nature of nationalism. This finding indicates convergent validity and would suggest that nationalism may be conceived of as a direct measure of out-group rejection rather than a form of national identification. Echoing these sentiments, Nigbur (2003) questions the factor labels of nationalism and patriotism as ways of relating to one's country. He suggests that they reflect concepts familiar from social identity theory (Tajfel & Turner, 1986) of inter-group bias and identification respectively. One might also question the face validity of our nationalism measure. For example, items such as "people who do not wholeheartedly support Britain [Germany] and respect its culture should live somewhere else" (borrowed from Schatz et al. 1999) imply not only dominance and superiority over foreigners but also a direct rejection of them. Such items are completely consistent with our measure of xenophobia (borrowed from Pettigrew & Meertens, 1995). Such conceptual confusion undermines this 'distinct national identities' approach toward an analysis of national identification and out-group evaluations.

Table 3.4. Effects of Nationalism and Patriotism on Xenophobia (Study 1d)

	Nationalism		Patriotism	
	r	β	r	β
Xenophobia	.64***	.67***	.18**	-.06

Note: ** $p < .01$, *** $p < .001$

These criticisms notwithstanding, we argue that it is important to examine whether the way in which national identification is constructed affects national attitudes such as the derogation of foreigners. In Chapter 1 we suggested that it might be useful to conceive of nationalism and patriotism as differing identity constructions that are based on different types of comparisons. Indeed, recent research has identified that nationalism and patriotism are characterised by inter-group and temporal comparisons respectively (Blank & Schmidt, 2003; Mummendey et al. 2001). These different comparison processes may be used to construct a positive social identity (e.g., Hinkle & Brown, 1990; Mummendey et al. 2001). By examining the items of our nationalism and patriotism scales we can see that nationalism is composed of inter-group comparisons (e.g., "the less influence Britain has over other nations the better off those nations will be") whereas patriotism is devoid of any inter-group comparisons (e.g., "I am proud to be British"). By isolating these comparison processes from the rest of the 'conceptual baggage' contained within each scale we may be able to more accurately distinguish different varieties of national attachment. Mummendey et al's (2001) experimental paradigm may be useful for achieving this. In that research, nationalism and patriotism were experimentally manipulated through inter-group and temporal comparisons respectively. The relationship between a positive in-group attachment (i.e., national identification) and xenophobia was examined. Results showed that when identification was constructed in terms of nationalism (i.e., through favourable inter-group comparisons) there was a reliable link between identification and xenophobia. When identification was constructed in terms of patriotism (i.e., favourable temporal comparisons), however, there was no reliable relationship between identification and xenophobia. We believe that it will be more profitable to adopt an experimental paradigm similar to Mummendey et al's (2001) rather than relying on correlational studies, to explore whether type of national identification leads to negative out-group evaluations. Consequently, we will adopt this approach. We will continue to use the nationalism and patriotism scales. However, in subsequent chapters we will use the labels "xenophobia" and "identification" rather than "nationalism" and "patriotism" to refer to these explicit measures. This is because of the large correlation between nationalism and xenophobia reported in Study 1d ($r = .64$) and because of the non-orthogonality observed between patriotism and identification in Study 2b (see p.92).

3.5 Summary

In this chapter we conducted a first series of studies to examine whether national identification may be connected to negative out-group evaluations. Our first two studies identified and confirmed two distinct forms of national identification that were readily identifiable as nationalism and patriotism. Consistent with past research (e.g., Kosterman & Feshbach, 1989; Schatz et al. 1999), nationalism reflected an orientation to dominance and in-group superiority whereas patriotism reflected feelings of belongingness and love for one's country. In both these studies (as well as Study 1c) both these constructs were moderately positively related, through an assumed positive in-group evaluation (Mummendey et al. 2001). Our third study assessed the predictive validity of nationalism and patriotism and showed that they had unique effects on the acceptance of out-group derogation. Nationalism but not patriotism predicted the acceptance of derogation. In short, the nationalism and patriotism scales were shown to be reliable and valid indicators. To our knowledge these are the first nationalism and patriotism scales constructed for a British audience. That we observed similar patterns of effects for both European samples (in terms of the factor structure of nationalism and patriotism and the equivalent differential prediction of negative inter-group evaluations) illustrates the generality and robustness of this distinction between varieties of national attachment.

Study 1d, however, raised some concerns about the interpretation of nationalism as a measure of national identification. The high correlation with xenophobia as well as a lack of face validity (i.e., scale items were highly consistent with xenophobia scale items) implied that nationalism could be better conceived of as a direct measure of the rejection of foreigners. We contended, however, that nationalism and patriotism should be distinguished as measures of national identification based upon the different types of comparisons on which they are constructed. Nationalism is characterised by inter-group comparisons and patriotism by temporal (on non-relational) comparisons (Blank & Schmidt, 2003; Mummendey et al. 2001). We suggested that Mummendey et al's (2001) experimental paradigm – manipulating inter-group and temporal comparisons as constructions of positive national identity – would be more useful toward an analysis of the effect of type of national identification on negative out-group evaluations.

Chapter 4

Type of National identification on Implicit and Explicit in-group bias: An Experimental Paradigm

4.0 Introduction

Does identification with one's nation inevitably lead to negative out-group evaluations? We continue to explore whether identification with the in-group is connected to out-group rejection and whether people may maintain a positive identification with their in-group without any negative out-group evaluations by means of different forms of identity construction (e.g., through intra-group vs. inter-group comparisons; Hinkle & Brown, 1990; Mummendey et al. 2001). In this chapter we investigate whether national identification constructed in terms of nationalism or patriotism will lead to differential (negative) out-group evaluations. We will experimentally manipulate these different identity orientations and examine how they influence implicit and explicit measures of in-group bias. In this endeavour we will borrow Mummendey et al's (2001) paradigm. Here, nationalism and patriotism are reduced to different comparison frames (i.e., inter- vs. intra-group comparisons respectively); these biased comparisons may be viewed as antecedents for constructing and maintaining positive in-group identity. We will examine the impact of identity orientation on out-group evaluations in three ways: 1) by means of looking at the magnitude of the link (relationship) between in-group attachment (identification) and xenophobia; 2) analysing the mean level of implicit and explicit in-group bias (negative out-group evaluations); and 3) looking at the correspondence between implicit and explicit measures. Indeed, these three forms of analyses provide convenient topics by which we may divide our approach to exploring the above question. Consequently, we will review each section individually and maintain the distinction between these topics throughout our discussions. Firstly, however, as the paradigm by Mummendey et al. (2001) is fundamental to our research, we will briefly review it again here.

4.0.1 Mummendey et al's (2001) paradigm

Mummendey et al. (2001) experimentally manipulated nationalism and patriotism. Nationalism corresponded to downward inter-group comparisons (e.g., Britain is better than other countries), whereas patriotism corresponded to downward temporal comparisons (e.g., Britain is better now than 100 years ago). Both orientations, therefore, implied a positive identification with the nation constructed through biased comparison processes (a prerequisite for a positive social identity according to SIT, Tajfel & Turner, 1986). Participants completed measures of identification (emotional attachment to the group), in-group evaluation and xenophobia. Results showed that there were no mean differences in level of identification or in-group evaluation as a function of identity orientation. Importantly, the identity constructed by each frame resulted in an equally positive attachment to the group as well as an equally positive in-group evaluation. Psychologically, each construction of national identity was thus 'meaningful' for group members. Interestingly, there were also no mean differences in the level of out-group derogation; all participants were equally non-prejudiced. The study did reveal, however, that the way in which identification was constructed impacted upon the relationship between these variables. Of particular note, identification was linked to xenophobia following the 'nationalistic' identification orientation but not following the 'patriotic' identification orientation. In short, although each identity construction maintained a positive in-group attachment, the psychological associations of that group attachment were quite different.

As discussed in Chapter 1, however, we suggest that this outcome of differing psychological associations between in-group attachment and xenophobia may be a result of differences in the group context and subsequent social identity that is made salient. We draw a distinction between inter-group and group social identity. The comparisons used in identity construction represent the type of group orientation that is prevalent. Nationalism represents an inter-group orientation and patriotism a group orientation. In these contexts (inter-group and group) corresponding identity (inter-group and group) is likely to be made salient. Individuals are made aware of their group membership and the prescriptive component for group behaviour or identity expression; the group member may view the in-group as better than others (nationalism) or better than the in-group at some other time (patriotism). This approach is largely consistent with that of Mummendey et al's (2001) – the evaluative

outcome is a result of the differences in biased comparisons that construct identity. However, we transmute this approach and further contend that differences in category salience (inter-group vs. group) are an epiphenomenon of these comparison processes. They represent qualitatively distinct psychological states that shape individual's subsequent cognitions and behaviours. The ideas contained in Hinkle and Brown's model of group and group contexts (see Chapter 1, section 1.1.2.1) inform our 'social identity salience' approach.

4.0.2 The identification – in-group bias link

Does the way in which identification is constructed affect the link between identification and bias? In Chapter 1 we saw that the prediction of a positive relationship between in-group attachment and in-group bias, implied by SIT, had received variable support (see Hinkle & Brown, 1990). Consequently, Hinkle and Brown (1990) proposed a taxonomy of groups or group contexts to account for the identification – in-group bias link. The model included an individualistic-collectivist dimension and an autonomous-relational ideology/context dimension and hypothesised that the identification – bias relationship is likely to exist only for collectivist (i.e., group oriented) individuals in a relational (inter-group) context. Strong support for this model came from the research of Mummendey et al. (2001). Following the nationalism (but not patriotism) frame there was a reliable relationship between identification and xenophobia. The nationalism frame, in our view, generated an inter-group context and corresponding inter-group identity. The type of identity moderated the relationship between identification and bias. Consequently, we expect to find a stronger relationship between in-group attachment and xenophobia when an inter-group identity is made salient (i.e., under our nationalism frame) than when an group identity is made salient (i.e., under our patriotic frame).

We also suggest that there may be a stronger link between identification and implicit bias under a nationalism frame than patriotism frame. When reviewing the relationship between implicit and explicit measures in Chapter 2 (section 2.3.3) we highlighted the importance of both measures activating the same memory contents and processes (e.g., Neumann & Seibt, 2001). Simply, we argued that, in general, an inter-group identity is likely to be accessible on explicit measures but not on implicit measures. We contended that the nationalism frame should make a corresponding

inter-group identity accessible on implicit measures and thus the same process (i.e., responses in terms of inter-group identity) should be accessible on both measures and we should obtain IEC. We suggest that this logic may have import here. To the extent that the nationalism frame makes the same processes operable on implicit measures and thus it is measuring the 'same type of bias' as explicit measures, we should observe a link between identification and implicit bias.

4.0.3 Mean differences in explicit and implicit in-group bias

Does the way in which identification is constructed impact on the level of explicit prejudice? As we reported above, an interesting finding from the Mummendey et al. (2001) research was that there were no mean differences in the level of xenophobia displayed by participants as a function of the type of identity orientation (on average all participants tended to report low levels of prejudice). No differences in level of explicit bias in the identity frames may have arisen because participant's responses were constrained by social desirability factors. Social norms of egalitarianism may exist (especially for student samples) which may suppress any variance in self-reported prejudice. Prejudice may be manifesting itself in more covert forms and only be displayed on measures that obviate social desirability constraints. This position is consistent with contemporary models of prejudice (e.g., Devine, 1989; Gaertner & Dovidio, 1986; McConahay, 1986; Pettigrew & Meertens, 1995). Consequently, we do not expect there to be any differences in level of explicit bias as a function of type of identity.

Does the way in which identification is constructed impact on the level of implicit prejudice? In Chapter 2 (section 2.4.2) we predicted that the way in which national identification is constructed should moderate implicit bias. Previous research has shown that implicit bias is malleable (e.g., Blair, 2002). Dambrun and Guimond (2004) showed that favourable inter-group comparisons resulted in higher implicit out-group derogation than in conditions in which favourable inter-group comparisons were absent. Given the nature of nationalism, positive in-group identification at the expense of out-groups, we expect more negative out-group evaluations following the nationalism than patriotism frame. We expect to find these differences on implicit measures because they obviate social desirability concerns.

4.0.4 Correspondence between implicit and explicit measures

Does the way in which identification is constructed impact on IEC? Another strain of research within the implicit in-group bias literature explores whether there exists correspondence between implicit and explicit measures. With much variability in the magnitude of correspondence (e.g., Devine, 1989; Wittenbrink et al. 1997, 2001b) some researchers have argued that it would be more fruitful to explore moderators of this relationship (e.g., Blair, 2001; Fazio & Olsen, 2003). In Chapter 2 we suggested that social identity salience might be one such moderator. Previous research asserted the importance of implicit and explicit measures tapping into the same processes (e.g., Neumann & Seibt, 2001; Wittenbrink et al. 2001a). We advanced the idea that explicit measures define an inter-group context and are, therefore, always likely to be responded to in terms of a salient inter-group identity irrespective of any prior priming experience. Implicit measures, on the other hand are unlikely to make an inter-group context (and thus inter-group identity) accessible. Therefore, implicit and explicit measures are responded to in terms of different processes. When a 'nationalistic' (inter-group) identity is made salient, that identity should affect responses on implicit measures and, therefore, both implicit and explicit measures should be responded to in terms of the prevailing inter-group identity. Consequently, we should observe a positive relationship between implicit and explicit measures. When a 'patriotic' identity is made salient, however, implicit measures will likely be responded to in terms of a group identity but explicit measures may be responded to in terms of an inter-group identity; the different identity processes are unlikely to result in correspondence between the implicit and explicit measures of in-group bias.

4.1 Study 2

As mentioned above, in order to examine whether type of national identification will impact on implicit and explicit in-group bias we will employ the paradigm of Mummendey et al. (2001). We will use a British – German inter-group context because there are likely to be clear pre-existing mental representations for both these categories given their historical relationship. To measure implicit bias we will use a sequential priming paradigm, in the form of an LDT. Because we want to be certain

to measure the strength of mental association between the category and the stereotypic evaluation (i.e., valenced in- and out-group traits) we will employ category labels as primes. We decided not to use picture primes (i.e., exemplars of categories), as they may not activate the social category in all individuals to the same degree (Neumann & Seibt, 2001). Furthermore, some exemplars may be more prototypical of a category than others and may automatically activate greater negative out-group evaluations than less prototypical exemplars (e.g., Livingston & Brewer, 2002). We may invest greater confidence in the validity of this variant of an LDT. Moreover, it is possible to calculate a number of indices of negative in-group bias that capture various differences in response to the positive and negative components of the in- and out-group categories. These indices may be correlated with explicit indices of bias (see Wittenbrink et al. 1997).

Sequential priming in the form of an LDT has been shown to capture unintended race evaluations (e.g., Wittenbrink et al. 1997, 2001a, 2001b). No studies, to our knowledge, have employed an LDT to explore implicit national evaluations. It was the aim of Study 2a to establish such an implicit measure. Only once we had a reliable measure (in the sense that it revealed unintended evaluations) could we examine the impact of national identification on implicit and explicit inter-group evaluations.

4.1.1 Study 2a (Pilot study): Establishing an Implicit Measure of Inter-group Evaluations

4.1.1.1 Method

4.1.1.1.1 Participants & design

Thirty-one, British undergraduate psychology students participated in partial fulfilment of their course requirements. All participants were entered into a draw to win £25 for their participation. Three independent variables were fully crossed in a 2 (prime: German, British) x 3 (stereotypic Trait Word: German, British, neutral) x 2 (valence: positive, negative) repeated measures design.

4.1.1.1.2 Materials & procedure

Participants arrived at the laboratory individually. They were told that they would be taking part in a study on 'distracted word recognition,' and that we were interested in how well they could recognise words and non-words following distracter stimuli. Participants completed a lexical decision task (LDT). They were presented with a series of computer-based trials. On each trial they first saw a fixation point, followed by a brief presentation of a 'distracter' word that was then followed by a target letter-string. Participants were instructed to ignore the briefly presented 'distracter' and to judge whether the following letter-string spelled a word or a non-word. Responses were made using the 'M' and 'Z' keys. To compensate for faster responses occurring due to the use of participants' dominant hand the response keys were counterbalanced. For half the participants the 'M' key was pressed when the letter-string spelled an existing word and the 'Z' key when the letter-string spelled a non-word. For the other half of the participants the response keys were switched. Participants were asked to respond as quickly and accurately as they could.

Presentation of the experimental stimuli and data collection (reaction times and errors) was controlled by SuperLab Pro (Cedrus Corporation, 1997) on an RM Innovator, Microsoft Windows 2000 computer, equipped with 17-inch monitor with a screen refresh rate of 70 Hz. The monitor was set to a resolution of 1024 X 768 pixels. All stimuli were presented in uppercase, in the centre of the screen, in bold, 40 point Arial font.

Each trial of the 'word recognition task' started with a fixation point (+) in the centre of the computer screen. The fixation point appeared for 500 ms and was immediately followed by the category prime (BRITISH or GERMAN). After 250 ms, the prime was replaced by a blank screen, which remained for 50 ms before the onset of the letter-string. Thus, the stimulus onset asynchrony (SOA), the interval between onset of the word prime and onset of the letter-string, was 300 ms. Immediately following the blank screen the letter string appeared, which remained until participants gave their response. Lastly, there was an inter-stimulus interval of 2000 ms.

Trait word stereotypicality was established through pilot testing. Participants had to either rate how characteristic a list of traits were of British people or how

characteristic they were of German people. Traits that were more characteristic of German (than British) or British (than German) people were selected (all ts > +/- 2.15). The traits were matched on valence and each trait category (e.g., negative British traits, positive German traits, etc.) was matched for word length, so that the mean word length for each category was comparable. This selection of traits culminated in 4 positive German stereotypic traits (punctual, methodical, organised, efficient), 4 negative German traits (extremist, unemotional, boring, overbearing), 4 positive British traits (humorous, sociable, sympathetic, outgoing), 4 negative British traits (lazy, materialistic, gullible, alcoholic), 4 positive neutral traits (refreshing, marvellous, graceful, wild) and 4 negative neutral traits (horrible, unbearable, unclean, childish). Pronounceable non-words were constructed by substituting corresponding consonants and vowels from the 'word' stimuli (e.g., 'lazy' = 'vifk'). This was done for every 'word' to establish an equal number of corresponding 'non-words'[1].

The GERMAN and BRITISH primes appeared before each stereotypic trait word and non-word, resulting in a total of 96 experimental trials that were randomly presented for each participant. Furthermore, 20 practice trials (10 noun words and 10 non-words) were presented with a neutral prime, 'XXXXXXX', and immediately preceded the experimental task. The neutral prime, rather than no prime, was included to keep the phenomenological experience of the practice trials comparable to experimental trials. The practice trials were randomly presented for each participant.

4.1.1.2 Results and Discussion

Firstly, all errors in lexical decision were recoded as missing. This resulted in an exclusion of 53 individual latencies. Response latencies are typically characterised by positive skew and the prevalence of outliers (Bargh & Chartrand, 2000). To account for this the remaining response latencies from the LDT faster than 300 ms and slower than 1500 ms were recoded as missing values. This resulted in an exclusion of an additional 66 individual latencies. Therefore, in total, 4% of the individual latencies were excluded from analyses, an exclusion rate similar to that of other researchers

[1] Non-words obviously did not vary in valence. The design merely included an equal number of non-word letter-strings to keep the task meaningful (e.g., Wittenbrink et al., 1997). Furthermore, these items were not included in analyses.

(e.g., Wittenbrink et al. 2001a). Parenthetically, it is worthwhile noting that both errors and reaction time outliers were randomly distributed across all 'word' letter-strings, suggesting that no particular words were problematic to judge. Additionally, to correct the positive skew, logarithmic transformations were performed. Results of transformed and untransformed data were comparable and therefore, for ease of interpretation, the untransformed millisecond values are reported.

To examine the extent to which the two group primes affected responses to the positive and negative stereotypic and neutral trait words, a 2 (prime) x 3 (stereotypic trait word) x 2 (valence) repeated measures analysis of variance (ANOVA) was performed (see Table 4.1(a) for means and standard deviations). The only effect of note was a theoretically intriguing marginal prime x valence interaction, $F(1, 30) = 2.71$, $p < .11$. We decomposed this interaction by examining the simple effects of the category prime within positive and negative traits. The analysis examined whether there were any relative in-group favouring or out-group derogating tendencies (e.g., in-group favouritism would be indicated by shorter response latencies for positive traits following a British prime than following a German prime whereas out-group derogation would be indicated by shorter response latencies for negative traits following a German prime than following a British prime). Results showed that although there was no significant difference in participant's response latencies for negative words following a German ($M = 642$, $SD = 91$) or British ($M = 642$, $SD = 102$) prime, $F(1, 30) = .002$, n.s., there was a marginally significant difference in response latencies for positive words following a British ($M = 617$, $SD = 100$) than a German ($M = 640$, $SD = 94$) prime, $F(1, 30) = 4.04$, $p < .06$. Participants displayed a tendency to favour the in-group relative to the out-group. This in-group favouritism effect is consistent with past research (e.g., Perdue et al. 1990).

This paradigm proved generally successful in capturing implicit evaluations, it did appear to be tapping into differences in strength of mental association between the categories and their evaluation. Nevertheless, the marginality of the global prime x valence interaction and the simple effects was disappointing. We wanted to be confident that the measure would reveal reliable differences in strength of mental associations. Only following such demonstrations would we deem it plausible to use this measure in subsequent studies. Because the paradigm appeared to be working we speculated that reliable effects did not emerge because either the sample size was too small or the valence of the trait words were not distinct enough. Previous studies

have used smaller or similar sized samples and still found effects (e.g., Perdue et al. 1990). Therefore, the marginality of effects may have arisen due to 'statistical noise' created by trait words that were not clearly positive or negative. To examine this we re-ran the above analysis using only the most extremely positive and negative trait words.

Table 4.1. Mean Response Latencies (ms) and Standard Deviations as a Function of Prime, Valence and Stereotypic Trait Word For (a) All Stimuli and (b) Stimuli With Most Extreme Valence (Study 2a)

	Prime type											
	GERMAN						BRITISH					
	Stereotypic trait-words						Stereotypic trait-words					
	German		Neutral		British		German		Neutral		British	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
(a) All Word Stimuli (N = 31)												
+	**659**	93	**637**	133	**624**	119	**636**	119	**611**	128	**605**	106
-	**660**	123	**632**	112	**633**	97	**636**	133	**629**	119	**662**	123
(b) Most Extreme Positive & Negative Word Stimuli (N = 31)												
+	**656**	108	**654**	127	**641**	132	**615**	99	**628**	129	**616**	118
-	**670**	131	**614**	135	**604**	87	**634**	152	**621**	166	**648**	123

The selection of these traits was made after re-analysing results of earlier pilot testing. Word valence had been rated on a 7 point scale were 1 = undesirable trait to possess and 7 = desirable trait to possess. Extreme positive and negative trait words were selected if they had received a mean score within a 1.5 range of either pole of the scale (i.e., scores of 1 – 2.5 were extremely negative and 5.5 to 7 were extremely positive). This selection process reduced the number of trait words from 24 to 16. Equality of valence and trait distribution across cells was maintained and culminated in the final categories of: positive (punctual, organised, efficient), and negative (unemotional, extremist, boring) German stereotypic traits, positive (humorous, sympathetic, sociable) and negative (materialistic, alcoholic, lazy) British stereotypic traits, and positive (refreshing, marvellous) and negative (horrible, unbearable) neutral trait words. Each category retained comparable mean word length.

The effect of the category primes on response latencies was again examined in a 2 (prime) x 3 (stereotypic trait word) x 2 (valence) repeated measures ANOVA (see Table 4.1 (b) for means and standard deviations). Again, the only effect of note was a

near significant prime x valence interaction, $F(1, 30) = 3.84$, $p < .06$. Simple effects analysis examining the effects of prime within each level of valence revealed a reliable relative in-group favouritism effect, $F(1, 30) = 5.31$, $p < .03$. Participants had significantly shorter response latencies for positive words following the British ($M = 618$, $SD = 94$) than German prime ($M = 650$, $SD = 98$). As in the previous analysis, however, there was no difference between the response latencies of negative words following the British ($M = 637$, $SD = 114$) or German ($M = 631$, $SD = 89$) prime, $F(1, 30) = .18$, ns.

Refining the stimuli to include only the most extreme positive and negative stereotypic trait words improved the implicit measure. Having demonstrated that the measure captures reliable differences in strength of mental associations between categories and their evaluation, we may invest greater confidence in using the measure to examine how different identity frames affect mental associations. Study 2b was designed for this purpose.

4.1.2 Study 2b: Effects of 'Nationalistic' and 'Patriotic' Identification on Implicit and Explicit measures of Group Stereotypic Attitudes

4.1.2.1 Method

4.1.2.1.1 Participants & Design

The participants were eighty-two British students recruited from the University of Kent campus. All participants were entered into a draw to win £100. Data from three participants who did not follow experimental instructions were excluded from the analyses. This resulted in seventy-nine participants (21 male, 58 female), with a mean age of 22 years ($SD = 5$). The experimental design was a 3 (Identity frame: nationalism, patriotism, control) x 2 (prime: British, German) x 2 (valence: positive, negative) x 3 (Stereotypic trait word: British, German, Neutral) mixed design, with identity frame the only between participants factor.

4.1.2.1.2 Materials & Procedure

Participants arrived at the laboratory individually or in pairs. The experimenter explained that they would be taking part in a short study session composed of three individual studies, each for different researchers. Participants were informed that the studies were examining attitudes toward group life, performance on distracted word recognition and opinions toward foreigners in Britain. The studies were actually related and were, respectively, a manipulation of identity orientation (nationalism/ inter-group; patriotism/intra-group; no comparison), an implicit measure of prejudice and a booklet of explicit measures (i.e., measures of identification (in-group attachment) and xenophobia).

Participants were randomly assigned to one of the three identity frame conditions. We manipulated the identity frame in the same manner as Mummendey et al. (2001). Participants were asked to imagine that they had to convey a particular opinion about a target (either Britain or Students) to a third party, irrespective of whether they endorsed this opinion. In the nationalism frame participants generated reasons for why it is better to live in Britain than in another country. In the patriotism frame participants generated reasons for why it is better to live in Britain now than at some time in the last century. In the non-comparative, national identity not-salient (control) frame participants generated reasons for why it is good to be a student. Within each frame participants could generate as many as five reasons. To further reinforce the identity frame we asked participants to rate their agreement with a variety of common statements about the target of interest (i.e., Britain or Students). The content of these statements were similar across each identity frame and focused on issues of education, economic prosperity, and standards of living. For example, participants rated the extent to which they agreed with the following statement: "Education in Britain is better than in most other countries." (nationalism); "Education in Britain is better nowadays than it was in the past." (patriotism) and; "Students in full-time education are of a good standard." (Control). All responses were made on 7-point scales, 1= disagree, 7= agree.

On completion of the 'first study', participants completed the 'second study' on 'distracted word recognition'. Here, participants completed the LDT that emerged from Study 2a. Materials and procedure were identical to the modified LDT above (i.e., using only the 8 extreme positive and 8 extreme negative trait words).

After completion of this task participants completed the 'third study', a booklet of explicit measures. This booklet contained the patriotism, nationalism and xenophobia scales that were derived from our first series of studies. In conjunction with these measures participants completed an adapted national in-group attachment (identification) scale (Brown, Condor, Matthews, Wade & Williams, 1986; "I identify with the British"; "I feel strong ties to Britain and its people"; "I consider myself as belonging to the British people"; "I often regret being a British person"; "Being British is important to me"; "I would rather belong to another country than Britain"). Participants rated the extent to which they agreed with each item on 7-point scales, 1 = disagree, 7 = agree. We performed exploratory factor analysis to determine whether the xenophobia scale and the nationalism scale were non-orthogonal, as study 1d demonstrated. Principal components extraction was used along with orthogonal (varimax) rotation. Although four items with eigenvalues greater than 1 emerged, the scree-plot suggested a one-factor model (see Chapter 3 for algorithm to determine number of factors to extract). The eigenvalue of 3.84 accounted for 29.5 percent of the variance. Constrained exploratory analysis (i.e., request for one factor) supported this model. Consequently, we integrated all these items into a 13-item xenophobia scale (α = .79). We also conducted exploratory factor analysis on our two identification scales (the adapted Brown et al. 1986 version and our earlier derived 'patriotism' scale) to determine their equivalence. Unconstrained and constrained exploratory factor analysis of the items also suggested a one-factor model. The eigenvalue of 3.59 accounted for 27.64 percent of the variance. We also integrated these items into an 11-item identification scale (α = .90).

Following completion of all the 'studies' participants were asked to complete a short assessment of the study session. Participants were probed for their awareness of the intentions of the study session and their awareness of any relationship between any of the studies they had completed. None of the participants reported being aware of any relationship between the comparison frame, the LDT and the explicit questionnaire booklet or thought that the earlier tasks affected their performance on later tasks.

4.1.2.2 Results

4.1.2.2.1 Preliminary Analysis

4.1.2.2.1.1 LDT response latencies. All response latencies were treated in the same manner as in Study 2a. All errors in lexical decision were recoded as missing. This resulted in an exclusion of 107 individual latencies (2%). To remove outliers, response latencies shorter than 300 ms and longer than 1500 ms were recoded as missing values. As a result, an additional 101 individual latencies were recoded as missing (4% in total). Furthermore, we examined the frequency of missing values (the combination of errors and outliers) for each individual 'word' stimuli to determine whether participants were having difficulties in categorising the word or responding within our response limits. Particularly problematic words may create 'statistical noise'. Because so few words were contained within each of the 12 cells (maximum of 3, see modified LDT above) one word with extreme latencies had the potential to 'bias' the variable. Given the size of our sample (N = 79) we conservatively decided that words with 10 or more missing values would be considered problematic. That is, if less than 70 participants correctly categorised the word and/or fell outside of the response time limits it was deemed to be problematic. We applied the criteria to words following both BRITISH and GERMAN category primes. The trait-word 'unemotional' fell outside of our criteria (only 69 individuals had response latencies retained following the GERMAN prime and only 63 following the BRITISH prime) and so was removed from all subsequent analyses[2].

To determine whether the identity frame was having any undue influence on the number of errors on the remaining trait words, we performed a one-way ANOVA with the identity frame as the independent variable. The mean number of errors did not differ between the identity frames, $F(2, 76) = .28$, ns.

To correct for positive skew, square root transformations were performed. All analyses were performed on the transformed data but for ease of interpretation the means we report in the text and tables have been retransformed back into the millisecond metric[3] (although note that the correlations reported are from the untransformed data). The mean response latencies involving comparison frame, group prime, item valence and item stereotypicality can be seen in Table 4.2.

[2] Analyses were also performed including the trait word 'unemotional'. Results of correlational, moderator and mean difference analyses were similar to analyses with the trait word removed.
[3] Analyses performed on both the transformed and untransformed data yielded very similar results.

Table 4.2. Mean Response Latencies (ms) and Standard Deviations as a Function of Identity Frame, Prime, Valence and Stereotypic Trait Word (Study 2b).

Nationalism Frame (N = 27)

	Prime type											
	GERMAN						BRITISH					
	Stereotypic trait-words						Stereotypic trait-words					
	German		Neutral		British		German		Neutral		British	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
+	**759**	180	**721**	207	**677**	153	**674**	147	**718**	159	**716**	192
-	**695**	185	**679**	161	**694**	139	**711**	161	**634**	103	**684**	116

Patriotism frame (N = 24)

	Prime type											
	GERMAN						BRITISH					
	Stereotypic trait-words						Stereotypic trait-words					
	German		Neutral		British		German		Neutral		British	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
+	**674**	154	**681**	179	**677**	167	**637**	175	**659**	151	**641**	148
-	**742**	207	**708**	217	**683**	141	**651**	161	**665**	183	**710**	154

Control frame (N = 26)

	Prime type											
	GERMAN						BRITISH					
	Stereotypic trait-words						Stereotypic trait-words					
	German		Neutral		British		German		Neutral		British	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
+	**691**	177	**731**	205	**673**	162	**685**	170	**664**	135	**639**	122
-	**666**	180	**657**	168	**688**	184	**644**	162	**704**	228	**661**	129

Note: + = Positive item valence, - = Negative item valence.

4.1.2.2.1.2 Implicit prejudice indices. A series of single degree of freedom within-participants contrasts were computed in line with Wittenbrink et al. (1997, 2001a; see Table 4.3). These contrasts resulted in a single score for each participant capturing the level of implicit prejudice represented by that particular contrast. Each contrast

was computed so that higher scores indicated more implicit prejudice[4]. Contrast I represented Wittenbrink et al's (2001a) operationalisation of stereotypic prejudice (what Wittenbrink et al. 1997, termed implicit prejudice). We computed this index by subtracting the sum of the response latencies for the negative German stereotypic items following the GERMAN prime and the positive British stereotypic items following the BRITISH prime from the sum of the response latencies for the positive German stereotypic items following the German prime and the negative British stereotypic items following the British prime. Higher scores on this index indicated a greater implicit association between GERMAN and the negative German stereotype, as well as a greater association between BRITISH and the positive British stereotype.

Table 4.3. Contrast Weights (Study 2b and 3)

Contrast	Prime type					
	OUT-GROUP			BRITISH		
	O	N	B	O	N	B
I. Stereotypic Prejudice						
Positive	-1	0	0	0	0	+1
Negative	+1	0	0	0	0	-1
II. Out-group Derogation						
Positive	-1	0	0	0	0	0
Negative	+1	0	0	0	0	0
III. Generalised Prejudice						
Positive	-1	-1	-1	+1	+1	+1
Negative	+1	+1	+1	-1	-1	-1

Note: O = trait words stereotypic of out-group; N = neutral trait words; B = trait words stereotypic of the British. In Study 2b out-group = German, in Study 3 out-group = American.

Contrast II captured a separate component of the stereotypic prejudice contrast, out-group derogation. This index was computed by subtracting the response latencies for the negative stereotypic German trait words away from the positive German stereotypic trait words, both following the GERMAN prime. Higher scores indicated a greater mental association between GERMAN and the negative German stereotype. Contrast III represented what Wittenbrink et al. (2001a) termed generalised prejudice

[4] The contrast scores within each identity frame may not exactly match with the corresponding means presented in Table 4.2. This is because some individuals had missing data for the overall analysis (and so were excluded) but had the necessary data for computing components of the overall analysis represented by the contrasts.

and examined whether prejudice generalised across item stereotypicality. We computed this contrast by subtracting the aggregated latencies for all positive items following the BRITISH prime and all negative items following the GERMAN prime from the sum of the latencies for negative items following the BRITISH prime and the positive items following the GERMAN prime. Higher scores on this index indicated a greater mental association between GERMAN and negative traits, as well as BRITISH and positive traits.

4.1.2.2.2 Main Analyses

4.1.2.2.2.1 The link between identification and implicit and explicit out-group evaluations. To examine the relationship between identification and implicit (contrast scores) and explicit (xenophobia) out-group evaluations a series of zero-order correlations were computed as a function of identity frame (see Table 4.4). The top half of Table 4.4 displays the relationships between the explicit measures of identification and xenophobia. Identification and xenophobia were not reliably related under any of the identity frames, all ps > .28. The bottom half of Table 4.4 shows the relationship between identification and the implicit indices. None of the relationships were reliable, all ps > .14.

Table 4.4. Correlations Between Implicit and Explicit Measures as a Function of Identity Frame (Study 2b).

	Identity Frame					
	Nationalism (N = 27 - 28)		Patriotism (N = 24 - 25)		Control (N = 26)	
Explicit Measures	1	2	1	2	1	2
1. Identification	--		--		--	
2. Xenophobia	.04	--	-.08	--	.22	--
Implicit Measures						
Stereotypic Prejudice	-.21	.37*	.01	-.07	.30	.33•
Out-Group Derogation	-.18	.50**	.03	-.23	.19	.22
Generalised Prejudice	-.21	.44*	.23	-.12	.18	.28

Note: •p < .10, *p < .05, **p < .01 (two tailed, although correlations between implicit and explicit measures under the nationalism frame are one-tailed).

4.1.2.2.2.2 Explicit in-group bias (xenophobia) and identification. To determine whether the mean level of identification and xenophobia differed as a function of

identity frame we ran a one-way ANOVA with identity frame as the independent variable (see top half of Table 4.5 for means and standard deviations). Identification and xenophobia did not differ as a function of identity frame (Fs < 2.27, ps > .11).

Table 4.5. Means and Standard Deviations for Explicit and Implicit Measures as a Function of Identity Frame (Study 2b)

	Identity Orientation					
	Nationalism (N = 27-28)		Patriotism (N = 24-25)		Control (N = 26)	
Explicit Measure	M	SD	M	SD	M	SD
Identification	**4.95**	1.05	**4.94**	.92	**5.09**	1.12
Xenophobia	**3.40**	.52	**3.57**	.58	**3.72**	.59
Implicit Measure (ms)						
Stereotypic Prejudice	**43**	283	**12**	283	**46**	151
Out-group Derogation	**65**	179	**-77**	182	**24**	109
Generalised Prejudice	**9**	462	**-11**	640	**103**	381

4.1.2.2.2.3 Malleability of implicit in-group bias. To determine whether there were mean differences in implicit in-group bias due to the type of salient national identity we ran a 3 (identity frame) x 2 (prime) x 2 (valence) x 3 (stereotypic trait word) mixed model ANOVA on the response latency data, with the identity frame the only between participants factor. The only theoretically intriguing, reliable effect to emerge was the global four-way interaction, F (4, 148) = 2.91, p < .03 (see Table 4.2. for means). To decompose this interaction and pinpoint the specific implicit prejudice effects we examined the effects of the identity frame on the implicit prejudice indices (see bottom half of Table 4.5 for means and standard deviations).

Firstly, for each of the indices we conducted single sample t-tests to determine whether any of the contrasts were significantly different from zero (no prejudice). This was done within each of the identity frames. Results showed that following the nationalism frame only the out-group derogation contrast (M = 65, SD = 179) was marginally different from zero t (27) =1.92, p < .07, all other ts < +/- .80, all other ps > .43. When a 'patriotic' identity was salient, only the out-group derogation contrast was significantly different from zero (M = -77, SD = 182), t (24) = –2.12, p < .05, all other ts < +/- .22, all other ps > .83. The negative mean value, however, implied that participants had stronger mental associations between GERMAN and the positive German stereotype than the negative German stereotype, unlike the form displayed in

the nationalism frame. Under the control frame no contrasts were reliable, ts < +/- 1.55, ps > .13.

Secondly, to examine whether the contrasts differed as a function of type of national identity, they were subject to a one-way ANOVA, with identity frame as the independent variable. Only the out-group derogation contrast significantly differed as a function of type of identity frame, $F(2, 76) = 5.43$, $p < .01$. Multiple comparisons between identity frames revealed that there was reliably more implicit out-group derogation following the nationalism frame ($M = 65$, $SD = 179$), $p < .01$, and marginally greater out-group derogation under the control frame ($M = 24$, $SD = 109$), $p < .07$, than following the patriotism frame ($M = -77$, $SD = 182$). Participant's level of out-group derogation did not reliably differ between the nationalism and control frames, $p > .60$.

4.1.2.2.2.4 Identity frame and the relationship between implicit and explicit in-group bias. To examine the IEC between implicit and explicit in-group bias we computed a series of zero-order correlations within each of the identity frames (see bottom half of Table 4.4). In general, reliable IEC emerged only under the nationalism frame. To test whether the identity frame moderated the correspondence between xenophobia and the implicit prejudice indices a series of multiple regression analyses were performed. For this purpose the identity frame variable was coded as two contrast variables (see Cohen & Cohen, 1983) to capture the main contrast of interest (comparison of nationalism versus patriotism frames) and the only other orthogonal contrast (of less theoretical concern). The first (Contrast 1) was represented by the following weights: Nationalism (+1), Patriotism (-1), and Control (0). The second (Contrast 2) was represented by the following contrast weights: Nationalism (-1), Patriotism (-1) and Control (+2). The two (regression) contrast variables and the participant's implicit contrast scores were entered into the first step of the regression analysis; in the second step the interaction terms, formed by the product of the implicit prejudice contrasts and each of the (regression) contrast variables, were entered (thus the analysis examined the independent effects of each contrast, controlling for the effects of the other contrast). The dependent variable was participant's scores on the xenophobia scale. As recommended by Cohen, Cohen, West and Aitken (2003), the implicit prejudice and xenophobia variables were standardised prior to analysis.

Results of the three regression analyses can be seen in Table 4.6. The interactions between Contrast 1 and out-group derogation and generalised prejudice were the only effects of note. These effects indicated that the relationships between xenophobia and both the implicit in-group bias contrasts significantly differed in the nationalism and patriotism frames. The bivariate correlations in the bottom half of Table 4.4 illustrate that the relationship between xenophobia and out-group derogation was stronger under the nationalism than patriotism frame ($z = 2.67$, $p < .005$; 1-tailed) and that the relationship between xenophobia and generalised prejudice was stronger following the nationalism than patriotism identity frame ($z = 1.98$, $p = .01$; 1-tailed).

Table 4.6. Identity Frame x Implicit Prejudice Regressed onto Xenophobia (Study 2b).

	Regression Contrast			
Implicit Measure	Contrast 1 (+1, -1, 0)		Contrast 2 (-1, -1, +2)	
	β	t	β	t
Stereotypic Prejudice (N = 79)	.17	1.51	.17	1.31
Out-Group Derogation (N= 79)	.29	2.58*	.10	.75
Generalised Prejudice (N = 77)	.23	2.06*	.09	.74

Note: *p < .05. Contrast weights = (nationalism, patriotism, control).

4.1.2.3 Discussion

Study 2b examined the effects of differing national identity constructions, nationalism and patriotism, on implicit and explicit inter-group evaluations. In this regard we manipulated biased inter- and intra-group comparisons to establish a positive social identity. Although we used no measure of in-group evaluation, as in the Mummendey et al. (2001) research, we assume that both types of national identification were psychologically meaningful. The (equally) high levels of in-group identification within each of the identity orientations attest to the 'importance of group attachment'. Although each form of national identification was equally important the psychological associations with out-group evaluations were quite distinct. Of particular note, only when identification was constructed in terms of nationalism did we find implicit out-group derogation. Furthermore, this level of out-group derogation was much greater than that following a patriotism frame. Interestingly, here, participants tended to display greater mental associations with the positive aspects of the German stereotype. In other words the patriotism frame resulted in implicit out-group

favouritism. In addition, we also found that there was greater correspondence between implicit and explicit measures following the nationalism than patriotism identity frame.

4.1.2.3.1 Identity – in-group bias link

Although no reliable relationships between identification and xenophobia or implicit in-group bias emerged, the mean differences in implicit bias still speak to this relationship. The results provide some general support for Hinkle & Brown's (1990) model. Although their model did not make speculations about implicit bias, to the extent that it is the 'same sort of bias' as explicit bias (in that it is an expression of a salient inter-group identity) we believe that the scope of the model encompasses these processes. We showed that identification was expressed through negative out-group evaluations only under an inter-group frame (a relational ideology, in Hinkle & Brown's terms). Furthermore, results suggest that identity need not be maintained only through inter-group comparisons. Temporal (intra-group) comparisons may also be effective and appear to lead to more favourable implicit out-group evaluations. However, the importance or utility of an intra-group identity has been criticised (e.g., Hopkins, 2001; McGarty, 2001). The burden of the criticism maintains that temporal comparisons do not provide meaningful or relevant dimensions for comparison, in which identity may be constructed or maintained. If temporal comparisons are not meaningful then it is necessary to explain why there was equally high attachment to the in-group following temporal and inter-group comparisons. Furthermore, recent research has shown that in naturalistic settings individuals do use intra-group comparisons to maintain a positive social identity (e.g., Brown & Haeger, 1999; Brown & Middendorf, 1996; Zagefka & Brown, 2005).

4.1.2.3.2 Malleability of Implicit in-group bias

Differing levels of out-group derogation following the identity frames support the idea that implicit bias is malleable (Blair, 2002) and not an inevitable consequence of category activation (e.g., Allport, 1954, Devine, 1989). The type of identity that is salient in corresponding group contexts (inter- vs. intra-group) has differential impact on category evaluation. We believe that these results are largely consistent with

research demonstrating that group context moderates the activation of implicit bias (e.g., Mitchell et al. 2003; Pratto & Shih, 2000; Richeson & Nussbaum, 2004; Wittenbrink et al. 2001b). Our national identity frames changed the meaning of category labels and the consequent unintended evaluation. In the same way that presenting Blacks in a positive or negative stereotypic context increased positive or negative evaluations respectively (Wittenbrink et al. 2001b), the identity frames made accessible differing information about group relations. The nationalism frame presented a situation of relative privilege, through biased inter-group comparisons. The 'inferior' out-group was imbued with a negative evaluation. Indeed, research shows that this inter-group situation may give rise to implicit out-group derogation (Dambrun & Guimond, 2004). The patriotism frame made no reference to out-groups. There was no reason to expect the out-group to be evaluated negatively.

4.1.2.3.3 Relationship between implicit and explicit measures

Consistent with expectations, there was greater IEC following the nationalism than patriotism frame. Our measure of xenophobia was correlated with all indices of implicit prejudice (although was only reliably different from IEC under a patriotism frame for the link between xenophobia and the out-group derogation and generalised prejudice indices). Interestingly, the magnitude of all the correlations was greater than moderate and would be likely to fall at the upper end of the distribution of the sample of all published studies examining IEC. Although correlations emerged for all implicit indices it must be noted that this outcome is not so exceptional. The contrasts were <u>not</u> orthogonal, they contained shared variance – they tapped into similar facets of bias that were composed of overlapping elements (e.g., all contrasts contained a measure of the association between the out-group and a negative evaluation).

We have identified the salience of inter-group identity as a moderator of IEC and contend that a salient inter-group identity makes accessible the same processes on implicit measures as those accessible on explicit measures. This is consistent with research that has demonstrated IEC when implicit and explicit measures activate the same processes (e.g., Neumann & Seibt, 2001; Wittenbrink et al. 2001a). We suggest that explicit measures clearly define an inter-group context and are likely to be susceptible to responses in terms of inter-group social identity salience. These measures typically contain items that suggest the inferiority (superiority) of out-

groups (in-groups). Simply being exposed to the out-group is likely to raise social identity salience (e.g., Haslam et al. 1995; Wilder & Shapiro, 1984). Implicit measures, on the other hand, are, due to their very nature, unlikely to make an inter-group context accessible (and similarly unlikely to heighten the salience of inter-group identity). The nationalism frame corresponded to a relevant inter-group context (and salient inter-group social identity) that reinforced in-group superiority. This frame was likely to have accentuated the accessible inter-group context on explicit measures and also made the same group context available on implicit measures (the assumed operation of inter-group social identity mechanisms on explicit measures – responses that reinforce relative in-group superiority – was also likely engaged on implicit measures). When implicit and explicit measures were completed under a 'patriotic' frame we found no IEC. There may have been an accessible inter-group context on explicit measures (and participants may have complete these in terms of inter-group identity) but there was unlikely to be a salient inter-group context on implicit measures, instead implicit measures were likely completed in line with a salient group identity.

An alternative explanation exists that may be able to explain the pattern of IEC we observed. As we saw in Chapter 2 (section 2.3.3.3), Fazio and Olson (2003) argued that patterns of IEC may be attributable to the degree of motivation and opportunity respondents have to control explicit prejudice. Only in conditions when there is no opportunity or motivation to control prejudice should we see IEC. Consequently, it may be argued that the nationalism relative to the patriotism frame decreased self-presentation demands for completion of explicit measures. This alternative approach to understanding IEC, however, may not account for the pattern we observed. If it were to hold true, that the nationalism frame reduced self-presentation demands, then we would expect to find greater mean levels of xenophobia under the nationalism frame. As we reported above, levels of xenophobia did not differ across identification frames.

4.1.2.3.4 Limitations

Even though we have suggested that the observed effects resulted from a salient inter-group identity, this interpretation may be called into question. It is possible that the results are merely an artefact of a between stimulus comparison. We confound inter-

group identity with favourable inter-group comparisons. It may be the case that the favourable outcome on a between stimulus comparison is sufficient to activate a 'mindset' from which this accessible information is used to interpret and respond to subsequent stimuli (e.g., group evaluations), independent of categorisation at the inter-group level. Simply having respondents generate reasons for why 'X' (e.g., apples) is better than 'Y' (e.g., oranges) might lead to an equivalent array of evaluative outcomes. The proposition that this is a potential flaw to the study is a little tentative, however. It would be necessary to explain how our British respondents displayed differential strengths in mental association between the in- and out-group categories and their evaluations, if the were not acting at the group level. How could the "X is better than Y" relation have been transmuted to British is better than German, without being 'aware' of the inter-group context? Having participants engage in inter-group comparisons or not has been an effective way to manipulate social identity in past research (see Haslam, 2001). Nevertheless, to provide more compelling evidence that the results are a function of inter-group identity it will be necessary to construct another condition in which participants engage in an inter-stimulus comparison not involving group labels. It may be particularly interesting to make this condition an inter-personal comparison. Here, we should be manipulating different levels of identity, inter-group and inter-personal. If results emerge as a function of comparison alone then we would expect to find similar level of bias across these conditions. However, greater bias in inter-group evaluations following inter-group than inter-personal comparisons would provide strong evidence that it was a salient inter-group identity that moderated the effects.

It may also be contended that the use of 'German' as an out-group may not have been the best choice. We found that there was no difference in implicit bias (out-group derogation) between the nationalism and control frames. Similarly, in the control frame, an index of IEC (involving the stereotypic prejudice contrast) was marginally significant and was almost as strong as the corresponding correlation in the nationalism frame. These equivalently 'strong' results may have emerged because the German out-group may chronically be a relational identity. There has been much history between Britain and Germany (particularly negative) and this "we are better than you" orientation may already be a heavily engrained default for our sample. In fact this study was conducted immediately following England's 5 – 1 victory over Germany in the football World Cup 2002 qualifier match. It may be more fruitful to

employ an alternative out-group for which there exists a less 'antagonist' history. Furthermore, use of an alternative out-group will enable us to test the generality of effects observed in the present study.

A final limitation to the study was that we were unable to really identify what was happening on the implicit measures in the identity frames. Did the nationalism frame facilitate responses to negative stereotypic out-group words relative to the patriotism frame, or did the patriotism frame inhibit these responses relative to the nationalism frame? As we had no baseline of responses to the word stimuli on the LDT we are unable to, with any certainty, pinpoint the locus of effects on mental associations between the categories and their stereotypic evaluation.

4.2 Summary

In this chapter we experimentally manipulated nationalism and patriotism and examined how these different constructions of national identification affected implicit and explicit in-group bias, including the relationship between these types of measures. The way in which identification was constructed affected unintended out-group evaluations. Results showed that a nationalism (versus patriotism) frame led to greater levels of implicit bias. Identity frame did not affect levels of explicit in-group bias. The way in which identification was constructed affected IEC. There was greater IEC following an inter-group versus intra-group frame. We identified a number of limitations to this study, the most crucial of which suggested that we might have confounded an inter-group identity with favourable inter-group comparisons. These limitations will be addressed in our next study.

Chapter 5

In-group Bias as a Function of Salient Inter-group Identity: Contrasting Inter-group From Inter-personal Identity

5.0 Introduction

In the previous chapter, Study 2b revealed two main findings. Firstly, participants displayed greater implicit out-group derogation following the nationalism than patriotism identity orientation. Secondly, the identity frame moderated the relationship between implicit and explicit measures of in-group bias. There was greater positive IEC following the nationalism than patriotism frame. We suggested that these findings were a result of the salient, "we're better than you", inter-group identity. When identification was constructed in terms of nationalism, a positive attachment to the nation was achieved at the expense of negative (implicit) out-group evaluations. Furthermore, it was likely that these ('nationalistic') identity processes were operable on explicit measures and so when the same (inter-group) identity processes were made accessible on implicit measures, in-group bias was likely to be responded to in the same manner. This resulted in the pattern of greater positive IEC under the nationalism (than patriotism) frame.

These results notwithstanding, in Chapter 4 we advanced that our findings may have been an artefact of biased inter-stimuli comparisons and not a result of inter-group ('nationalistic') identity. We conflated biased inter-group comparisons with inter-group identity. It was suggested that in order to disentangle this confound we construct equivalent biased inter-stimuli comparisons to make accessible inter-personal identity. This may provide an adequate comparison standard to establish whether, following a 'nationalistic' orientation, participants were actually operating under an accessible inter-group identity or whether between-stimuli comparisons were sufficient to result in the observed pattern of results. To the extent that there may be differing patterns of effects on inter-group evaluations following the nationalism and inter-personal identity frames (and that the effects following the nationalism frame may be similar to those observed in the previous study), we may retain some confidence that responses are a function of a salient inter-group identity.

Theoretically, one should expect there to be different identity processes made accessible following biased inter-group and inter-personal comparisons. The different comparisons may represent types of inter-group versus inter-personal behaviour. As we saw in Chapter 1, Tajfel (1978) proposed an inter-personal – inter-group continuum to explain people's cognitions and behaviours. Tajfel suggested that at the inter-personal extreme, any social encounter that takes place is determined by the personal relationships between the individuals and their individual characteristics (i.e., idiosyncratic personal qualities are the causal influence of cognition and behaviour). At the inter-group extreme, all of the behaviour of two or more individuals is determined by their group membership (to the exclusion of individual characteristics and inter-personal relationships). Tajfel's (1978) continuum was further developed by Turner (1982) who hypothesised that an individual's self-concept could itself be defined along a continuum ranging from definition in terms of inter-personal identity to definition in terms of inter-group identity. He proposed that the functioning of the self-concept is the cognitive mechanism that underpinned Tajfel's (1978) continuum. Thus, inter-personal behaviour is associated with a salient personal identity and inter-group behaviour with a salient social (inter-group) identity. The inter-personal-inter-group continuum was later adapted in self-categorisation theory (Turner et al. 1987) and the self-concept was seen as representing different levels of category inclusiveness rather than inversely related constructs, as articulated in the continuum models. Nevertheless, the distinction between personal and social identity tied to inter-personal and inter-group behaviour was still retained. Furthermore, research has shown that the type of identity that is salient affects the role of personality and group-based factors (e.g., in-group stereotypes) in predicting prejudice. Under conditions of a salient inter-personal identity personality-based but not group-based factors predict prejudice. However, under conditions of a salient (inter-group) social identity group-based but not personality-based factors predict prejudice (e.g., Reynolds, Turner, Haslam & Ryan, 2001; Verkuyten & Hagendoorn, 1998).

5.1 Study 3: Implicit and Explicit Bias as a Function of Inter-group Identity

To examine whether the effects found in Study 2b were a function of a salient inter-group identity we employed the same paradigm as before but also introduced an inter-

personal comparison frame. We make the same hypotheses as before; that there will be a greater positive relationship between identification and in-group bias (implicit and explicit) following the nationalism than patriotism frame, that there will be greater implicit in-group bias following the nationalism than patriotism frame and that there will be greater positive IEC following the nationalism than patriotism frame. Importantly, we also expect this pattern of results to emerge between the nationalism and inter-personal identity frames.

For this study we decided to use Americans as the out-group. We wanted to provide a test of the generality and robustness of our experimental paradigm. The effects observed in the previous study arose when a historically negative out-group (i.e., Germans) was used, a group for which negative associations may have been already chronically accessible (implicated in the lack of mean difference in implicit out-group derogation between our nationalism and control frames). We wanted to establish whether similar effects as the previous study would emerge for a group that has historically been considered to be (relative to the German out-group) positive, for which there is unlikely to be such high pre-existing negative associations. Similar patterns of effects to Study 2 would indicate the robustness and generality of our paradigm.

5.1.1 Method

5.1.1.1 Participants & Design

One hundred, University of Kent students were recruited to take part in the study. Participants completed the study in partial fulfilment of course requirements. Data from 9 participants (5 who were non-British, 4 who did not follow experimental instructions) were excluded from the analyses. This resulted in 91 British participants (15 male, 76 female), with a mean age of 21 years (SD = 5). The experimental design was a 4 (identity frame) x 2 (prime) x 2 (valence) x 3 (Stereotypic trait word) mixed design, with identity frame the only between participants factor.

5.1.1.2 Materials & Procedure

Materials and procedure closely followed that of Study 2a. Participants completed the initial identity orientation phase, the implicit measure of prejudice (LDT) and a booklet of explicit measures. The main difference in this study, however, was the inclusion of the inter-personal identity orientation. Here, participants had to generate reasons for why they were a better student than an imagined fellow student. The frame was reinforced by having participants indicate their agreement with a variety of statements about education, economic prosperity and standards of living (e.g., "I am better educated than this other person." "I have better job opportunities than this other individual.") Responses were made on a seven point scale, 1 = disagree. 7 = agree. In this way, the inter-personal and nationalism frames contained equivalent biased inter-stimulus comparisons but differed in the level of social categorisation (inter-personal vs. inter-group respectively).

The LDT followed the same procedure as beforehand although there were two main differences from the previous study. Firstly, a baseline (control) prime was included (i.e., 'XXXXXXXX') so that we could gage facilitation and inhibition scores. Secondly, traits that characterised American and British people were included. The valence and stereotypicality of the traits were established through the same form of pilot testing used in Study 2a. This resulted in positive-American (happy, bold, friendly, charismatic), negative-American (stupid, loud, obese, extravagant), positive-British (sincere, modest, polite, intelligent, negative-British (rigid, regal, conservative, restrained), positive-neutral (brilliant, marvellous, refreshing, positive), and negative-neutral (dirty, nasty, dreadful, horrible) trait adjectives. Pronounceable non-words were constructed in the same manner as before. Each word and non-word was presented following each of the primes (BRITISH, AMERICAN, XXXXXXX), which resulted in 144 experimental trials. All trials were randomly presented for each participant. Twenty practice trials were again included before the experimental task. The sequence and presentation of experimental stimuli was the same as before. However, we reduced the inter-stimulus-interval (from 2000 ms) to 1000 ms to prevent the LDT taking too long to complete (due to increased number of trials) and jeopardising the influence of the identity frame across this and subsequent tasks.

The booklet of explicit measures contained the same xenophobia and identification scales as in Study 2b. Additional items adapted from Pettigrew and Meerten's (1995) subtle ("Foreigners living here teach their children values and skills different from those required to be successful in Britain"; "I often feel admiration for foreigners living here") and blatant ("I would not mind if a suitably qualified foreigner was appointed as my boss"; "Most foreigners living here who receive support from welfare could get along without it if they tried"; "Foreigners who come to Britain should overcome prejudice and work their way up without any special favour") prejudice scales were also included in the aim of increasing the reliability of the xenophobia measure. As before, unconstrained and constrained exploratory factor analyses using principal components analysis and varimax rotation, suggested that the xenophobia and additional blatant and subtle prejudice items formed one factor. The eigenvalue of 6.36 accounted for 35.34 percent of the variance. We integrated these items into an 18-item xenophobia scale (α = .89). The 11-item identification scale also had good internal consistency (α = .91).

Following completion of all the studies participants completed the assessment of the study session, which probed for their awareness of the intentions of the study session and their awareness of any relationship between any of the studies. As before, no participants reported being aware of the actual intentions of the study session or guessed the relationship between the studies. Moreover, none of the participants thought that earlier tasks influenced their responses on subsequent tasks.

5.1.2 Results

5.1.2.1 Preliminary Analyses

5.1.2.1.1 LDT response latencies. All response latencies were treated in the same manner as in the previous study. Firstly, all errors in lexical decision were recoded as missing. This resulted in an exclusion of 431 individual latencies (3%). To reduce outliers, response latencies that were quicker than 300 ms or slower than 1500 ms were recoded as missing values. As a result, an additional 246 individual latencies were recoded as missing values (5% in total). Next, we examined the frequency of missing values (the combination of errors and outliers) for each individual 'word' stimuli. We used the same criteria as before (i.e., given N = 91, we conservatively

decided that 10 or more missing values indicated a problematic word). The trait-words 'rigid' 'regal' 'obese' and 'extravagant' fell outside of our criteria and so were removed from all subsequent analyses[1]. To determine whether the identity frame was having any undue influence on the number of errors on the remaining trait words, we performed a one-way ANOVA with the identity frame as the independent variable. The mean number of errors did not differ between the identity frames, $F(3, 87) = .01$, ns. Lastly, to correct the positive skew, square root transformations were performed. All analyses were performed on the transformed data but for ease of interpretation the means we report in the text and tables have been retransformed back into the millisecond metric[2] (although note that the correlations reported are from the untransformed data). Difference scores were computed by subtracting the response latency for an item following the BRITISH and AMERICAN prime from the latency for that same item following the baseline ('XXXXXXX') prime. More positive scores indicate that the prime has facilitated responses whereas as more negative scores indicate that the prime has inhibited responses. The mean response latency difference scores involving identity frame, group prime, item valence and item stereotypicality can be seen in Table 5.1.

5.1.2.1.2 Implicit prejudice indices. The stereotypic prejudice, out-group derogation and generalised prejudice indices were computed so that higher scores indicated greater prejudice (see Table 4.3)[3].

[1] Analyses were also performed including the trait words. All results of correlational, moderator and mean difference analyses were similar to analyses with the trait word removed.
[2] Analyses performed on both the transformed and untransformed data yielded very similar results.
[3] The contrast scores within each identity frame may not exactly match with the corresponding means presented in Table 5.1 because some individuals had missing data for the overall analysis (and so were excluded) but had the necessary data for computing components of the overall analysis represented by the contrasts.

Table 5.1. Difference Scores (ms) and Standard Deviations as a Function of Identity Frame, Prime, Valence and Stereotypic Trait Word (Study 3)

Nationalism Frame (N = 21)

	Prime type: AMERICAN — Stereotypic trait-words: American						Prime type: BRITISH — Stereotypic trait-words: American					
	Neutral		British				Neutral		British			
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
+	**47**	104	**18**	97	**-7**	118	**-22**	157	**-10**	130	**35**	85
-	**42**	130	**69**	99	**11**	348	**62**	140	**54**	126	**37**	298

Inter-personal Frame (N = 23)

	Prime type: AMERICAN — Stereotypic trait-words: American						Prime type: BRITISH — Stereotypic trait-words: American					
	Neutral		British				Neutral		British			
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
+	**3**	146	**63**	168	**26**	112	**17**	139	**38**	154	**24**	146
-	**51**	137	**5**	134	**31**	162	**40**	175	**19**	111	**-21**	116

Patriotism (N = 23)

	Prime type: AMERICAN — Stereotypic trait-words: American						Prime type: BRITISH — Stereotypic trait-words: American					
	Neutral		British				Neutral		British			
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
+	**18**	113	**-55**	120	**29**	111	**35**	136	**12**	84	**48**	129
-	**51**	179	**48**	75	**8**	188	**45**	189	**13**	105	**30**	178

Control frame (N = 22)

	Prime type: AMERICAN — Stereotypic trait-words: American						Prime type: BRITISH — Stereotypic trait-words: American					
	Neutral		British				Neutral		British			
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
+	**32**	89	**-5**	137	**84**	117	**56**	126	**44**	89	**61**	171
-	**23**	175	**31**	121	**21**	142	**64**	171	**66**	92	**59**	153

Note: + = Positive item valence, - = Negative item valence.

5.1.2.2 Main Analyses

5.1.2.2.1 The link between identification and implicit and explicit out-group evaluations. To examine the relationship between identification and implicit (contrast scores) and explicit (xenophobia) out-group evaluations a series of zero-order correlations were computed as a function of identity frame (see Table 5.2). The top half of Table 5.2 displays the relationships between the explicit measures of identification and xenophobia. Identification and xenophobia were not significantly related under any of the comparison frames (all ps > .22). The bottom half of Table 5.2 shows the relationship between identification and the implicit indices. Identification was reliably related to all indices of implicit in-group bias under a nationalism frame.

To test whether the identity frame moderated the correspondence between identification and the implicit prejudice indices we performed a series of multiple regression analyses in the same manner as in Study 2b. The identity frame variable was coded as two contrast variables to capture the main contrast of interest (comparison of inter-group identity versus non-inter-group identity; i.e., nationalism versus inter-personal identity and patriotism combined) and another orthogonal contrast (of less theoretical concern). The first (Contrast 1) was represented by the following weights: Nationalism (+2), Inter-personal (-1), Patriotism (-1), and Control (0). The second contrast (Contrast 2) was represented by the following weights: Nationalism (-1), Inter-personal (-1), Patriotism (-1) and Control (+3).

Table 5.2. Correlations Between Implicit and Explicit Measures as a Function of Identity Orientation (Study 3)

	Identity Frame							
	Nationalism (N = 21-22)		Inter-personal (N = 23)		Patriotism (N = 23-24)		Control (N = 22)	
Explicit Measures	1	2	1	2	1	2	1	2
1. Identification	--		--		--		--	
2. Xenophobia	.19	--	.27	--	.05	--	.20	--
Implicit Measures								
Stereotypic Prejudice	.45*	.48*	-.30	.16	.16	-.24	.12	.02
Out-Group Derogation	.52*	.18	-.28	.21	.20	-.15	.18	.29
Generalised Prejudice	.40*	.20	-.18	-.06	-.07	.01	.27	-.01

Note: • p< .10, *p< .05, **p< .01 (two tailed, although correlations between implicit and explicit measures under the nationalism frame are one-tailed).

The two (regression) contrast variables and the participants' implicit contrast scores were entered into the first step of the regression analysis; in the second step the interaction terms formed by the product of the implicit prejudice contrasts and each of the (regression) contrast variables were entered. The dependent variable for the separate regression analyses was participants' scores on the identification scale. The implicit and explicit measures were standardised prior to analyses. Results of the three regression analyses can be seen in Table 5.3.

Table 5.3. Identity Frame x Implicit Prejudice Regressed onto Identification (Study 3)

	Regression Contrast			
Implicit Measure	Contrast 1 (+2, -1, -1, 0)		Contrast 2 (-1, -1, -1, +3)	
	β	t	β	t
Stereotypic Prejudice (N = 89)	.20	1.90•	-.00	-.04
Out-Group Derogation (N = 90)	.28	2.47*	-.00	-.02
Generalised Prejudice (N = 89)	.25	2.09*	.06	.51

Note: •p < .10, *p < .05. Contrast weights = (nationalism, inter-personal, patriotism, control).

The interactions between Contrast 1 and the out-group derogation and generalised prejudice contrasts indicated that the correspondence between identification and these indices significantly differed in the inter-group and the non-inter-group (i.e., the combined inter-personal and patriotism) frames. Similarly, the interaction between Contrast 1 and the stereotypic prejudice index showed that there was a marginally significant difference between the inter-group and the non-inter-group frames. The bivariate correlations in the bottom half of Table 5.2 illustrate that the relationship between identification and the stereotypic prejudice index was greater following the inter-group than non-inter-group frame; $z = 2.17$, $p = .01$ (1-tailed). Similarly, the link between identification and the out-group derogation index ($z = 2.25$, $p < .01$, 1-tailed) and identification and the generalised prejudice index ($z = 1.97$, $p = .01$, 1-tailed) was greater following the inter-group than non-inter-group frame.

Additionally, we further decomposed Contrast 1 to examine whether the identification – implicit in-group bias link differed between the nationalism and inter-personal identity frames and the nationalism and patriotism frames. Table 5.2 illustrates that the relationship between identification and stereotypic prejudice was greater under the nationalism frame than the inter-personal frame ($z = 2.48$, $p < .005$, 1-tailed) and was marginally greater following the nationalism than patriotism frame

($z = 1.02$, $p = .08$, 1-tailed). Similarly, the relationship between identification and out-group derogation was greater under the nationalism than inter-personal ($z = 2.70$, $p < .005$, 1-tailed) and patriotism frame ($z = 1.18$, $p = .06$, 1-tailed) as was the relationship between identification and generalised prejudice (vs. interpersonal $z = 1.86$, $p < .05$, 1-tailed; vs. patriotism $z = 1.52$, $p < .05$, 1-tailed).

5.1.2.2.2 Explicit in-group bias (xenophobia) and identification. To determine whether the mean level of identification and xenophobia differed as a function of identity frame we ran a one-way ANOVA with identity frame as the independent variable (see top half of Table 5.4 for means and standard deviations). Identification and xenophobia did not differ as a function of comparison frame ($Fs < 1.94$, $ps > .13$).

5.1.2.2.3 Malleability of implicit in-group bias. To determine whether there were any implicit in-group bias effects as a function of identity frame we ran a 4 (identity frame) x 2 (prime) x 2 (valence) x 3 (stereotypic trait word) mixed model ANOVA on the response latency difference scores, with the identity frame the only between participants factor (see Table 5.1 for difference scores). The only effect of note was an identity frame x prime x valence x stereotypic trait word interaction, $F (6, 170) = 2.33$, $p < .04$. To decompose this interaction and pinpoint the specific implicit prejudice effects we used the same implicit prejudice indices in the above analyses (see bottom half of Table 5.4 for means and standard deviations).

For each of the implicit indices we conducted single sample t-tests to determine whether any of the contrasts were significantly different from zero (no prejudice). This was done within each of the identity frames. The only effects of note emerged in the inter-personal and patriotism frames. Firstly, under inter-personal frame, the stereotypic prejudice contrast was approaching significance. This suggested that, under this frame, participants had strong mental associations between the in-group and its positive stereotype as well as the out-group and its negative stereotype; ($M = 92$, $SD = 254$), $t (22) = 1.75$, $p < .10$. Secondly, following the patriotism frame, the generalised prejudice index was approaching significance. This suggested that, following a patriotic identity, participants had strong mental associations between the in-group and a positive evaluation and the out-group and a negative evaluation ($M = 120$, $SD = 321$), $t (22) = 1.80$, $p < .09$. None of the other

implicit prejudice contrasts reliably differed from zero following any of the identity frames (all ts < -.1.26, all ps > .22). Next, we examined whether level of implicit in-group bias differed as a function of identity frame. A one-way ANOVA revealed that none of the implicit prejudice contrasts significantly differed between identity frames (all Fs, < 2.03, all ps > .12).

Table 5.4. Means and Standard Deviations for Explicit and Implicit Measures as a Function of Identity Frame (Study

	Identity Orientation							
	Nationalism (N = 21-22)		Inter-personal (N = 23)		Patriotism (N = 23-24)		Control (N =	
Explicit Measure	M	SD	M	SD	M	SD	M	S
Identification	**5.02**	.98	**5.01**	1.06	**4.84**	.93	**5.05**	.8
Xenophobia	**3.21**	.85	**2.86**	.80	**2.94**	.87	**3.36**	.6
Implicit Measures (ms)								
Stereotypic Prejudice	**-7**	427	**92**	254	**51**	358	**-7**	2
Out-group Derogation	**-7**	137	**47**	181	**32**	214	**-9**	1
Generalised Prejudice	**-86**	311	**35**	345	**120**	321	**-65**	2

5.1.2.2.4 Identity frame and the relationship between implicit and explicit in-group bias. To examine the IEC between implicit and explicit in-group bias we computed a series of zero-order correlations within each of the identity frames (see bottom half of Table 5.2. Reliable IEC only emerged between xenophobia and the stereotypic prejudice contrast under the nationalism frame. To test whether the identity frame moderated IEC we performed a series of regression analyses as above. The regression analyses were identical to those computed above, however, the dependent variable in this instance was participant's scores on the xenophobia scale. Results of the three regression analyses can be seen in Table 5.5.

Table 5.5. Identity Frame x Implicit Prejudice Regressed onto Xenophobia (Study 3)

	Regression Contrast			
Implicit Measure	Contrast 1 (+2, -1, -1, 0)		Contrast 2 (-1, -1, -1, +3)	
	β	t	β	t
Stereotypic Prejudice (N = 89)	.22	2.11*	-.02	-.16
Out-Group Derogation (N= 90)	.09	.76	.07	.63
Generalised Prejudice (N = 89)	.09	.84	-.03	-.25

Note: *p < .05. Contrast weights = (nationalism, inter-personal, patriotism, control).

The interaction between Contrast 1 and xenophobia for stereotypic prejudice indicated that the relationship between xenophobia and stereotypic prejudice differed in the inter-group (nationalism) and the non-inter-group (combined inter-personal and patriotism identity) frames. Examining the bivariate correlations in the bottom half of Table 5.2 confirmed that there was significantly greater correspondence between xenophobia and stereotypic prejudice under the inter-group than the non-inter-group frame ($z = 2.05$, $p = .01$; 1-tailed). Furthermore, we further decomposed Contrast 1 to examine whether IEC differed between the nationalism and inter-personal identity frames and the nationalism and patriotism frames. Table 5.2 also illustrates that the relationship between xenophobia and stereotypic prejudice was marginally greater following the nationalism than inter-personal frame ($z = 1.13$, $p = .06$, 1-tailed) and was significantly greater following the nationalism than patriotism frame ($z = 2.42$, $p < .005$, 1-tailed).

5.1.3 Discussion

Study 3 explored whether the effects obtained from Study 2b were a function of a salient inter-group identity or merely an artefact of a between stimulus comparison. In this regard we employed an inter-personal identity frame constructed through biased inter-personal comparisons. These comparisons were equivalent to the biased inter-group comparisons in the inter-group frame. Consequently, we manipulated different forms of national identification (nationalism and patriotism) as well as personal identity and examined the effects of these identity constructions on implicit and explicit inter-group evaluations.

As was found in Study 2b, results showed that, across each of the identity constructions, participant's level of in-group identification was equally high. Parenthetically, one may not necessarily expect high levels of in-group identification following the inter-personal identity orientation. We suggest that the reactivity of the measure was such that it 'over-rode' the inter-personal identity frame. As we suggested in Chapter 2, the very nature of explicit measures of bias is likely to make accessible an inter-group identity. The items typically imply the inferiority (superiority) of out-groups (in-groups). Moreover, simply being exposed to the out-

group is likely to raise (inter-group) social identity salience (e.g., Haslam et al. 1995; Wilder & Shapiro, 1984). Nevertheless, even though in-group identification was strong following each identity orientation the psychological associations with inter-group evaluations were quite distinct. The identity frame moderated the link between identification and implicit in-group bias. There were significantly greater positive correlations between identification and (implicit) bias following the nationalism than patriotism frame. Crucially, the magnitude of the relationships under the nationalism (inter-group identity) frame was significantly stronger than the equivalent relationships under the inter-personal frame. Furthermore, consistent with Study 2b, we found that the identity frame moderated IEC. Reliable positive correspondence between implicit and explicit measures emerged only following the nationalism frame. This IEC was significantly greater than corresponding IEC following the patriotism and inter-personal frames.

5.1.3.1 Effects due to salient inter-group identity

That there was a stronger relationship between identification and bias and greater IEC following the inter-group (nationalism) than inter-personal identity orientation provides support for the thesis that these effects were affected by a salient inter-group identity. Furthermore, because both inter-group and inter-personal identity was constructed through equivalent biased comparisons we may be able to rule out the possibility that a biased inter-stimulus comparison per se is sufficient to account for such effects.

A direct analysis and discussion of the function of inter-personal identity versus inter-group identity is beyond the scope of this research. We did not include any personal-identity factors in our design. Consequently, we are unable to examine whether a salient inter-personal identity may have affected the link between personality-based factors (e.g., personal identification) and in-group bias, or whether personality-based factors would be predictive of in-group bias following an inter-group frame. Such variables would be necessary to provide a balanced design and be consistent with earlier research examining this issue (e.g., Reynolds et al. 2001; Verkuyten & Hagendoorn, 1998). Nevertheless, we did see that a group-based factor (i.e., in-group identification) was related to in-group bias following a salient inter-

group identity. This finding alone may provide somewhat tangential support for theoretical frameworks that propose a qualitative distinction between individuals acting as individuals and individuals acting as group-members and is consistent with the idea that inter-personal identity and inter-group identity generates qualitatively distinct cognitions and behaviours (e.g., Tajfel, 1978; Tajfel & Turner, 1986; Turner, 1982; Turner et al. 1987).

5.1.3.2 Identity – in-group bias link

Identity orientation moderated the link between in-group attachment and implicit in-group bias. Of particular note, there was a positive relationship between these variables following a nationalism frame. This relationship was significantly greater than the corresponding relationship under the patriotism frame. These findings are consistent with those of Mummendey et al. (2001) and provide support for Hinkle and Brown's (1990) model. The findings suggest that identification may be linked to negative out-group evaluations following a salient relational or comparative (inter-group) context. Although Hinkle and Brown (1990) did not speculate about the link between identification and implicit in-group bias we believe that such an analysis should fall under the scope of their model. To the extent that implicit measures are responded to in terms of the same inter-group identity processes as explicit measures, they should capture the 'same' form of in-group bias as explicit measures. In short, the way in which identification was constructed led to process differences; identification was linked to implicit bias when constructed in terms of nationalism but this relationship did not exist when identification was constructed in terms of patriotism.

It is interesting to note that this effect did not arise in the previous study (2b). There was no reliable link between identification and the implicit in-group bias indices following a nationalism frame. This implies that there was no difference between high and low identifiers in their strength of mental associations of the out-group and a negative evaluation (as well as the in-group and a positive evaluation). Previous research (e.g., Lepore & Brown, 1997, 1999) suggests that high and low identifiers should differ in the strength of mental associations between a category and its valenced stereotypic content. We did find a reliable positive relationship between

identification and the implicit in-group bias indices, however, in this study. Individuals high and low in identification did appear to differ in the strength of mental association between the category and its stereotypic content. This difference is likely to be attributable to type of out-group used. Given the historical nature of the group relationships between Germany and Britain and the frequent reinforcement of negative connotations attached to Germany one may speculate that all group members may chronically have strong mental associations between Germany and a negative stereotypic evaluation; perhaps it is therefore not surprising that there is little variability in the mental associations between high and low identifiers. It is unlikely, however, that British people will have been subjected to information that reinforces a negative evaluation of Americans. It is expected that Americans have historically been presented (relative to the Germans) positively. In short, there is unlikely to be chronic accessibility of Americans and a negative stereotypic evaluation. Therefore, under a nationalism frame, we would expect a more normal distribution in participants' strength of mental association between Americans and negative evaluations. This variability should (and apparently does) correspond to participants' strength of in-group identification. As strength of identification increases so does implicit in-group bias.

5.1.3.3 Malleability of implicit in-group bias

We found little evidence of identity orientation moderating in-group bias. Participant's mental associations between social categories and evaluations did not differ as a function of the salience of national (or personal) identity. These findings are inconsistent with research that views implicit bias as malleable (see Blair, 2002). However, it should be noted that there were differences in strength of mental association between identity orientations. Analysis yielded a significant omnibus interaction but the within participant contrasts computed (i.e., stereotypic prejudice, out-group derogation and generalised prejudice) did not pinpoint these differences. These contrasts were used in accordance with precedence (e.g., Wittenbrink et al. 1997, 2001a) and theoretical concerns. Therefore, the differences that apparently do exist are likely to be theoretically uninteresting (e.g., participants may simply have

stronger mental associations between the category American and positive British stereotypic traits in one frame over the other).

5.1.3.4 Relationship between implicit and explicit measures

As in Study 2b, we found that the way in which identification was constructed affected the relationship between implicit and explicit measures. Reliable IEC emerged following the nationalism frame and this IEC was greater than the corresponding relationship following the patriotism (and inter-personal) frame. This finding is consistent with our expectations and suggests that a salient inter-group identity made accessible the same processes on implicit measures as those accessible on explicit measures. We suggest that explicit measures clearly define an inter-group context and are likely to be susceptible to responses in terms of inter-group social identity salience, across all identity frames. Implicit measures, on the other hand, are, due to their very nature, unlikely to make an inter-group context accessible (and similarly unlikely to heighten the salience of group membership). The nationalism frame corresponded to a relevant inter-group context (and salient inter-group identity) that reinforced in-group superiority. This frame was likely to have accentuated the accessible inter-group context on explicit measures and also made the same group context available on implicit measures (the assumed operation of inter-group social identity mechanisms on explicit measures – responses that reinforce relative in-group superiority – was also likely engaged on implicit measures). Our 'inter-group social identity salience' explanation of IEC is consistent with research that has suggested that positive IEC is crucially dependent upon implicit and explicit measures activating the same memory contents and processes (e.g., Neumann & Seibt, 2001; Wittenbrink et al. 2001a). When an inter-group identity is operable on both implicit and explicit measures it makes accessible the same memory contents and consequently shapes the construction of bias.

5.2 Summary

This study demonstrated the effects of national identity construction on the link between in-group attachment and implicit in-group bias and on the relationship

between implicit and explicit measures. Only when a positive in-group attachment was based upon biased inter-group comparisons (nationalism) identification was linked to implicit in-group bias and there was positive IEC. These relationships were greater than corresponding relationships following identification based upon temporal comparisons (patriotism). Importantly, we demonstrated that these effects were a function of the salient inter-group identity and not a simply a result of biased inter-stimuli comparisons.

Chapter 6

Examining the Generality of National Identification on In-group bias: Using a New Implicit Measure of In-group Bias

6.0 Introduction

Across the last two studies we showed that the way in which national identification was constructed affected in-group bias. This primarily occurred in two ways. In Study 2b, national identification in terms of nationalism led to greater implicit out-group derogation than national identification in terms of patriotism. In Study 3, identification in terms of nationalism resulted in a stronger relationship between national attachment and implicit in-group bias than national identification in terms of patriotism. Furthermore, we consistently showed across the two studies that type of national identification moderated the correspondence between implicit and explicit measures of in-group bias. The relationship between implicit and explicit measures was significantly stronger when a 'nationalistic' identity was salient than when a 'patriotic' identity was salient. That these effects occurred for two different out-groups (Germans and Americans) highlights the robustness of our findings.

6.0.1 Extending the generality of our findings

In order to further demonstrate the generality of our findings we wanted to examine whether we would find similar patterns of effects using a different implicit measure of in-group bias; the IAT (Greenwald et al. 1998). As discussed in Chapter 2, the IAT can be best thought of as providing a measure of the strength of mental association between a target concept and a particular attribute dimension (see section 2.2 for description of the IAT).

6.0.2 Is the IAT a measure of in-group bias?

As we saw in Chapter 2, there exists some debate as to whether the IAT can be considered a measure of in-group bias. It has been criticised for being a theoretically

obscure measure that possibly has nothing to do with mental associations. This criticism is derived from research into the cognitive processes that may be responsible for the IAT effect (e.g., Brendl, Markman & Messner, 2001; De Houwer, 2001; McFarland & Crouch, 2002; Mierke & Klauer, 2001, 2003; Rothermund & Wentura, 2001, 2004). McFarland and Crouch (2002), for example, argued and showed that scores on the IAT may be confounded with general cognitive skill associated with response speed. They argued that cognitive skill might be associated with individual differences in the processing of information when the IAT categories (target and attribute) are incompatible compared to when they are compatible. That is, some individuals might have greater difficulty than others in responding to incompatible categories than to compatible categories, independent of the specific content of the IATs. They showed that control IATs, on irrelevant dimensions to in-group bias (e.g., with target concepts Delicious and Not delicious and attributes Happy and Unhappy), were substantially correlated with an IAT measuring racial bias. These relationships cannot be understood in terms of an associative strength interpretation of IAT effects. Furthermore, McFarland and Crouch (2002) showed that the cognitive skill was also associated with task-switching difficulties (i.e., switching from compatible to incompatible trials or vice versa). When presented first, incompatible but not compatible pairings on the Race IAT were correlated with the (irrelevant) control IATs (indicating that the cognitive skill is likely to be associated with processing difficulties in incompatible trials). However, the compatible pairings of the Race IAT were correlated with the (irrelevant) control IATs when presented after the incompatible pairings. McFarland and Crouch (2002) suggested that change from one response mapping to another (e.g., incompatible to compatible) might tax the ability of the participant to learn a new rule. Individual differences in the ability to learn this new rule may contribute to the response speed in the second task and thus to the IAT effect. Consequently, those who lack the skill (and respond slower in the second task) are biased to higher in-group bias scores (also see Mierke & Klauer, 2001, 2003 for another task-switching account of the IAT effect).

Rothermund and Wentura (2001, 2004) have shown that the IAT may be confounded with a cognitive process associated with the flexibility in developing task performance strategies. These authors advanced a figure-ground asymmetry model. This model assumes that there are salience differences in the categories of the target and attribute dimensions (e.g., Blacks may be more salient than Whites and

unpleasant words may be more salient than pleasant words) and it is these salience differences that contribute to the IAT effect. It is assumed that participants should find it easier to respond when both salient categories (the 'figures') are mapped onto one response key and non-salient categories (the 'grounds) are mapped onto the other response key (which is the case in the compatible block of the IAT). Matching category salience assists in the categorisation of target and attribute stimuli. It simplifies the cognitive task. If a target or attribute stimulus belongs to a salient category (is the 'figure'), a "yes" response may be given and if the stimulus does not belong to the salient category (is part of the 'ground'), a "no" response may be given. In the incompatible blocks, the salience and response dimensions are independent of each other, salient and non-salient categories are not mapped consistently onto response keys. Here, there is no influence of salience on speed of response. This model implies that some individuals might find it easier than others to 'tune into' the salience asymmetries of the target and attribute dimensions and thus develop a new response strategy. Individuals who have this ability will be likely to have shorter response latencies in the compatible task-set and may be biased to higher in-group bias scores.

Despite research highlighting the cognitive confounds of the IAT, and thus implicating the lack of internal validity, much research exists that supports the general construct validity of the IAT. Indeed, research has demonstrated the convergent (e.g., Cunningham et al. 2001; Olson & Fazio, 2003), predictive (e.g., McConnell & Liebold, 2001) and discriminant validity (e.g., Gawronski, 2002; also see Fazio & Olson, 2003; Greenwald & Nosek, 2001, for reviews). The IAT has been shown to correlate (with rs up to .55; Cunningham et al. 2001) with more established measures of in-group bias. In particular, the IAT correlates with sequential priming procedures, more established measures that are acknowledged to be capturing the automatically activated mental associations between a category and its evaluation or stereotype. These correlations are likely to be quite strong, however, when the sequential priming task uses only category labels as primes (and not pictorial exemplars; Olson & Fazio, 2003) and when measurement error had been controlled for (Cunningham et al. 2001). The IAT has also been shown to predict nonverbal behaviours (McConnell & Liebold, 2001).

Perhaps the most compelling study to date on the construct validity of the IAT is that by Gawronski (2002). Gawronski simultaneously tested both the convergent

and discriminant validity of the IAT by having German participants complete two prejudice-related IATs and explicit prejudice measures for different target groups (e.g., Asians and Turks). Results showed that the IATs exhibited both convergent and discriminant validity. Specifically, the two IATs were related to the explicit prejudice measure only when the out-group category in the IAT matched the out-group mentioned in the explicit measure. Gawronski argued that these findings provide a strong reply to the assertion that the IAT effect is confounded with individual differences in cognitive skills (e.g., McFarland & Crouch, 2002; Rothermund & Wentura, 2001, 2004). If the obtained relation between the IAT scores and explicit prejudice responses were an artefact of a common relation to other variables such as cognitive skill, the IAT may exhibit convergent validity, but not discriminant validity.

In addition to tests of construct validity, research has focused on advancing the scoring of the IAT, to be more resilient against the effects of potential confounding variables that may be associated with response speed. Specifically, Greenwald, Nosek & Banaji (2003) have provided an alternative, improved, scoring algorithm for calculating the IAT effect: the IAT-*D*. The crucial difference between this algorithm and the traditional one is that, for the new algorithm, the difference in response latencies between the compatible and incompatible blocks (the traditional scoring algorithm; the IAT effect) is divided by within-participant latency variability. An overall latency standard deviation from compatible and incompatible tasks is computed for each participant. *D* is the millisecond-difference score divided by this standard deviation. Using the standard deviation as a divisor adjusts differences between means for the effect of underlying variability (e.g., individual differences in speed of response). One of the advantages of this new scoring algorithm is that it provides some resistance to artefacts related to speed of responding, including cognitive skill. For example, Cai, Sriram, Greenwald & McFarland (2004) replicated McFarland and Crouch's (2002) study (see above) and showed that the correlations between the (irrelevant) control IAT and race IAT and between the IAT and mean response latency were reduced to non-significance by use of the IAT-*D* measure (also see Mierke & Klauer, 2003).

In sum, even though the internal validity of the IAT has been questioned, repeated demonstration of its general construct validity does provide convincing support that the IAT is a measure of the automatically activated mental associations between a category and its evaluation (or stereotype). Furthermore, recent advances

in the development of an improved scoring algorithm appear to make the IAT more resistant to cognitive skill confounds.

6.1 Study 4: Extending the Generality of our Paradigm - Use of the IAT as an Implicit Measure of In-group Bias

In order to examine whether the effects we obtained in our two previous studies may be observed when using an alternative implicit measure, we constructed a national bias IAT using British and Germans as the two target categories. We reverted back to using Germans as the out-group primarily because we had success in eliciting differential mental associations between Germans and their evaluation as a function of identity frame in Study 2b. Additionally, we wanted a measure of automatic evaluation, independent of stereotypic content of the categories. Therefore, we used only pleasant and unpleasant traits (on our attribute dimension) that were not part of the British or German stereotype. This measure is approximately the same as the generalised prejudice index constructed in the previous studies.

We make the same hypotheses as before: that there will be a greater positive relationship between identification and in-group bias (implicit and explicit) following the nationalism than patriotism frame, that there will be greater implicit in-group bias following the nationalism than patriotism frame and that there will be greater positive IEC following the nationalism than patriotism frame.

6.1.1 Method

6.1.1.1 Participants

One hundred and forty five, first-year psychology undergraduates (128 female, 17 male) from the University of Kent were recruited to take part in the study (mean age = 19 years, SD = 1 year). Participants completed the study in partial fulfilment of their course requirements. The identity frame (nationalism, patriotism, control) was the only, between participants, factor for this study.

6.1.1.2 Materials and Procedure

The procedure closely followed that of study 2b. Participants took part in a study session that was composed of three independent studies. Firstly, we manipulated the identity orientation, next participants completed the implicit measure of in-group bias and lastly, participants completed a booklet of explicit measures. For this study, however, the implicit measure was passed off as a 'categorisation task' rather than a 'distracted word recognition task', as in the past studies.

The nationalism, patriotism and control identity frame was manipulated in the same manner as before. Participants completed the same booklet of explicit measures as in Study 3. As before, both the 18-item nationalism (α = .87) and the 11-item patriotism (α = .91) scales had good internal consistencies.

The IAT was a word-based task, which presented 40 stimulus words: 10 British names (Sarah, Laura, Mary, Amy, Katie, Andrew, David, William, Charles, Richard), 10 German names (Helga, Steffi, Friede, Hildegard, Gretel, Gerhardt, Gunther, Fritz, Hans, Jurgen), 10 pleasant words (beautiful, wonderful, honest, happy, awesome, marvellous, flattering, delicious, fair, passionate), and 10 unpleasant words (filthy, dirty, rotten, horrible, hideous, ugly, disgusting, stupid, unpleasant, unfair). All words were selected from pilot tests; only names that were typical German names but untypical British names and typical British names but untypical German names were selected. An equal number of male and female names were selected (5 for each national category). Attributes were chosen if they were uncharacteristic of both the British and German people (i.e., were neutral with regard to both). Of these neutral attributes the 10 most pleasant and 10 most unpleasant were selected for inclusion into the IAT. All stimuli were presented in the centre of the screen. The initial letter was capitalised and the remainder of the stimulus word was lower case (e.g., 'Sarah', 'Horrible').

The IAT was based on Greenwald et al. (1998) and was run using the Farnham Implicit Association Test for windows (FIAT 2.3; available from http://faculty.washington.edu/agg/iat_materials.htm). Table 6.1 outlines the blocks of trials and the sequence of the IAT. Blocks 3 and 4 represent compatible blocks, those for which the target (British/German names) and attribute (pleasant/unpleasant words) dimensions are assumed to be strongly associated and Blocks 6 and 7 represent non-compatible blocks, those for which the target and attribute dimensions are assumed to

be weakly or not associated. The order of completion of compatible and non-compatible blocks was counterbalanced. Specifically, for half the participants, the positions of Blocks, 1, 3, and 4 were switched with those of Blocks 5, 6, and 7. In Blocks 3, 4, 6 and 7 each of the stimulus words were presented once until the imposed trial limit was reached. The category was alternated on each trial. That is, if the first trial presented either a British or a German name to be categorised the next trial presented either a pleasant or unpleasant word to be categorised. This alternation continued until the imposed trial limit was reached.

Table 6.1. Sequence of Trial Blocks in the (British vs. German) IAT (Study 4)

Block	No. of trials	Function	Item assigned to left-key ('A') response	Item assigned to right-key ('5') response
1	20	Practice	British names	German names
2	20	Practice	Pleasant traits	Unpleasant traits
3	20	Practice	Pleasant traits + British names	Unpleasant traits + German names
4	40	Test	Pleasant traits + British names	Unpleasant traits + German names
5	20	Practice	German names	British names
6	20	Practice	Pleasant traits + German names	Unpleasant traits + British names
7	40	Test	Pleasant traits + German names	Unpleasant traits + British names

Participants were told that they would be required to categorise British and German first names as well as words with pleasant and unpleasant meanings into the appropriate categories. Participants were instructed to use the green coloured 'A' and '5' (in the number pad, on the right hand side of the keyboard) keys to make their categorisation judgements. The 'A' key corresponded to the category(ies) on the left and the '5' key corresponded to the category(ies) on the right. Category label reminders ('GERMAN', 'BRITISH', 'Unpleasant', 'Pleasant') were displayed on the left and right sides of the stimulus word, consistent with key assignment shown in Table 6.1. Participants were informed that if their categorisation of the stimulus word was correct a green circle would appear under the stimulus word and the next trial would begin. If, however, their categorisation was incorrect, a red 'X' would appear below the stimulus word and they would have to correctly categorise the stimulus word to continue to the next trial. A 250 ms inter-trial interval was used. Following each block, participants were given feedback on the time taken to complete the block and the percentage of errors made. This was given to prompt both accuracy and speed

in response. Subsequently, participants were given a self-paced break and instructions for the next block.

Following completion of the three 'studies' participants completed the assessment of the study session, which probed for their awareness of the intentions of the study session and their awareness of any relationship between any of the studies. As before, no participants reported being aware of the actual intentions of the study session or guessed the relationship between the studies. Moreover, none of the participants thought that earlier tasks influenced their responses on subsequent tasks.

6.1.2 Results

6.1.2.1 Preliminary Analyses

6.1.2.1.1 Computation of IAT-D. We computed a scoring algorithm that was approximately consistent with Greenwald, Nosek and Banaji's (2003) IAT-*D*. This made use of the response latencies in Blocks 3, 4, 6 and 7. Firstly, to account for extreme values response latencies less than 400 ms and greater than 5,000 ms were deleted. Next, the modified effect size transformation (*D*) was computed. This had a number of stages. Firstly, we computed the mean of the latencies for each of the four blocks. Next, for each participant, we computed one pooled standard deviation for all the trials in Blocks 3 and 6 (i.e., an SD for the practice trials) and one pooled standard deviation for all the trials in Blocks 4 and 7 (i.e., an SD for the test trials). Greenwald et al. (2003) suggested that, next, error latencies should be replaced by the block mean of correct responses and adjusted with a penalty score of +600 ms. We did not include this procedure in our calculation of IAT-*D* because the design of our IAT allowed only correct responses to be made. Participants had to correctly categorise a stimulus word before continuing with the next trial. We felt that the time taken to re-categorise the stimulus following an error was a sufficient, self-imposed penalty. Following computation of the pooled standard deviations for Blocks 3 and 6 and Blocks 4 and 7, we computed two difference scores. We subtracted participants' mean latencies of Block 3 (compatible practice block) from the mean latencies of Block 6 (non-compatible practice block) and the mean latencies of Block 4 (compatible test block) from the mean latencies of Block 7 (non-compatible test block). Each difference was divided by its associated pooled-trials standard deviation

(i.e., Block 7 – Block 4 / SD for trials of Blocks 4 and 7; Block 6 – Block 3 / SD for trials of Blocks 3 and 6). The two resultant scores were averaged together to form the IAT-*D*. Mean IAT-*D* scores (and standard deviations) as a function of identity frame can be seen in Table 6.2.

Table 6.2. IAT-*D* Scores and Standard Deviations as a Function of Identity Frame (Study 4)

	Identity Frame					
	Nationalism (N = 49)		Patriotism (N = 48)		Control (N = 48)	
	M	SD	M	SD	M	SD
IAT-*D*	**1.46**	.86	**1.56**	.81	**1.51**	.95

6.1.2.2 Main Analyses

6.1.2.2.1 The link between identification and implicit and explicit out-group evaluations. To examine the relationship between identification and implicit (IAT-*D*) and explicit (xenophobia) out-group evaluations, a series of zero-order correlations were computed as a function of identity frame (see Table 6.3). The top half of Table 6.3 displays the relationships between the explicit measures of identification and xenophobia. Identification and xenophobia were marginally related under the nationalism frame and significantly related under the patriotism frame. The magnitude of these relationships did not differ between these identity frames, $z = .057$, $p > .20$. Furthermore, identification and xenophobia were not related under the control frame ($p > .70$). The bottom half of Table 6.3 shows the relationship between identification and the IAT-*D*. Identification was marginally related to the IAT-*D* under the nationalism frame. The corresponding relationships under the patriotism and control frames were not reliable.

To test whether the identity frame moderated the correspondence between identification and the IAT-*D* we performed a multiple regression analyses in the same manner as in Study 3. The identity frame variable was coded as two contrast variables to capture the main contrast of interest (comparison of nationalism versus patriotism identity frame) and the only other orthogonal contrast (of less theoretical concern). The first (Contrast 1) was represented by the following weights: Nationalism (+1), Patriotism (-1), and Control (0). The second contrast (Contrast 2)

was represented by the following weights: Nationalism (-1), Patriotism (-1) and Control (+2)

Table 6.3. Correlations Between IAT-*D* and Explicit Measures as a Function of Identity Frame (Study 4)

	Comparison Frame					
	Nationalism (N = 49)		Patriotism (N = 48)		Control (N = 48)	
Explicit Measures	1	2	1	2	1	2
1. Identification	--		--		--	
2. Xenophobia	.23•	--	.34*	--	-.05	--
IAT-*D*	.20•	.28*	-.14	-.02	-.13	-.02

Note: •p < .10, *p < .05, (two tailed, although correlations between implicit and explicit measures under the nationalism frame are one-tailed).

The two (regression) contrast variables and the participant's IAT-*D* scores were entered into the first step of the regression analysis; in the second step the interaction terms formed by the product of the IAT-*D* and each of the (regression) contrast variables were entered. The dependent variable for the regression analysis was participant's scores on the identification scale. The implicit and explicit measures were standardised prior to the analysis. The only effect of note was the marginal interaction between Contrast 1 and identification ($\beta = .15$; $t = 1.75$, $p = .08$), indicating that the relationship between identification and the IAT-*D* differed in the nationalism and patriotism frames (Contrast 2: $\beta = -.06$; $t = -.71$, $p > .40$). The bivariate correlations in the bottom half of Table 6.3 illustrate that the relationship between identification and the IAT-*D* was significantly greater following the nationalism than patriotism frame ($z = 1.75$, $p < .03$; 1-tailed).

Table 6.4. Means and Standard Deviations for Explicit Measures as a Function of Identity Frame (Study 4)

	Identity Orientation					
	Nationalism (N = 49)		Patriotism (N = 49)		Control (N = 48)	
	M	SD	M	SD	M	SD
Identification	**5.07**	1.06	**5.05**	1.11	**4.96**	.91
Xenophobia	**2.87**	.74	**3.02**	.82	**3.06**	.72

6.1.2.2.2 Explicit in-group bias (xenophobia) and identification. To determine whether the mean level of identification and xenophobia differed as a function of identity frame we ran a one-way ANOVA with identity frame as the independent

variable (see Table 6.4 for means and standard deviations). Identification and xenophobia did not differ as a function of identity frame (Fs < .90, ps > .41).

6.1.2.2.3 Malleability of implicit in-group bias. We conducted single sample t-tests to determine whether the IAT-*D* effect was significantly different from zero (no prejudice). This was done in each of the identity frames. All of the IAT-*D*s were significantly different from zero (all ts > 11.06, all ps < .001). Next, to examine whether the IAT-*D* effect differed as a function of identity frame it was subject to a one-way ANOVA, with identity frame as the independent variable. The IAT-*D* did not significantly differ between identity frames, F (2, 142) = .16, ns.

6.1.2.2.4 Identity frame and the relationship between implicit and explicit in-group bias. To examine the IEC between implicit and explicit in-group bias we computed a series of zero-order correlations within each of the identity frames (see bottom half of Table 6.3). Xenophobia was significantly related to the IAT-*D* under the nationalism frame. Corresponding relationships under the other identity frames were of a lesser magnitude.

To test whether identity frame moderated the correspondence between xenophobia and the IAT-*D*, we performed a multiple regression analysis exactly as the moderation analysis above, however, in this instance, the dependent variable for the regression analysis was participant's scores on the xenophobia scale. The implicit and explicit measures were standardised prior to analyses. The interactions between the contrast variables and xenophobia were not significant (Contrast 1: $\beta = .14$; $t = 1.40$, $p = .16$; Contrast 2: $\beta = .00$; $t = .03$, $p > .90$).

6.1.3 Discussion

Study 4 explored the robustness of our research paradigm by examining whether we would be able to obtain similar effects as those in Study 2b and Study 3 when using a different measure of implicit prejudice; the IAT. In general, results were largely consistent with the two previous studies. Specifically, as before, participants' level of in-group identification was equally high across each identity frame but the psychological associations with in-group bias were quite distinct. There was a

significantly stronger positive correlation between identification and implicit bias following the nationalism than patriotism identity frame. Unlike before, however, there did not appear to be any significant differences in IEC between identity frames. However, even though our moderation analyses suggested that IEC did not significantly differ between the nationalism and patriotism frames (when controlling for the difference in IEC between these frames combined and the control frame), the pattern of IEC was consistent with our two previous studies (see Table 6.3). Indeed, if we examine the bivariate correlations between xenophobia and the IAT-*D* in the nationalism and patriotism identity frames we see that there is greater IEC following the nationalism than patriotism frame ($z = 1.47$, $p < .05$, 1-tailed).

6.1.3.1 Identity – in-group bias link

Identity orientation moderated the relationship between identification and implicit in-group bias. There was a marginally reliable positive relationship between these variables following the nationalism frame. These variables were not reliably associated following the patriotism frame. These results are approximately consistent with those from Study 3. Nevertheless, even though results from this and the previous study have highlighted the moderating effects of identity frame on the relationship between identification and implicit bias, there was some variability in the general magnitude of these relationships. Furthermore, no relationship between these variables emerged in study 2b. Therefore, it may be possible that, on average, the link between identification and implicit bias was not as strong as our latter two studies implied. Consequently, over the three studies, identity frame may not have moderated the link between identification and bias. To explore this possibility we conducted a small meta-analytic integration (Mullen, 1989) of our three studies. So as not to violate the meta-analytic constraint of independent hypothesis tests we simply averaged the relationships between identification and the three implicit in-group bias indices (i.e., stereotypic prejudice, out-group derogation, generalised prejudice) within each of the identification frames, in Study 2b and Study 3. This resulted in one hypothesis test per identity frame, per study and resulted in a meta-analytic database comprising 9 hypothesis tests (we did not include the inter-personal frame from Study 3). This seemed the most prudent approach to tackling the issue of independence of hypothesis tests. An alternative approach would have been to select just one of the

indices of implicit in-group bias. However, we could not determine, a-priori, on any theoretical grounds, which single index would have been the most appropriate indicator of implicit bias. All of the hypothesis tests were weighted by sample size. Results showed that following the nationalism frame there was a reliable $Z = 1.83$, $p < .05$, small, $\bar{Z}_{FISHER} = .20$, $\bar{r} = .20$, relationship between identification and implicit in-group bias. The average relationships between identification and implicit bias were small and not significant in both the patriotism ($Z = -.43$, $p < .70$, $\bar{Z}_{FISHER} = -.02$, $\bar{r} = -.02$) and control ($Z = .08$, $p < .50$, $\bar{Z}_{FISHER} = .04$, $\bar{r} = .04$) frames. Importantly, the average relationship following the nationalism frame was marginally greater than the average relationship following the patriotism frame ($Z = 1.29$, $p < .10$). However, the relationship under the nationalism frame was not different from the average relationship following the control frame ($Z = .81$, $p > .20$).

The meta-analytic integration of our research findings provides support for Hinkle and Brown's (1990) model. These findings indicate that identification is reliably linked to implicit in-group bias only following a salient relational or comparative (inter-group) context and that this relationship tends to be marginally greater following a salient inter-group context than following a salient intra-group context.

6.1.3.2 Malleability of implicit in-group bias

We found little evidence of identity orientation moderating implicit in-group bias. Participants' mental associations between social categories and evaluations did not differ as a function of the salience of national identity. These findings are inconsistent with research that views implicit bias as malleable (Blair, 2002). Despite no differences in the magnitude of the IAT effect, as a function of identity frame, the effect size in each identity frame was reliably different from zero, indicating in-group bias. Following each identity frame, participants had strong mental associations between Britain and positivity and German and negativity. One explanation for this pattern of effects is that all individuals automatically activated the cultural associations in addition to their individual associations between the categories and their attributes (see Karpinski & Hilton, 2001). It is possible that even individuals for whom negativity is not automatically activated in response to a German category

prime may possess and perceive strong mental associations between the category "Germans" and negativity. For example, they may recognise that Germans have been historically portrayed in a negative way by British society. This knowledge may easily come to mind when the IAT presents them with a German + negative response mapping and may facilitate their responding. This explanation notwithstanding, there may be some difficulty distinguishing cultural associations from personal ones. It is likely that individual attitudes (and stereotypes) originate from learning experiences within one's culture (see Banaji, 2001). That there may be difficulties in distinguishing cultural and individual associations decreases the plausibility of the above explanation for our results. In the broader context of our research, however, this is a minor issue. Even though implicit in-group bias was displayed following each identity frame, the psychological associations with identification and explicit measures of bias were quite distinct depending upon how identification was constructed (see discussion immediately above and below). Even though the mean differences in level of prejudice did not differ as a function of how identification was constructed, the processes operating under each identity construction were likely to be quite distinct.

6.1.3.3 Relationship between implicit and explicit measures

Although the identity frame did not reliably moderate the relationship between implicit and explicit measures of in-group bias, the pattern of results was consistent with the two previous studies. A reliable relationship between xenophobia and the IAT only emerged following the nationalism frame. Corresponding relationships following the patriotism and control frames were not reliable and were of a much lesser magnitude (they approximated zero). This finding is generally consistent with our expectations and suggests that a salient inter-group identity made accessible the same processes on implicit measures as those accessible on explicit measures. This finding also provides support for research that suggests that positive IEC is crucially dependent upon implicit and explicit measures activating the same memory contents and processes (Neumann & Seibt, 2001; Wittenbrink et al. 2001a).

Further support for our hypothesis that the identity frame moderates IEC comes from a small meta-analytic integration (Mullen, 1989) of our three studies. The meta-analysis was performed in the same manner as the meta-analysis presented

above. We averaged over all the correlations between xenophobia and the three indices of implicit in-group bias in Study 2b and Study 3, in each frame, to derive a single hypothesis test. Again, the meta-analytic database was comprised of 9 hypothesis tests (1 from each identity frame, for each study) that were all weighted by sample size in the analysis. Results showed that there was a reliable $Z = 3.08$, $p = .001$, moderate, $\bar{Z}_{FISHER} = .34$, $\bar{r} = .33$, relationship between identification and implicit in-group bias following the nationalism frame. The average relationships between identification and implicit bias were small and not significant in both the patriotism ($Z = -.61$, $p > .70$, $\bar{Z}_{FISHER} = -.08$, $\bar{r} = -.08$) and control ($Z = .67$, $p < .30$, $\bar{Z}_{FISHER} = .09$, $\bar{r} = .09$) frames. The average IEC following the nationalism frame was significantly greater than the average IEC following the patriotism frame ($Z = 2.76$, $p < .005$) and was marginally different from the average IEC following the control frame ($Z = 1.42$, $p < .08$).

6.2 Summary

This study demonstrated that our findings could be generalised to include a different implicit measure of in-group bias, the IAT. Similar effects to Study 2b and Study 3 emerged. The way in which national identification was constructed moderated the relationship between identification and implicit bias. Furthermore, a similar pattern of correspondence between implicit and explicit measures to that found in the two previous studies emerged. There was greater IEC following the nationalism than patriotism frame. Additionally, two meta-analytic integrations of our three studies provided convincing evidence that the way in which identification is constructed affects in-group bias. Across the three studies we found that, on average, there is a small but reliable relationship between identification and implicit bias when identification is constructed in terms of nationalism. This relationship is marginally greater than when identification is constructed in terms of patriotism. Moreover, identification frame moderates IEC. There is moderate and reliable IEC following a nationalism frame and this IEC is greater than corresponding IEC following a patriotism and control frame.

Chapter 7

Inter-group Context Salience and IEC: A Meta-analytic Integration

7.0 Introduction

The most consistent and robust effect to emerge across our last three studies was undoubtedly the moderating effect of type of national identification on IEC. Clearly demonstrated by the mini meta-analytic integration in the previous chapter, IEC was significantly greater when national identification was constructed in terms of nationalism (i.e., an inter-group identity) than when it was constructed in terms of patriotism (i.e., a group identity). We have suggested that IEC was greater following an inter-group identity frame because, under these conditions, implicit and explicit measures tapped into the same memory contents and processes; an accessible inter-group social identity. Explicit measures define an inter-group context and are, therefore, always likely to be responded to in terms of a salient inter-group identity, irrespective of any prior priming experience. Implicit measures, on the other hand are unlikely to make an inter-group context (and thus inter-group identity) accessible. Therefore (as default), implicit and explicit measures are likely to be responded to in terms of different processes. When a 'nationalistic' (inter-group) identity was made salient, however, the same information (e.g., mental associations determined by the prevailing inter-group context) was made accessible on implicit measures and, therefore, both implicit and explicit measures were likely to have been responded to in terms of the prevailing inter-group identity. Consequently, we observed a positive relationship between implicit and explicit measures. When a 'patriotic' identity was made salient, however, implicit measures were likely to have been responded to in terms of a group identity whereas explicit measures were responded to in terms of an inter-group identity; the likely occurrence of different identity processes resulted in less correspondence (approximately zero) between the implicit and explicit measures of in-group bias.

In Chapter 2 we speculated that the salience of an inter-group context (and the assumed corresponding salience of an inter-group identity) might be one factor that may account for the variability of IEC effects in existing research. In a somewhat

fleeting glance at some of the research, we suggested that some methodological procedures might have incidentally made accessible a relevant inter-group context (and inter-group identity) prior to or during completion of the implicit and explicit measures of bias. For example, Wittenbrink et al. (1997) had participants identify the ethnicity of people based upon their first name prior to completion of a LDT. To give the subliminal category labels 'BLACK' and 'WHITE' meaning, participants assigned African names and European names to the categories 'BLACK' and 'WHITE'. Other researchers have more explicitly made an inter-group context accessible prior to completion of implicit and explicit measures of bias by naming the two groups of interest. For example, Neumann and Seibt (2001) informed participants at the beginning of the experimental session that the experimenter was interested in the attributes that most Germans ascribe to Turks. Researchers that have had participants complete explicit measures prior to implicit measures have also been likely to raise the salience of an inter-group context (and an inter-group identity e.g., Gawronski, 2002; McConnell & Leibold, 2001). Explicit measures clearly define the inter-group context by explicitly naming the out-group of interest. Simply being exposed to the out-group is likely to raise social (inter-group) identity salience (e.g., Haslam et al. 1995; Wilder & Shapiro, 1984). Explicit measures may, therefore, be susceptible to responses in terms of the accessible inter-group identity. These identity processes (the accessible mental associations forged or strengthened by the inter-group context) may 'spill over' to implicit measures. That is, implicit measures may consequently be susceptible to responses in terms of the salient inter-group identity. The meta-analytic review by Hofmann et al. (in press) supports the idea that memory contents or processes made accessible on explicit measures may carry over to influence implicit measures. Hofmann et al. reported significantly greater IEC when explicit measures had been completed prior to implicit measures ($r = .24$) than when they had been responded to after completion of implicit measures ($r = .17$).

Based on these observations, and backed by our earlier findings, we decided to conduct a meta-analytic review of the existing literature to determine whether variation in IEC could be predicted by variations in the salience of an inter-group context (and the assumed inter-group identity salience). Although there has already been one meta-analytic review of the relationship between implicit and explicit measures of in-group bias (Dovidio et al. 2001), this review was primarily concerned with examining the average IEC and did not look beyond methodological factors as

predictors of IEC (it only examined whether the type of implicit or explicit measure used affected IEC). We also conducted this review in response to the request to explore moderators of IEC (e.g., Blair, 2001, Fazio & Olson, 2003), so that we may move beyond the 'related or not' approach that has previously dominated IEC research and delimit some conditions in which implicit and explicit measures are related. Ultimately, this meta-analytic integration should help us better understand the link between implicit and explicit measures of in-group bias.

7.1 Study 5: Meta-Analytic Review of the Relationship Between Implicit and Explicit Measures of In-group Bias

The main goal of the meta-analytic integration was to examine whether IEC systematically varied as a function of the salience of an inter-group context (and assumed corresponding salience of an inter-group identity, assessed via judges' ratings). We were also interested in several methodological factors that could possibly moderate IEC. Of particular note, we were interested in whether the order in which implicit and explicit measures were administered affected IEC. As implied above, this may provide an additional index of the salience of an inter-group context (and identity). Completing explicit measures first may make accessible a relevant inter-group context and inter-group identity that may 'spill over' to affect responses on implicit measures and result in greater IEC than when implicit measures are completed first. When implicit measures are completed first an inter-group context is unlikely to be as salient given the unobtrusive nature of the measure. Thus, in this situation, only explicit measure may be likely to be responded to in terms of inter-group identity. Previous research has shown that the order of administering implicit and explicit measures does affect IEC (e.g., Hofmann et al. in press).

In addition to the order of administration of implicit and explicit measures, we wanted to investigate whether the type of implicit or explicit measure used, including the combination of implicit and explicit measures used, moderated IEC. It may be interesting to examine the independent effects of type of measure on IEC. For example, would IEC be greater when the explicit measure used is an affective based feeling thermometer or when it is a belief-based measure that captures individual differences in the endorsement of bias? Or, would IEC be greater when the implicit measure is based on sequential priming (e.g., LDT) or is associations-based (e.g.,

IAT)? Perhaps, a more complete understanding of the influence of type of measure on IEC, however, may come from examining the combined effects of type of measure used. Earlier research has suggested that IEC should be greater when implicit and explicit measures activate the same memory contents and processes (e.g., Neumann & Seibt, 2001; Wittenbrink et al. 2001a). Neumann and Seibt (2001) argued that explicit measures of in-group bias assess exclusively the strength of mental association between a category and the evaluation. Because association based measures (e.g., the IAT) also assesses this, IEC may be greatest when these combination of measures are used. The IEC may be greater than when sequential priming measures and endorsement measures are used because sequential priming measures also assess the activation of the social category in addition to the strength of mental association between category and evaluation (Neumann & Seibt, 2001). That is, for some sequential priming techniques (primarily those that have used pictorial stimuli as exemplars of the category), the category may not be activated to the same extent for each individual (as it is not explicitly stated as in association-based measures). More prototypic exemplars are likely to lead to greater category activation than less prototypic exemplars (Livingston & Brewer, 2002).

Of course, we will initially examine whether there does exist a relationship between implicit and explicit measures of bias. As discussed in Chapter 2, there exist two theoretical accounts of IEC. One, the independent constructs approach, considers implicit and explicit attitudes to be distinct constructs (Devine, 1989, Dovidio et al. 1997; Greenwald & Banaji, 1995; Wilson, Lindsey & Schooler, 2000). This view postulates the operation of separate mental processes and emphasises the unique contribution of implicit and explicit modes of evaluation. This view speculates that implicit and explicit attitudes develop and are expressed by different aspects of the cognitive system. According to this view implicit and explicit measures should be dissociated. The second perspective, the single construct approach, proposes that there is only one form of attitude (Brauer et al. 2000; Fazio & Olson, 2003). It is assumed here that what has become implicit is the attitude that was initially consciously, and perhaps intentionally, learned. In other words, implicit measures tap the internalisation of the attitude tapped by explicit measures (Brauer et al. 2000). According to this perspective, there should be a relationship between implicit and explicit measures of in-group bias.

7.1.1 Procedure

7.1.1.1 Literature Search

Studies were collected using a variety of techniques. Firstly, we adopted the ancestry approach to retrieving studies. Dovidio, et al's (2001) meta-analytic review and Blair's (2001) and Fazio and Olson's (2003) literature reviews provided starting points from which we collected all relevant articles. Secondly, we retrieved published articles through a detailed search of the PsycINFO database, up to and including the year of 2003. The key words/phrases used to locate the studies were: implicit prejudice, implicit measures of prejudice, implicit and explicit prejudice, implicit bias and implicit intergroup bias. In conjunction with this approach we also scanned a number of leading journals (British Journal of Social Psychology, European Journal of Social Psychology, Journal of Experimental Social Psychology, Journal of Personality and Social Psychology and Personality and Social Psychology Bulletin) including, where available, 'early view' sections, to find potentially relevant published and in-press articles. Finally, we released a 'call for papers' to the social psychological community affiliated with the European Association of Experimental Social Psychology, to procure potentially relevant in-press and unpublished manuscripts. These techniques resulted in more than 200 studies being made available for inclusion into the meta-analytic database.

7.1.1.2 Inclusion Criteria for Studies

Studies were included in the meta-analysis if they met the following criteria: 1) the focus of the research was on inter-race or inter-nation bias. 2) At least one implicit and one explicit index of bias had to be available. 3) The implicit index of bias gauged 'activation' of attitudes or valenced stereotyping (studies that included only implicit indices of attitude or stereotype 'application' (e.g., behavioural measures, trait evaluations) were not included in the meta-analytic database). 4) All or the majority of the participants belonged to the in-group (e.g., were White if White vs. Black inter-group bias was being examined). We arbitrarily – but intelligibly – decided that 60% or greater of participants had to belong to the in-group for it to constitute a majority. Those studies for which less than 60% of participants belonged

to the in-group were excluded from the database. Where specific demographic information was unavailable (6 studies), however, we presumed that the majority of participants were in-group members. 5) An estimate of the relationship between implicit and explicit indices of prejudice was reported (or intelligibly implied). Studies that reported relationships as 'non-significant' or reported only partial inferential test results (e.g., $t < 1$) were also included. For these studies the relationship was recorded as zero. However, studies that only selectively reported relationships were excluded. This is important as selective reporting may bias the results of the meta-analysis (i.e., only significant relationships are likely to be reported). 6) Internet studies (N= 3) were excluded from the database. The reason for this decision was that the sample size was so vast (more than 100 times the size of the average sample size of other studies, N= 64) and that the subsequent weighting of the effect size by N would mean that these studies would gain more that 100 times the weight of most other studies and, therefore, would dominate the results of the present analysis. The application of these criteria rendered a total of 38 papers, 52 studies, with 60 hypothesis tests, representing the responses of 3,312 participants. These 60 hypothesis tests of the IEC were included in the meta-analytic database.

Most studies reported more than one implicit-explicit correlation. In order to assure the independence of hypothesis tests the average correlation was computed for each study (k= 60). For moderator analyses with categorical predictors, however, we averaged all single correlations belonging to the same moderator category. For moderators that varied only across studies (i.e., type of bias, order of administration of implicit and explicit measures), the study correlation assigned to the different moderator categories was identical to the study correlation used for the analysis of general effects. However, for all moderator variables that varied within studies (i.e., type of explicit measure, type of implicit measure[1]), we averaged for each study the subsets of single correlations that belonged to the same moderator category (k= 75).

[1] Some studies that used sequential priming (e.g., Calitri & Brown, 2003) constructed a number of different indices of bias that could be conceived of as different types of implicit bias (e.g., stereotypic prejudice, generalised prejudice). However, these indices were not orthogonal, they contained much shared variance. Consequently, it would not have been prudent to examine the differing effects of type of implicit index on IEC. Therefore, where the IEC between stereotypic prejudice and generalised prejudice and explicit measures were reported separately, we averaged over the reported effects to provide one single hypothesis test of IEC.

7.1.1.3 Coding of Study Variables

In addition to the requisite statistical information, each hypothesis test was coded for: type of bias (R= racial, N= national), category of explicit measure (1= prejudice endorsement, 2= relational self-report, 3= semantic differentials, 4= feeling thermometers; 5= eclectic index), category of implicit measure (1= RTs and errors in sequential priming, 2= RTs in categorisation task, 3= association tasks, 4= physiological measures, 5= linguistic intergroup bias, 6= semantic differentials as implicit, 7= eclectic index, 8= inspection time of pictorial stimuli), order of administering implicit and explicit measures (1= explicit measure first, 2= implicit measure first, 3= independent (i.e., completed prior to arrival at the lab), 4= counterbalanced), and inter-group context salience (where 1= not salient, 5= moderately salient, 9= highly salient). In short, there were four categorical predictors and one continuous predictor. The four categorical predictors were directly coded by the author and an independent judge with perfect agreement. For the continuous (inter-group context salience) predictor, five independent judges naïve to the research topic were given summaries of the method sections of included studies. For studies that used the same paradigm, however, assessment was based upon one representational summary. As a result of this, judges were handed a pack containing 36 method summaries[2]. The summaries contained no information about authors or publication year. They were ordered alphabetically by author name and numbered 1-36. Judges could identify the summary only by the summary number. Judges were informed that they were helping with a study examining the effects of inter-group context salience on implicit and explicit measures of prejudice. Implicit and explicit prejudice was briefly defined along with what was meant by inter-group context salience. Judges were told that inter-group context salience meant that an in-group/out-group distinction was made accessible and individuals were, therefore, likely to be 'aware' of their group membership and have the potential to act in terms

[2] Three studies (Dasgupta & Greenwald, 2001, Study 1, Rudman, Ashmore, & Gary, 2001, Study 1 & Study 2) experimentally manipulated a number of conditions, yet only reported a pooled correlation between implicit and explicit measures. We felt the experimental conditions may have differed in the degree to which they made an inter-group context salient. Consequently, we thought it would not be possible for judges to provide an accurate estimate of inter-group context salience for these studies. However, so as to retain them in the meta-analytic database (and because the pooled IEC effect was likely to have been a function of some degree of inter-group context salience), we decided to rate these study methods with an inter-group context salience score of '5' (the mid-point of our scale).

of their group membership. Judges were asked to read through the summaries and rate the extent to which an inter-group context had been made salient before or at the time in which participants completed implicit and explicit measures. To assist with this task, judges were given some examples of when an inter-group context may or may not be particularly salient. When explicit measures were reported first/last or if the participant was/was not told that the study was interested in their views toward an out-group, were such examples. Judges' scores for each summary were averaged to provide the index of inter-group context salience. The mean inter-judge reliability based on these five judges was $\bar{r} = .79$, rendering a Spearman-Brown effective reliability of R = .95.

Each hypothesis test and corresponding predictor information is presented in Table 7.1. Where multiple hypothesis tests are reported we show the averaged hypothesis test that contributes to the general effect of IEC and moderator effects (where applicable).

7.1.2 Results

7.1.2.1 General Effects

The combined results of the 60 hypothesis tests of implicit-explicit correspondence, weighting each hypothesis test by its corresponding sample size, revealed a significant, Z = 8.760, p = 2.51E-17, small, $\bar{Z}_{FISHER} = .178$, $\bar{r} = .176$, effect[3]. A rather substantial failsafe number of $N_{fs(p = .05)} = 2184.5$ indicated that over 2,180 additional studies averaging no IEC would be needed before these results could be ascribed to sampling error. These findings indicate that there is a relationship between implicit and explicit measures of in-group bias, albeit a modest one.

Additionally, a significant diffuse comparison of effect sizes, $\chi^2(59) = 121.37$, p = 9.779E-07, indicated that the strength of the IEC effect for the 60 hypothesis tests were significantly heterogeneous and may be thought of as having been sampled from different populations of study outcomes. This finding suggests that there are likely to be moderators of IEC.

[3] Extreme one-tailed p values are reported precisely in scientific notation. Thus p = 2.51E-17 is p = .00000000000000000251.

Table 7.1. Hypothesis Tests Included in the General Meta-analysis (k = 60) and Moderator Meta-analysis (k = 75) (Study 5)

Study	Type Bias[1]	Statistic[2]	Z	r	Type Explicit	EC[3]	Type Implicit	IC[4]	Order I/E[5]	IGCS[6]
Best, Field & Williams (1976)	R	r(54) = .62 [56] {+}	5.09	.62	PRAM II	1	CMTII	6	1	8.4
Blascovitch, Wyer, Swart & Kibler (1997, Study 1)	R	F(1, 13) = 4.66 [15] {+}	1.96	.51	MRS	1	CT	2	2	7.6
Blascovitch, Wyer, Swart & Kibler (1997, Study 2)	R	F(1, 36) = 4.45 [38] {+}	2.03	.33	MRS	1	CT	2	3	7.6
Boniecki & Jacks (2002, Study 1)		r(54) = .08 [56] {-}		.08	MRS		LDT			
		r(54) = .15 [56] {-}		.15	SRS		LDT			
GENERAL EFFECT	R	r(54) = .12 [56] {-}	-.88	.12		1		1	1	7.2
Boniecki & Jacks (2002, Study 2)		r(62) = .03 [64] {-}		.03	MRS		IAT			
		r(62) = .04 [64] {+}		.04	SRS		IAT			
		r(62) = .13 [64] {+}		.13	Pro-Black		IAT			
		r(62) = .08 [64] {+}		.08	Anti-Black		IAT			6.8
Moderator effect	R	r(62) = .06 [64] {+}	.47	.06		1		3	2	
		r(62) = .02 [64] {+}		.02	MRS		LDT			
		r(62) = .09 [64] {-}		.09	SRS		LDT			
		r(62) = .07 [64] {+}		.07	Pro-Black		LDT			
		r(62) = .06 [64] {-}		.06	Anti-Black		LDT			
Moderator effect	R	r(62) = .02 [64] {-}	-.16	.02		1		1	2	6.8
GENERAL EFFECT	R	r(62) = .02 [64] {+}	.16	.02					2	6.8
Calitri & Brown (2003, Study 1) – Nationalism frame	N	r(26) = .41 [28] {+}	2.17	.41	Combined	1	LDT	1	2	8.2
Calitri & Brown (2003, Study 1) – Patriotism frame	N	r(23) = .10 [25] {-}	-.48	.10	Combined	1	LDT	1	2	2
Calitri & Brown (2003, Study 1) – Control frame	N	r(24) = .31 [26] {+}	1.54	.31	Combined	1	LDT	1	2	1.4
Calitri & Brown (2003, Study 2) – Nationalism frame	N	r(19) = .34 [21] {+}	1.51	.34	Combined	1	LDT	1	2	8.2

Table 7.1 continued.

Study		Type Bias[1]	Statistic[2]	Z	r	Type Explicit	EC[3]	Type Implicit	IC[4]	Order I/E[5]	IGCS[6]
Calitri & Brown (2003, Study 2) – Inter-personal frame		N	r(21) = .05 [23] {+}	.23	.05	Combined	1	LDT	1	2	1
Calitri & Brown (2003, Study 2) – Patriotism frame		N	r(21) = .12 [23] {-}	-.55	.12	Combined	1	LDT	1	2	2
Calitri & Brown (2003, Study 2) – Control frame		N	r(20) = .01 [22] {+}	.04	.01	Combined	1	LDT	1	2	1.4
Calitri & Brown (2003, Study 3) – Nationalism frame		N	r(47) = .28 [49] {+}	1.95	.28	Combined	1	IAT	3	2	8.2
Calitri & Brown (2003, Study 3) – Patriotism frame		N	r(46) = .02 [48] {-}	-.13	.02	Combined	1	IAT	3	2	2
Calitri & Brown (2003, Study 3) – Control frame		N	r(46) = .02 [48] {-}	-.13	.02	Combined	1	IAT	3	2	1.4
Cunningham, Preacher & Banaji (2001)		R	r(91) = .45 [93] {+}	4.53	.45	MRS	1	Combined	7	4	4.4
Dasgupta & Greenwald (2001, Study 1)	Moderator effect	R	r(46) = .12 [48] {+}	.81	.12	SDIFF	3	IAT	3	2	5**
	Moderator effect	R	r(46) = .19 [48] {+}	1.29	.19	FT	4	IAT	3	2	5**
	GENERAL EFFECT	R	r(46) = .16 [48] {+}	1.09	.16					2	5**
Dovidio, Kawakami & Gaertner (2002)		R	r(38) = .09 [40] {-}	-.55	.09	ATBS	1	CIT	1	3	1.2
Dovidio, Kawakami, Johnson, Johnson & Howard (1997, Study 1)			r(22) = .15 [24] {+}		.15	MRS		CIT			
			r(22) = .28 [24] {+}		.28	ATBS		CIT			
	GENERAL EFFECT	R	r(22) = .22 [24] {+}	1.03	.22		1		1	3	1.2
Dovidio, Kawakami, Johnson, Johnson & Howard (1997, Study 2)			r(31) = .60 [33] {+}		.60	MRS		CIT			
			r(31) = .49 [33] {+}		.49	OFRS		CIT			
	GENERAL EFFECT	R	r(31) = .55 [33] {+}	3.31	.55		1		1	2	1.2
Dovidio, Kawakami, Johnson, Johnson & Howard (1997, Study 3)			r(31) = .01 [33] {+}		.01	MRS		CIT			
			r(31) = .07 [33] {-}		.07	OFRS		CIT		2	

Table 7.1 continued.

Study		Type Bias[1]	Statistic[2]	Z	r	Type Explicit	EC[3]	Type Implicit	IC[4]	Order I/E[5]	IGCS[6]
	GENERAL EFFECT	R	r(31) = .03 [33] {-}	-.17	.03		1		1	2	1.2
Fazio, Jackson, Dunton & Williams (1995, Study 1)		R	r(43) = .15 [45] {-}	-.98	.15	MRS	1	AET	1	3	1.4
Fazio, Jackson, Dunton & Williams (1995, Study 2)		R	r(47) = .28 [49] {-}	-1.95	.28	MRS	1	AET	1	3	1.4
Fazio, Jackson, Dunton & Williams (1995, Study 4)		R	t(107) = < 1 [111] {+}	0	.00	MRS	1	AET	1	3	1.4
Florack, Scarabis & Bless (2001)		N	t(65) = < 1 [67] {+}	0	.00	RSR	2	IAT	3	2	4
Gaertner & McLaughlin (1983, Study 1)		R	ns [29] {+}	0	.00	MRAI	1	LDT	1	3	3
Gaertner & McLaughlin (1983, Study 2)		R	ns [21] {+}	0	.00	MRAI	1	LDT	1	3	3
Gawronski (2002)			r(59) = .32 [61] {+}		.32	BPS_A		IAT-A			
			r(59) = .37 [61] {+}		.37	BPS_T		IAT-T			
	GENERAL EFFECT	N	r(59) = .35 [61] {+}	2.76	.35		1		3	1	9
Gowronski, Geschke & Banse (2003)		N	r(67) = .22 [69] {+}	1.82	.22	SBPS	1	IAT	3	1	8.6
Greenwald, McGhee & Schwartz (1998, Study 3)	Moderator effect	R	r(24) = .13 [26] {+}	.63	.13	FT	4	IAT	3	2	4.4
	Moderator effect	R	r(24) = .21 [26] {+}	1.03	.21	SDIFF	3	IAT	3	2	4.4
			r(24) = .07 [26] {+}		.07	MRS		IAT			
			r(24) = .24 [26] {+}		.24	DIVERS		IAT			
			r(24) = .07 [26] {+}		.07	DISCRIM		IAT			
	Moderator effect	R	r(24) = .13 [26] {+}	.63	.13		1		3	2	4.4
	GENERAL EFFECT	R	r(24) = .14 [26] {+}	.68	.14					2	4.4
Livingston & Brewer (2002, Study 5)		R	F(1, 94) = 1.76 [96] {+}	1.32	.14	MRS	1	AET	1	2	2.2

Table 7.1 continued.

Study		Type Bias[1]	Statistic[2]	Z	r	Type Explicit	EC[3]	Type Implicit	IC[4]	Order I/E[5]	IGCS[6]
Locke, MacLeod & Walker (1994)		N	F(1, 36) = 5.69 [40] {+}	2.28	.37	MRS	1	STROOP	1	2	7.8
McConnell & Leibold (2001)		R	r(39) = .42 [41] {+}	2.73	.42	EI	5	IAT	3	1	8.4
Monteith, Voils & Ashburn-Nardo (2001)		R	r(77) = .28 [79] {+}	2.50	.28	MRS	1	IAT	3	2	3.8
Neumann & Seibt (2001)		N	r(45) = .42 [47] {+}	2.94	.42	BSPS	1	IAT	3	2	9
Nosek & Banaji (2001, Study 6)			r(48) = .08 [50] {+}		.08	FT		IAT			
			r(48) = .02 [50] {+}		.02	FT		GNAT			
	GENERAL EFFECT	R	r(48) = .05 [50] {+}	.34	.05		4		3	4	5.2
Ottaway, Hayden & Oakes (2001, Study 2)	Moderator effect	R	r(30) = .18 [32] {+}	.99	.18	FT	4	IAT	3	2	6.8
	Moderator effect	R	r(30) = .18 [32] {+}	.99	.18	SDIFF	3	IAT	3	2	6.8
			r(30) = .02 [32] {+}		.02	DIVERS		IAT			
			r(30) = .25 [32] {+}		.25	DISCRIM		IAT			
	Moderator effect	R	r(30) = .14 [32] {+}	.76	.14		1		3	2	6.8
	GENERAL EFFECT	R	r(30) = .16 [32] {+}	.59	.16					2	6.8
Porier & Lott (1967)			r(58) = .38 [60] {+}		.38	ES		GSR			
			r(58) = .13 [60] {+}		.13	OS		GSR			
	GENERAL EFFECT	R	r(58) = .26 [60] {+}	2.01	.26		1		4	3	5.8
Richeson & Nussbaum (2003, in press) – Multicultural frame		R	r(22) = .29 [24] {+}	1.37	.29	FT	4	IAT	3	2	8.6
Richeson & Nussbaum (2003, in press) – Colour-blind frame		R	r(22) = .34 [24] {+}	1.63	.34	FT	4	IAT	3	2	8.6
Rudman, Ashmore & Gary (2001,Study 1)			r(45) = .36 [47] {+}		.36	MRS		IAT			
Time 1 (start of semester)			r(45) = .18 [47] {+}		.18	MRS		SIAT			

Table 7.1 continued.

Study		Type Bias[1]	Statistic[2]	Z	r	Type Explicit	EC[3]	Type Implicit	IC[4]	Order I/E[5]	IGCS[6]
	GENERAL EFFECT	R	r(45) = .27 [47] {+}	1.84	.27		1		3	2	5**
Rudman, Ashmore & Gary (2001,Study2)	Moderator effect	R	r(117) = .13 [119] {+}	1.41	.13	FT	4	LDT	1	2	5**
Time 1 (start of semester)	Moderator effect	R	r(117) = .42 [119] {+}	4.75	.42	FT	4	IAT	3	2	5**
	GENERAL EFFECT	R	r(117) = .28 [119] {+}	3.08	.28					2	5**
Schnake & Ruscher (1998)		R	F(1, 62) = 3.97 [64] {+}	1.95	.25	MRS	1	LIB	5	1	8.2
Sensening Jones & Varney (1973)		R	F(1, 20) = 8.60 [24] {+}	2.64	.55	FT	1	IT	8	3	7
Stellmacher & Wagner (unpub 2002, Study1)			r(44) = .41 [46] {+}		.41	BPS		IAT			
			r(44) = .31 [46] {+}		.31	SPS		IAT			
	GENERAL EFFECT	N	r(44) = .36 [46] {+}	2.46	.36		1		3	1	8.6
Stellmacher & Wagner (unpub 2002, Study2)			r(81) = .21 [83] {+}		.21	BPS		IAT			
			r(81) = .32 [83] {+}		.32	SPS		IAT			
	GENERAL EFFECT	N	r(81) = .27 [83] {+}	2.47	.27		1		3	1	8.6
Tognacci & Cook (1975)		R	F(1, 20) = 7.71 [24] {+}	2.52	.53	MRAI	1	GSR	4	3	6.4
Tropp, Fisher, Gilmore & Ball (unpub, 2002, Study 1)	Moderator effect	R	r(124) = .13 [126] {-}	-1.45	.13	FT	4	IAT	3	2	4.4
	Moderator effect	R	r(124) = .20 [126] {+}	2.25	.20	SDIFF	3	IAT	3	2	4.4
			r(124) = .10 [126] {+}		.10	IGBS		IAT			
			r(124) = .09 [126] {+}		.09	Pro-Black		IAT			
			r(124) = .20 [126] {+}		.20	Anti-Black		IAT			
	Moderator effect	R	r(124) = .13 [126] {+}	1.45	.13		1		3	2	4.4
	GENERAL EFFECT	R	r(124) = .09 [126] {+}	1.00	.09					2	4.4

Table 7.1 continued.

Study		Type Bias[1]	Statistic[2]	Z	r	Type Explicit	EC[3]	Type Implicit	IC[4]	Order I/E[5]	IGCS[6]
Tropp, Fisher, Gilmore & Ball (unpub, 2002, Study 2)	Moderator effect	R	r(108) = .15 [110] {-}	-1.56	.15	FT	4	IAT	3	4	4.4
	Moderator effect	R	r(108) = .00 [110] {+}	0	.00	SDIFF	3	IAT	3	4	4.4
			r(108) = .17 [110] {+}		.17	IGBS		IAT			
			r(108) = .18 [110] {+}		.18	Pro-Black		IAT			
			r(108) = .10 [110] {+}		.10	Anti-Black		IAT			
	Moderator effect	R	r(108) = .15 [110] {+}	1.56	.15		1		3	4	4.4
	GENERAL EFFECT	R	r(108) = .06 [110] {+}	.62	.06					4	4.4
Vanman, Paul, Ito & Miller (1997, Study 3)		R	F(1, 23) = 4.49 [25] {+}		.31	MRS	1	EMG(brow)	4	1	
		R	F(1, 23)= 10.48 [25] {+}		.56	MRS	1	EMG(cheek)	4	1	
	GENERAL EFFECT	R	F(1, 23) = 7.49 [25] {+}	2.52	.50		1		4	1	9
Verplanken & Silvera (unpub, 2002, Study 3)		N	r(46) = .33 [48] {+}	2.29	.33	SDIFF	3	IAT	3	2	8.4
Vidulich & Krevanick (1966)		R	F(1, 36) = .98 [40] {+}	.98	.16	ATNS	1	GSR	4	3	7.4
Von Hippel, Sekaquaptewa & Vargas (1997, Study 1)		R	r(188) = .01 [190] {+}	.14	.01	MRS	1	LIB	5	2	7.4
Von Hippel, Sekaquaptewa & Vargas (1997, Study 2)		R	r(116) = .03 [118] {+}	.32	.03	MRS	1	LIB	5	2	7.4
Williams (1969)		R	r(49) = .31 [51] {+}	2.21	.31	MRAI	1	SDIFF	6	2	2.4
Wittenbrink, Judd & Park (1997)			r(86) = .33 [88] {+}		.33	MRS		LDT			
			r(86) = .28 [88] {+}		.28	Pro-Black		LDT			
			r(86) = .16 [88] {+}		.16	Anti-Black		LDT			
			r(86) = .27 [88] {+}		.27	DIVERS		LDT			
			r(86) = .29 [88] {+}		.29	DISCRIM		LDT			
	GENERAL EFFECT	R	r(86) = .27 [88] {+}	2.54	.27		1		1	2	6

Table 7.1 continued.

Study		Type Bias[1]	Statistic[2]	Z	r	Type Explicit	EC[3]	Type Implicit	IC[4]	Order I/E[5]	IGCS[6]
Wittenbrink, Judd & Park (2001a, Study 1a)			r(73) = .30 [75] {+}		.30	MRS		LDT			
			r(73) = .13 [75] {+}		.13	Pro-Black		LDT			
			r(73) = .13 [75] {+}		.13	Anti-Black		LDT			
			r(73) = .25 [75] {+}		.25	DIVERS		LDT			
			r(73) = .19 [75] {+}		.19	DISCRIM		LDT			
	Moderator effect	R	r(73) = .20 [75] {+}	1.72	.20		1		1	2	6
	Moderator effect	R	r(73) = .13 [75] {+}	1.11	.13	FT	4	LDT	1	2	6
	GENERAL EFFECT	R	r(86) = .19 [75] {+}	1.63	.19					2	6
Wittenbrink, Judd & Park (2001a, Study 1b)			r(73) = .15 [75] {+}		.15	MRS		LDT		2	
			r(73) = .08 [75] {+}		.08	Pro-Black		LDT			
			r(73) = .13 [75] {-}		.13	Anti-Black		LDT			
			r(73) = .14 [75] {+}		.14	DIVERS		LDT			
			r(73) = .14 [75] {+}		.14	DISCRIM		LDT			
	Moderator effect	R	r(73) = .08 [75] {+}	.68	.08		1		1	2	6
	Moderator effect	R	r(73) = .23 [75] {+}	1.99	.23	FT	4	LDT	1	2	6
	GENERAL EFFECT	R	r(73) = .10 [75] {+}	.85	.10					2	6
Wittenbrink, Judd & Park (2001b, Study 1) – Negative context			r(85) = .34 [87] {+}		.34	MRS		IAT			
			r(85) = .18 [87] {+}		.18	Pro-Black		IAT			
			r(85) = .08 [87] {+}		.08	Anti-Black		IAT			
			r(85) = .19 [87] {+}		.19	DIVERS		IAT			
			r(85) = .36 [87] {+}		.36	DISCRIM		IAT			
	Moderator effect	R	r(85) = .23 [87] {+}	2.14	.23		1		3	2	6.6
	Moderator effect	R	r(85) = .17 [87] {+}	1.57	.17	FT	4	IAT	3	2	6.6

Table 7.1 continued.

Study	Type Bias[1]	Statistic[2]	Z	r	Type Explicit	EC[3]	Type Implicit	IC[4]	Order I/E[5]	IGCS[6]
GENERAL EFFECT	R	r(85) = .22 [87] {+}	2.05	.22					2	6.6
Wittenbrink, Judd & Park (2001b, Study 1) – Positive context		r(85) = .19 [87] {-}		.19	MRS		IAT			
		r(85) = .03 [87] {-}		.03	Pro-Black		IAT			
		r(85) = .14 [87] {-}		.14	Anti-Black		IAT			
		r(85) = .01 [87] {+}		.01	DIVERS		IAT			
		r(85) = .03 [87] {-}		.03	DISCRIM		IAT			
Moderator effect	R	r(85) = .08 [87] {-}	-.74	.08		1		3	2	6.2
Moderator effect	R	r(85) = .21 [87] {+}	1.95	.21	FT	4	IAT	3	2	6.2
GENERAL EFFECT	R	r(85) = .03 [87] {-}	-.28	.03					2	6.2

Note:
[1] R= Race Bias, N= National Bias.
[2] (Degrees of freedom), [N], {direction of effect}.
[3] Category of Explicit Measures (EC): 1= Prejudice Endorsement (Anti-Black Scale, Attitudes Toward Blacks Scale (ATBS), Attitudes Toward Negroes Scale (ATNS), Blatant Prejudice Scale (BPS), Discrimination Scale (DISCRIM), Diversity Scale (DIVERS), E Scale (ES), Modern Racism Scale (MRS), Multifactor Racial Attitude Inventory (MRAI), Old Fashioned Racism Scale (OFRS), Intergroup Beliefs Scale (IGBS), Opinionation Scale (OS), Preschool Racial Attitude Measure II (PRAMII), Pro-Black Scale, Student Racism Scale (SRS), Subtle Prejudice Scale (SPS), Subtle and Blatant Prejudice Scale (SBPS)); 2= Relational Self-report (e.g., negative evaluations of out-group minus negative evaluations of in-group); 3= Semantic Differentials; 4= Feeling Thermometers; 5= Eclectic Index (i.e., composite measures containing scales from multiple categories).
[4] Category of Implicit Measures (IC): 1= RTs and Errors in Sequential Priming (Automatic Evaluation Task (AET), Category Inclusion Task (CIT), Lexical Decision Task (LDT), Stroop Task); 2= RTs in categorisation task (CT); 3= Association Tasks (Implicit Association Task (IAT), Go No-Go Association Task (GNAT)); 4= Physiological Measures (Facial Electromyography (EMG), Galvanic Skin response (GSR)); 5= Linguistic Intergroup Bias (LIB); 6= Semantic Differentials (Colour Meaning Task II, CMTII); 7= Eclectic index; 8= Inspection Time of Pictorial Stimuli (IT).
[5] Order of administering implicit and explicit measures (Order I/E): 1= Explicit first, 2= Implicit first, 3= Independent (i.e., completed prior to arrival), 4= Counterbalanced.
[6] IGCS = Inter-group Context Salience.
** No IGCS score could be determined so k was rated with the scale midpoint (i.e., '5').

7.1.2.2 Type of Bias

A significant, Z = 7.037, p = 2.17E-12, small, $\bar{Z}_{FISHER}$ = .166, $\bar{r}$ = .165, IEC effect was obtained from the 42 hypothesis tests derived from research examining race bias. A significant, Z = 5.80, p = 3.95E-09, small, $\bar{Z}_{FISHER}$ = .216, $\bar{r}$ = .213, IEC effect was obtained from the 18 hypothesis tests derived from research examining national bias. The difference between the magnitudes of these effects was not significant, Z = .082 p = .467. Consequently, we collapsed over type of bias for the remainder of the analyses.

7.1.2.3 Inter-group Context Salience

7.1.2.3.1 Judges' index of inter-group context salience. Implicit-explicit correspondence increased as a function of inter-group context salience, $\bar{Z}_{FISHER}$ = .543, Z = 5.225, p = 9.34E-08. As a means of better illustrating this effect we performed a median split of the inter-group context salience (judges' index) variable on the 60 hypothesis tests. We report only the effect sizes of IEC for high and low inter-group context salience. When the inter-group context salience was high $\bar{Z}_{FISHER}$ = .227, $\bar{r}$ = .223, whereas when inter-group context salience was low $\bar{Z}_{FISHER}$ = .124, $\bar{r}$ = .123.

7.1.2.3.2 Order of administration of implicit and explicit measures. The effects on IEC of the order in which implicit and explicit measures were administered can be seen in Table 7.2 (it should be borne in mind that the number of k for some variables are so small that they prevent making sensible comparisons). IEC was greatest when explicit measures were completed first (prior to implicit measures). This IEC effect was significantly greater than when implicit measures were presented first (Z = 2.703, p = .0034), than when explicit measures were completed prior to attending the laboratory (Z = 2.845, p = .0022), and, than when implicit and explicit measures were counterbalanced (Z = 1.728, p = .042). There were no other significant differences in IEC between the orders in which implicit and explicit measures were administered (all Zs < .87, all ps > .192).

Table 7.2. IEC as a Function of the Order of Implicit and Explicit Measure Administration (Study 5)

Order of Administration	k	Z	p	$\overline{Z}_{FISHER}$	$\bar{r}$
Explicit measures prior to implicit measures	9	6.610	3.18E-11	.319	.309
Implicit measures prior to explicit measures	36	6.091	7.33E-10	.161	.159
Explicit completed before attending laboratory	12	1.336	.091	.09	.09
Counterbalanced	3	3.322	.0005	.214	.211

7.1.2.4 Type of Implicit and Explicit Measure

7.1.2.4.1 Independent effects. Table 7.3a shows the magnitude of IEC as a function of each category of implicit and explicit measure (each hypothesis test was weighted by its corresponding sample size). However, we present this information merely for the sake of completeness. Because we want to examine the combined effects of (i.e., the 'interaction' between) the type of implicit and explicit measures used in subsequent analyses, we were only able to focus our analysis on measures with an adequate number of hypothesis tests. Consequently, we reduced the focus of the meta-analysis to examine just the two most frequently used categories of implicit measures (i.e., sequential priming and association-based measures) and the two most frequently used categories of explicit measures (i.e., endorsement scales and feeling thermometers). In doing this, only hypothesis tests that were formed of a combination of these implicit and explicit measures were retained in the meta-analytic database. This resulted in 54 hypothesis tests of the IEC effect. Table 7.3b shows the independent effects of each of the measures on IEC. Each measure revealed a significant but small IEC effect. The magnitudes of the IEC effect did not significantly differ as a function of the explicit measure used, $Z = .528$, $p = .299$. However, the difference between the magnitudes of the effect for type of implicit measure used was significant, $Z = 1.760$, $p = .039$. There was greater IEC when the implicit measure used was associations-based rather than based on sequential priming.

7.1.2.4.2 Combined effects. Table 7.4 shows the magnitude of IEC as a function of the combination of the most frequently used implicit and explicit measures (it should

be borne in mind that the number of k for some variables are so small that they prevent making sensible comparisons). IEC was reliable but of a small magnitude following each combination of implicit and explicit measures. IEC was smallest when endorsement scales and sequential priming techniques were the measures used. IEC was greatest when endorsement scales and association-based techniques (which were exclusively IATs) were the measures used. The IEC effect following the combination of endorsement and association measures was significantly greater than the IEC effect following the combination of endorsement and sequential priming measures, $Z = 1.942$, $p = .0261$. No other effect sizes significantly differed from each other (all $Zs < 1.087$, all $ps > .139$).

Table 7.3. IEC as a function of Type of Implicit Measure and Explicit Measure Used (Study 5)

Measures of Bias	k	Z	p	$\overline{Z}_{FISHER}$	$\bar{r}$
a) All measures (k = 75)					
Explicit Measures					
Endorsement Scales	53	7.951	5.60E-15	.171	.170
Feeling Thermometers	14	3.716	.0001	.133	.132
Semantic Differentials	6	2.647	.0041	.152	.151
Relational Self-report	1	.00	.50	.00	.00
Eclectic Index	1	2.733	.0031	.448	.42
Implicit Measures					
Sequential Priming	26	3.499	.00023	.101	.101
Associations	36	6.853	6.97E-12	.159	.158
RTs in Categorisation Task	2	2.611	.0045	.408	.387
Physiological Measures	4	3.536	.0002	.337	.323
Language Bias	3	.813	.208	.058	.058
Semantic Differentials	2	5.257	7.88E-08	.532	.487
Combined	1	4.525	3.07E-06	.485	.45
Inspection Times	1	2.641	.0041	.616	.548
b) Most frequently used measures (k = 54)					
Explicit Measures					
Endorsement Scales	40	6.008	1.19E-09	.137	.136
Feeling Thermometers	14	3.716	.0001	.133	.132
Implicit Measures					
Sequential Priming	26	3.499	.00023	.101	.101
Associations	28	6.170	4.59E-10	.160	.159

Table 7.4. IEC as a Function of the Combination of Implicit and Explicit Measures Used (Study 5)

Combination of Implicit and Explicit	k	Z	p	$\overline{Z}_{FISHER}$	$\bar{r}$
Feeling Thermometers x Associations	11	2.814	.00245	.123	.123
Feeling Thermometers x Sequential Priming	3	2.509	.00606	.160	.158
Endorsement x Associations	17	5.741	5.54E-09	.185	.183
Endorsement x Sequential Priming	23	2.554	.00533	.086	.086

7.1.2.5 Combination of Implicit and Explicit Measures Used and Inter-group Context Salience

In light of the moderating effects of the combination of implicit and explicit measures used, and of the effect of inter-group context salience on IEC, the relation between IEC and inter-group context salience was examined separately for hypothesis tests comprising each of the four combinations of implicit and explicit measures used. When feeling thermometers and sequential priming were the measures used, there was no reliable relationship between the IEC effect and inter-group context salience, $\overline{Z}_{FISHER} = .50$, $Z = .415$, $p = .339$. When endorsement scales and sequential priming were the measures used, there was a reliable, moderate relation between IEC and inter-group context salience, $\overline{Z}_{FISHER} = .36$, $Z = 2.086$, $p = .0185$. When the combination of feeling thermometers and association-based measures were used, there was a reliable, large relation between IEC and inter-group context salience, $\overline{Z}_{FISHER} = .579$, $Z = 1.776$, $p = .038$. There was an even larger relation between IEC and inter-group context salience when the combination of endorsement scales and association measures (exclusively IATs) were used, $\overline{Z}_{FISHER} = .667$, $Z = 2.814$, $p = .00245$. As a means of better illustrating this effect we performed a median split of the inter-group context salience (judges' index) variable on the 54 hypothesis tests (i.e., just the hypothesis test comprising each of the four combinations of implicit and explicit measures used. We report only the effect sizes of IEC for high and low inter-group context salience (see Table 7.5)

Table 7.5. IEC Effect Sizes as a Function of the Combination of Implicit and Explicit Measures Used When Inter-group Context Salience Was High vs. Low (Study 5)

	Inter-group Context Salience			
	High Salience		Low Salience	
Combination of Implicit and Explicit	$\bar{Z}_{FISHER}$	$\bar{r}$	$\bar{Z}_{FISHER}$	$\bar{r}$
Feeling Thermometers x Sequential Priming	.180	.180	.131	.130
Endorsement x Sequential Priming	.163	.161	.030	.030
Feeling Thermometers x Associations	.189	.187	.076	.076
Endorsement x Associations	.216	.213	.145	.144

7.1.3 Discussion

The meta-analytic integration was primarily conducted to explore whether IEC systematically varied as a function of the salience of an inter-group context (and corresponding inter-group identity). Results clearly showed that our two indices of inter-group context salience (i.e., judges ratings and the order of administration of implicit and explicit measures) affected IEC. In general, when there was greater inter-group context salience (including when explicit measures were presented first) there was greater IEC. Furthermore, the relationship between the judges' index of inter-group context salience and IEC was moderated by the combination of the type of measures used. We will discuss these findings in more depth later, but first we will look at the more general effects of the meta-analytic integration.

7.1.3.1 General Effects

For our sample of 60 hypothesis tests, the average IEC was reliable but of a small magnitude ($\bar{Z}_{FISHER} = .178$). The average effect size is approximately consistent with Dovidio et al's (2001) meta-analysis of IEC and is in line with the conclusions of narrative reviews (e.g., Blair, 2001; Fazio et al. 2003). Albeit small, there is a relationship between implicit and explicit measures. This provides support for the one construct approach to viewing implicit and explicit measures of in-group bias (e.g., Brauer, et al. 2000; Fazio & Olson, 2003) and suggests that implicit and explicit

measures both tap into one attitude and do not necessarily represent distinct attitudes controlled by different aspects of the cognitive system, as implied by the dual construct approach (e.g., Devine, 1989, Dovidio et al. 1997; Greenwald & Banaji, 1995; Wilson, Lindsey & Schooler, 2000). It should be noted, however, that the modest correlation between implicit and explicit measures does not preclude the possibility of distinct attitudes or cognitive systems per se (even though two things are correlated they may still be distinct). The correlation we obtained, however, suggests that a specific dual construct system (one that sees implicit attitudes derived from learned associations over time – ideas central to Devine, 1989; Dovidio et al. 1997; Greenwald & Banaji, 1995; Wilson et al. 2000) does not apply. This specific dual construct approach implies that implicit attitudes should not be malleable. That is, one's implicit attitude should not increase (or decrease) as a function of explicit attitude. We find that implicit attitudes do increase as a function of explicit attitudes and this positive correlation implies that this specific dual construct approach is not tenable. Instead, we favour an interpretation of implicit and explicit attitudes as one construct (although we cannot rule out other possible alternative dual-construct conceptualisations).

In addition to the average effect size of IEC, the meta-analysis also revealed, as previously expressed by many narrative reviewers (e.g., Blair, 2001; Fazio & Olson, 2003), much variability in effect sizes. Given that the effect sizes were heterogeneous and may be thought of as having been sampled from different populations of study outcomes implied that there should be some moderators of the IEC effect. We explored whether the type of measures used moderated IEC.

7.1.3.2 The Types of Measures Used

It did not matter whether feeling thermometers or endorsement scales were the measure of choice, as there was no difference in IEC as a function of these explicit measures used. The choice of implicit measure, however, did appear to matter. IEC was greater when association-based measures were used than when sequential priming measures were used. This may be because association measures capture exclusively the strength of association between the category and evaluation, as do both types of explicit measures (i.e., feeling thermometers and endorsement scales), whereas some sequential priming techniques (i.e., those that do not use category

labels as primes) capture this in addition to the activation of the social category (Neumann & Seibt, 2001).

The combination of implicit and explicit measures used moderated IEC. Specifically, there was greater IEC when endorsement scales and association-based (all IATs) measures were used than when endorsement scales and sequential priming measures were used. The reason for this may be the same as that stated above. Association measures capture exclusively the strength of mental association between a category and evaluation whereas the category is not necessarily activated for all respondents on sequential priming measures. Moreover, feeling thermometers and endorsement scales may be assumed to capture affective versus cognitive associations, respectively. The pattern of IEC would suggest that both sequential priming measures and association-based measures capture affective associations. However, association-based measures are better at capturing cognitive associations than sequential priming measures.

Parenthetically, it is worth noting that the very small IEC for endorsement scales and sequential priming measures (.086) is reliable. There is a relationship between implicit and explicit measures. This finding contradicts that of Dovidio et al. (1997, Study 1), who, using the same category of measures (MRS and CIT) found slightly larger IEC (.15) but concluded that implicit and explicit measures were largely dissociated.

7.1.3.3 Social Identity Salience

As stated above, the two inter-group context indices affected IEC. We found a large, reliable, positive relationship (.54) between inter-group context salience (judges' index) and IEC. The more accessible an inter-group context was at the time in which both measures were completed, the greater the correspondence between implicit and explicit measures. In other words, when an inter-group context was accessible on both implicit and explicit measures, and thus they were likely to be responded to in terms of the corresponding inter-group identity, implicit and explicit measures were likely to be tapping into 'the same form of in-group bias'. Our additional indicator of inter-group context salience, the order in which implicit and explicit measures were completed, also revealed a similar effect. Results showed that when explicit measures were completed first there was greater IEC than when implicit measures were

completed first. IEC was also greater when explicit measures were completed first than when the measures were completed prior to attending the study or than when the measures were counterbalanced. We suggest that the explicit measures made accessible a relevant inter-group context that 'spilled over' to influence how implicit measures were responded to (i.e., both measures were responded to in terms of an accessible inter-group context and inter-group identity). These findings provide support for research that suggests that IEC is likely to be a function of implicit and explicit measures tapping into the same memory contents and processes (e.g., Neumann & Seibt, 2001).

The strength of the relationship between inter-group context salience and IEC differed as a function of the combination of the types of implicit and explicit measures used. Recall, that, in general, there was a relationship between the salience of an inter-group context and IEC. However, when sequential priming and feeling thermometers were used the link between the salience of an inter-group context and IEC was not reliable. The relationship was smaller than the general effect when sequential priming was used in combination with endorsement scales. Moreover, the magnitude of the relationship was equivalent to the general effect when association-based measures and feeling thermometers were used. The magnitude of the relationship was larger than the general effect when associations (IAT) and endorsement scales were the measures of choice. As discussed above, whereas explicit measures exclusively capture the strength in mental association between the category and its evaluation, the implicit measures are likely to differ on this dimension. Whereas association-based measures (particularly the IAT) do exclusively capture this dimension, sequential priming measures may capture this in addition to the activation of the social category (as the different exemplar primes do not necessarily activate the social category to the same degree for all individuals, Neumann & Seibt, 2001). Therefore, these findings indicate that, in general, when implicit and explicit measures are capturing the same processes and memory contents the link between inter-group context salience and IEC is likely to be stronger than when the measures used do not tap into the same processes.

Parenthetically, these findings suggest that association-based measures in general, and the IAT in particular, may be better indicators of implicit in-group bias than their sequential priming counterparts. As discussed above, the association-based measures are more likely to be capturing the mental associations between category

and evaluation than sequential priming measures. These findings provide some validation for the IAT as measure of implicit in-group bias (Gawronski, 2002; Greenwald et al. 1998) and call into question the criticisms the IAT has received as a theoretically obscure measure (Brendl et al. 2001; De Houwer, 2001; McFarland & Crouch, 2002; Mierke & Klauer, 2001, 2003; Rothermund & Wentura, 2001, 2004).

7.2 Summary

The meta-analytic integration showed that there was a relationship between implicit and explicit measures and there was considerable variability in the magnitude of the IEC effect. We identified the type of measures used, particularly the combination of implicit and explicit measures used, and the order of administration of implicit and explicit measures, as moderators of the IEC effect. IEC was greatest when, respectively, the IAT and endorsement scales were used and when explicit measures were completed first. Crucially, we showed that the salience of an inter-group context (and the assumed corresponding identity) systematically predicted variations in IEC. The magnitude of this relationship differed as a function of the combination of implicit and explicit measures used; it was greatest when the IAT and endorsement scales were the measures of choice and, therefore, illustrates the importance of using implicit and explicit measures that tap into the same memory contents and processes (Neumann & Seibt, 2001).

Chapter 8

Summary and Conclusions

8.0 Introduction

In this chapter we summarise the results of the studies reported in the preceding chapters. Our central thesis considered whether national identification could be connected to negative out-group evaluations. In exploring this issue we drew the distinction between nationalism and patriotism, two ways in which national identification can be constructed. In examining the impact of these different identity orientations on implicit and explicit out-group evaluations we looked at: 1) the relationship between in-group attachment (identification) and implicit and explicit forms of in-group bias; 2) the mean level of implicit and explicit in-group bias; and 3) the correspondence between implicit and explicit measures of in-group bias. Here, we argue that the findings provide general support for our thesis. National identification may be connected to negative out-group evaluations (implicit and explicit) when identification is constructed in terms of nationalism rather than patriotism. Additionally, we argue that there is substantial evidence illustrating that the way in which national identification is constructed affects the correspondence between implicit and explicit measures; IEC is greater when identification is constructed in terms of nationalism than patriotism. In examining the consequences of type of national identification on these three related sub-topics of out-group evaluation, it is argued that the thesis represents an important advance on previous research in these areas (particularly 1 and 3). Limitations of the current research are then considered and possible directions for future research are outlined.

8.1 The identification – in-group bias link

Does the way in which national identification is constructed affect the link between identification (a positive in-group attachment) and in-group bias? This is the first of the three related questions that we simultaneously explored in our research program. Our first series of studies (1a – 1d) used a correlational paradigm that was consistent with much previous research examining the impact of nationalism and patriotism on a

variety of outcome variables (e.g., Blank & Schmidt, 2003; Kosterman & Feshbach, 1989; Schatz et al. 1999). Initially we established the factor structure of 'nationalistic' and 'patriotic' forms of identification (Study 1a and 1b); they were shown to be separate yet related constructs that tended to be only moderately correlated (with rs of around .40, for our British samples). Two validation studies examined the extent to which these forms of identification were differentially related to indices of negative out-group evaluations. The World Cup study (Study 1c) showed that nationalism was a significantly stronger predictor of an index capturing individual's acceptance of out-group derogation (i.e., the acceptance of hostility toward opposing football team supporters) than patriotism. Our second validation study (Study 1d) showed that nationalism but not patriotism predicted individual's scores on an adapted version of Pettigrew and Meertens (1995) blatant and subtle prejudice scale (adapted to examine British people's evaluations of foreigners). Here, there was strong evidence that the way in which identification was constructed impacted upon the link between identification and bias. Only when identification took the form of nationalism and individuals had the perception that Britain was better than other nations, coupled with anti-foreigner sentiments, was there a link with negative out-group evaluations. When identification was constructed in terms of patriotism, a positive in-group attachment – with no reference to an out-group – there was no link between identification and bias. Prima facie, these results support research that proposes a distinction between nationalism and patriotism as two identity or identity-related constructions (e.g., Blank & Schmidt, 2003; Kosterman & Feshbach, 1989; Schatz et al. 1999) and are amongst the first to show the differential prediction of negative out-group evaluations in this context. Nevertheless, it may be argued that our nationalism measure lacks face validity and may be best conceived of as a more classical prejudice measure. Evidence to support this claim can be seen in our second validation study. Here, nationalism and the prejudice measure were highly correlated ($r = .64$). This criticism notwithstanding, it can be argued that our nationalism measure contained defining characteristics of 'nationalistic' identity. The measure contained socially derogating, downward inter-group comparisons. Various researchers have suggested that national identification in terms of nationalism is constructed by these comparisons (e.g., Blank & Schmidt, 2003; Mummendey et al. 2001).

To provide a more direct test of our thesis, and to obviate the concerns raised by the correlational paradigm, the next three studies experimentally manipulated the comparison processes that may be key in the construction of 'nationalistic' and 'patriotic' identification. We employed the paradigm of Mummendey et al. (2001) and reduced nationalism and patriotism to inter-group and temporal comparisons respectively. We contended that the inter-group and temporal comparisons actually provided convenient manipulations of inter-group and group social identity respectively. The comparisons used in identity construction represent the type of orientation that is being engaged. Nationalism represents an inter-group orientation and patriotism a group orientation. In these contexts (inter-group and group) corresponding identity (inter-group and group) is likely to be made salient. Individuals are made 'aware' of their group membership and the prescriptive component for group behaviour or identity expression; the group member may view the in-group as better than others (nationalism) or better than the in-group at some other time (patriotism). They represent qualitatively distinct psychological states that shape individual's subsequent cognitions and behaviours. Our adaptation of Hinkle and Brown's (1990) model of groups and group contexts (see Chapter 1, section 1.1.2.1) informed this 'social identity salience' approach.

In each of our three studies (2b, 3, 4) that used the paradigm of Mummendey et al. (2001), participants completed an implicit measure of in-group bias as well as explicit measures of identification and xenophobia. Results converged in showing that the link between identification and implicit indices of in-group bias was significantly stronger when identification was constructed in terms of nationalism than when identification was constructed in terms of patriotism (but see Study 2b). This was further illustrated by the mini-meta-analytic integration of the three studies – on average, the identification and implicit in-group bias relationship was marginally stronger following the nationalism than patriotism frame. We did not, however, find any differences in the magnitude of the relationship between identification and (explicit) xenophobia between the nationalism and patriotism identity orientations. In general, this relationship tended to be small and not statistically reliable (but see Study 4). Despite this latter finding the results obtained were largely consistent with those of Mummendey et al. (2001) and support Hinkle and Brown's (1999) model. Their taxonomic model of groups and/or group contexts was designed to account for the identification – in-group bias link. Their model included an individualistic-

collectivist dimension and an autonomous-relational ideology/context dimension and hypothesised that the identification-bias relationship is likely to exist only for collectivist (i.e., group oriented) individuals in a relational (inter-group) context. We showed that identification was expressed through negative out-group evaluations only under an inter-group frame (a relational ideology, in Hinkle & Brown's terms). Although Hinkle and Brown (1990) did not speculate about the effects of type of group or group context on implicit bias, to the extent that implicit bias is the 'same sort of bias' as explicit bias (in that it is an expression of a salient inter-group identity) we believe that the scope of the model encompasses these processes. As we have suggested throughout, the nationalism frame made an inter-group context accessible on both implicit and explicit measures and thus they were likely to be responded to in terms of the same underlying process (i.e., a salient inter-group identity).

8.2 Malleability of in-group bias

Does the way in which identification is constructed impact on the level of explicit in-group bias? Across each of the three studies (2b, 3, 4) we found no differences in the mean level of xenophobia reported as a function of identity frame. As expected, participants were equally non-prejudice irrespective of the form of national identity that was constructed. These findings are consistent with those of Mummendey et al. (2001). No differences in level of explicit bias may have arisen because participant's responses were constrained by social desirability factors. Social norms of egalitarianism may exist (especially for student samples) which may suppress any variance in self-reported prejudice. Prejudice may be manifesting itself in more covert forms and only be displayed on measures that obviate social desirability constraints (this consideration was the primary reason for including implicit measures in our research). This position is consistent with contemporary models of prejudice (e.g., Devine, 1989; Gaertner & Dovidio, 1986; McConahay, 1986; Pettigrew & Meertens, 1995).

Does the way in which identification is constructed impact on the level of implicit in-group bias? We found variable findings with regard to this question. In Study 2b we found that the way in which identification was constructed did impact upon the mean level of implicit in-group bias. There was greater implicit out-group derogation following the nationalism frame than the patriotism frame. This finding

supports the idea that implicit bias is malleable (Blair, 2002) and not an inevitable consequence of category activation (e.g., Allport, 1954, Devine, 1989). The type of identity that was salient in corresponding group contexts (inter- vs. intra-group) had differential impact on category evaluation. We believe that these results are largely consistent with research demonstrating that group context moderates the activation of implicit bias (e.g., Mitchell et al. 2003; Pratto & Shih, 2000; Richeson & Nussbaum, 2004; Wittenbrink et al. 2001b). Our national identity frames changed the meaning of category labels and the consequent unintended evaluation. In the same way that presenting Blacks in a positive or negative stereotypic context increased positive or negative evaluations respectively (Wittenbrink et al. 2001b), the identity frames made accessible differing information about group relations. The nationalism frame presented a situation of relative privilege, through biased inter-group comparisons. The 'inferior' out-group was imbued with a negative evaluation. Indeed, research shows that this inter-group situation may give rise to implicit out-group derogation (Dambrun & Guimond, 2004). The patriotism frame made no reference to out-groups. There was no reason to expect the out-group to be evaluated negatively.

Study 3 and 4 revealed no differences in the level of implicit in-group bias as a function of identity frame. These results are inconsistent with the view that implicit in-group bias is malleable (e.g., Blair, 2002). We speculate that the heightened accessibility of actual differences in status relations may be one factor that may account for the differences observed between our studies. As we mentioned in Chapter 4, Study 2b was conducted immediately following England's 5 – 1 defeat over Germany in a football World Cup 2002 qualifier match. As is customary when England wins a game of such magnitude, the national media would have run with the story for some time afterwards. In some instances parallels may have even been drawn to the outcomes of World War II. Such messages, we suggest, may have served to accentuate the inter-group (nationalism) priming frame by re-enforcing the position that "Britain is better than other countries". Additionally, such messages alone may have strengthened the mental associations between Germany and a negative evaluation. No such events occurred prior to our next two studies (3 and 4) and no information of the actual status relations between the groups would be likely to have impacted on the identity frame manipulations.

8.3 Relationship between implicit and explicit measures

Does the way in which identification is constructed impact on the relationship between implicit and explicit measures of in-group bias? Across our three studies (2b, 3, 4) we found consistent and robust effects of the moderating role of type of national identification on IEC. Clearly demonstrated by the mini meta-analytic integration in Chapter 6, IEC was significantly greater when national identification was constructed in terms of nationalism (i.e., an inter-group identity) than when it was constructed in terms of patriotism (i.e., a group identity). We have suggested that IEC was greater following an inter-group identity frame because, under these conditions, implicit and explicit measures tapped into the same memory contents and processes; an accessible inter-group social identity. Explicit measures define an inter-group context and are, therefore, always likely to be responded to in terms of a salient inter-group identity, irrespective of any prior priming experience. Implicit measures, on the other hand are unlikely to make an inter-group context (and thus inter-group identity) accessible. Therefore (as default), implicit and explicit measures are likely to be responded to in terms of different processes. When a 'nationalistic' (inter-group) identity was made salient, however, the same information (e.g., mental associations determined by the prevailing inter-group context) was made accessible on implicit measures and, therefore, both implicit and explicit measures were likely to have been responded to in terms of the prevailing inter-group identity. Consequently, we observed a positive relationship between implicit and explicit measures. When a 'patriotic' identity was made salient, however, implicit measures were likely to have been responded to in terms of a group identity whereas explicit measures were responded to in terms of an inter-group identity; the likely occurrence of different identity processes resulted in less correspondence (approximately zero) between the implicit and explicit measures of in-group bias. In general, our findings are consistent with research that has demonstrated IEC when implicit and explicit measures activate the same memory contents and processes (e.g., Neumann & Seibt, 2001).

These results extend the research domain on IEC by delimiting one of the conditions in which implicit and explicit measures are related. Our research moves beyond the 'related or not' approach that has previously dominated IEC research and provides a response to the request to identify moderators of the relationship between implicit and explicit measure (e.g., Blair, 2001; Fazio & Olson, 2003). Additionally,

our meta-analytic review (Study 5) of the current literature indicated that there was a link between the salience of an inter-group context and IEC. We found that as the salience of an inter-group context increased (and the likely corresponding accessible inter-group identity) so did the magnitude of IEC. This review suggested that the salience of an inter-group context is one factor that may account for the variability observed in previous research on IEC (e.g., Dovidio et al. 1997; Greenwald et al. 1998; McConnell & Leibold, 2001; Wittenbrink et al. 1997). Moreover, the meta-analysis also indicated that the combination of the types of implicit and explicit measures used affected the link between inter-group context salience and IEC. Although in general there was a relationship between the salience of an inter-group context and IEC, when sequential priming and feeling thermometers were used the link between the salience of an inter-group context and IEC was not reliable. The relationship was smaller than the general effect when sequential priming was used in combination with endorsement scales. The magnitude of the relationship was equivalent to the general effect when association-based measures and feeling thermometers were used. The magnitude of the relationship was larger than the general effect when associations (IAT) and endorsement scales were the measures of choice. As an explanation for these findings, we suggest that whereas explicit measures exclusively capture the strength in mental association between the category and its evaluation, the implicit measures are likely to differ on this dimension. Whereas association-based measures (particularly the IAT) do exclusively capture this dimension, sequential priming measures may capture this in addition to the activation of the social category (as the different exemplar primes do not necessarily activate the social category to the same degree for all individuals, Neumann & Seibt, 2001). Therefore, these findings indicate that, in general, when implicit and explicit measures are capturing the same processes and memory contents the link between inter-group context salience and IEC is likely to be stronger than when the measures used do not tap into the same processes.

Our meta-analytic review also found that there <u>is</u> a relationship between implicit and explicit measures, albeit a small one ($\overline{Z}_{FISHER} = .178$). This provides support for the one construct approach to viewing implicit and explicit measures of in-group bias (e.g., Brauer, et al. 2000; Fazio & Olson, 2003) and suggests that implicit and explicit measures both tap into one attitude and do not necessarily

represent distinct attitudes controlled by different aspects of the cognitive system, as implied by the dual construct approach (e.g., Devine, 1989, Dovidio et al. 1997; Greenwald & Banaji, 1995; Wilson, Lindsey & Schooler, 2000).

8.4 Additional findings

8.4.1 Inter-group identity as a causal factor

Are the effects that we obtained throughout the experimental studies a function of a salient inter-group identity? This question was partly addressed in Study 3. We speculated that our findings from Study 2b might have been an artefact of biased inter-stimuli comparisons and not a direct result of inter-group ('nationalistic') identity. We argued that we might have conflated biased inter-group comparisons with inter-group identity. Therefore, in order to disentangle this confound, in Study 3 we constructed equivalent biased inter-stimuli comparisons to make accessible inter-personal identity. It was assumed that the inter-personal frame may provide an adequate comparison standard to establish whether, following a 'nationalistic' orientation, participants were actually operating under an accessible inter-group identity or whether between-stimuli comparisons were sufficient to result in the observed pattern of results.

Study 3 revealed that there was a stronger relationship between identification and implicit in-group bias and greater IEC following the inter-group (nationalism) than inter-personal identity orientation. These findings provided support for the thesis that these effects were affected by a salient inter-group identity. Furthermore, because both inter-group and inter-personal identity was constructed through equivalent biased comparisons we were able to rule out the possibility that a biased inter-stimulus comparison per se was sufficient to account for such effects. Additionally, these finding may provide somewhat tangential support for theoretical frameworks that propose a qualitative distinction between individuals acting as individuals and individuals acting as group-members and is consistent with the idea that inter-personal identity and inter-group identity generates qualitatively distinct cognitions and behaviours (e.g., Tajfel, 1978; Tajfel & Turner, 1986; Turner, 1982; Turner et al. 1987).

8.4.2 The generality of our findings

Can we generalise about the effects of the way in which national identification is constructed? We argue that this thesis provides a convincing demonstration of the generality of the effects of type of national identification on negative out-group evaluations. This is particularly the case with regard to the link between identification (positive in-group attachment) and implicit in-group bias and the relationship between implicit and explicit measures. Across our three studies (2b, 3, 4), results tended to converge in showing that the link between identification and implicit in-group bias was greater when identification was constructed in terms of nationalism than patriotism. Similarly, IEC was reliably stronger when identification was constructed in terms of nationalism than patriotism. The corresponding mini-meta-analytic integrations confirmed these effects. These effects arose when we used both German (Study 2b and 4) and American (Study 3) as the out-group category to be evaluated and also occurred on different implicit measures of in-group bias. We found similar effects when we used a sequential priming measure, an LDT (Study2b and 3), and when we used an IAT (Study 4).

8.5 Further considerations

The research has provided compelling evidence for two of the three related topics examining the effects of type of national identification on negative out-group evaluations (i.e., the link between identification and implicit in-group bias and IEC). Above, we discussed the theoretical implications of these effects. Here, we examine some of the more indirect issues surrounding our overarching thesis.

8.5.1 Relevance of temporal comparisons

The paradigm of Mummendey et al. (2001) has received some criticism about the relevance or meaningfulness temporal comparisons have for identity construction or maintenance (e.g., Hopkins, 2001, McGarty, 2001). The criticism has import here. The burden of the criticism maintains that, unlike inter-group comparisons, temporal comparisons do not provide meaningful or relevant dimensions for comparison, in which identity may be constructed or maintained. Obviously, we do not agree with

this suggestion. If temporal comparisons were not meaningful for our participants then it is necessary to explain why there was equally high attachment to the in-group following temporal and inter-group comparisons in each of our three experimental studies. From these findings, it does appear that temporal comparisons may be one process by which a meaningful and relevant identification may be constructed and maintained (also see Hinkle & Brown, 1990). Parenthetically, recent research has shown that in naturalistic settings individuals do use intra-group comparisons to maintain a positive social identity (e.g., Brown & Middendorf, 1996; Brown & Haeger, 1999; Zagefka & Brown, 2005).

8.5.2 Comparison choice as pathway to prejudice reduction

Is it possible to infer from our findings that encouraging temporal (as opposed to inter-group) comparisons may be one way to reduce negative out-group evaluations? The answer to this question may be different for implicit and explicit out-group evaluations. For explicit evaluations, we found no mean differences in level of prejudice as a function of the type of national identity constructed (nationalism or patriotism). Thus, participants were equally (non-) xenophobic irrespective of the type of comparison on which in-group identification was based. The differences we observed in the strength of relationship between identification and xenophobia within each identity frame represent process differences. Therefore, for explicit measures, comparison choice for identity construction may not be seen as a pathway for explicit prejudice reduction. For implicit evaluations, however, we did find that the mean level of implicit out-group derogation differed as a function of identity frame. There was greater out-group derogation following the nationalism than patriotism frame (Study 2b). This result would suggest that comparison choice may be important for the reduction of implicit prejudice: encouraging people to make temporal rather than inter-group comparisons in identity construction may be likely to lead to less implicit negative out-group evaluations. Nevertheless, we suggest that caution is exercised before comparison choice is accepted as a tool for implicit-prejudice reduction. As we noted above, we found no mean differences in implicit evaluations as a function of identity frame for either Study 3 or Study 4. We speculated that the reason we obtained mean differences in Study 2b was because of the heightened accessibility of actual differences in status relations, given the context in which the study was

completed (i.e., post England – Germany football match victory). The more consistent finding across the three studies (2b, 3, 4) was the differences in strength of relationship between identification and implicit in-group bias. As mentioned above, this represents process differences and, therefore, comparison choice may not be a pathway to the reduction of implicit prejudice. Therefore, overall, our data seems to suggest that comparison choice will not, by itself, reduce people's negative out-group evaluations. To achieve that, it is likely that other strategies may be necessary – perhaps those stemming from the contact hypothesis (e.g., Allport, 1954; Brown & Hewstone, 2005). Perhaps integrating those strategies with interventions that highlight temporal rather than inter-group comparisons in identity construction may prove beneficial in reducing implicit and explicit prejudice reduction. These ideas may inform future research in prejudice reduction.

8.5.3 Extending models of social identity

As we saw in Chapter 1, current models of social identity (e.g., Hinkle & Brown, 1990; Tajfel & Turner, 1986) emphasise the strategic or voluntary nature of social psychology processes involved in inter-group evaluations, as a strategy for maintaining or enhancing a positive social identity. They make no hypotheses about the unintended or implicit effects of social identity processes. Chapter 2 documented a myriad of studies that illustrated implicit in-group bias effects (e.g., Dovidio et al. 1997; Fazio et al. 1995; Greenwald et al. 1998; Perdue et al. 1990), and the differences in magnitude of these effects as a function of individual's level of identification or prejudice (e.g., Lepore & Brown, 1997, 1999; Locke et al. 1994; Wittenbrink et al. 1997). Noting the ubiquity of implicit biases (particularly as a function of identification or prejudice level), Brown (2000) suggested that a future challenge for SIT researchers would be to identify which social identity processes (if any) operate at the implicit level. This research has taken a first step in response to this and has shown that social identity processes may operate at the implicit level. Specifically, the type of comparison used to construct, maintain or enhance a positive social identity may have an unintended (implicit) influence on negative out-group evaluations. Throughout the research we showed that the different types of comparison that construct identity may lead to differential psychological associations between a positive in-group attachment and out-group evaluations. As a consequence

of these findings, we suggest that models of social identity be extended or elaborated for the inclusion of implicit measures. This should not lead to dramatic revisions of SIT however, because, as our research has revealed, implicit indicators of in-group bias tend to be correlated to explicit measures under conditions that make accessible inter-group social identity. So, in these circumstances, we would expect a similar array of implicit in-group biases to be displayed for identity purposes as explicit in-group biases.

Similarly, based on our data, we also argue that the concept of social identity itself be further examined and elaborated. We adopted a popular conception of social identity that was put forward by Tajfel (1978, p.63): "that part of an individual's self-concept which derives from his knowledge of his membership in a social group (or groups) together with the value and emotional significance attached to that membership". In our experimental studies, we manipulated different comparisons (inter-group and temporal) that resulted in accessible social identity. Although all individual's had an accessible social identity, there were different psychological associations between identity and in-group bias depending upon how that social identity was constructed. These results imply that, in predicting evaluations (or behaviour) identification is not always the same, it can mean different things. Consequently, we need to specify what these different meanings are before making specific predictions about outcome variables, such as in-group bias. We suggest that Hinkle & Brown's (1990) model will provide a useful framework to assist with this (also see Ellemers et al. 1999 and Jackson & Smith, 1999, for interesting frameworks).

8.6 Limitations and future research

Arguably, the most robust and consistent effect to emerge from our research was the moderating role of type of national identification on IEC. We found across the three experimental studies (2b, 3, 4) that IEC was reliably greater following the nationalism than patriotism frame. Our meta-analytic review also illustrated that there was a positive relationship between the accessibility of an inter-group context and IEC. This work has advanced our understanding of the relationship between implicit and explicit measures of in-group bias (see above). Nevertheless, we suggest that, although promising, this work be taken only as a first step toward a better

understanding of the construct validity of implicit measures. Our studies did not look beyond the initial correlation between implicit and explicit measures. To gain a better understanding of the construct validity of implicit measures (in relation to explicit measures) we must also examine the predictive validity of both measures (see Fazio & Olson, 2003). As we saw in Chapter 2, McConnell & Leibold (2001) showed that even though there may be reliable IEC (r = .42), implicit and explicit measures might also show predictive validity. In this study, implicit (but not explicit) measures were associated with a variety of spontaneous behaviours (e.g., speech errors, speech hesitations) that White participants displayed toward a Black experimenter. Given these findings, implicit and explicit measures may best be viewed as separate yet related constructs. This obviously partly contradicts the 'one construct' conclusion that we were able to draw from our meta-analytic integration (Study 5).

To better understand the construct validity of implicit measures in research on national bias (as well as generally), we suggest that future research should examine the pattern of the relationships between implicit and explicit attitude measures and spontaneous and deliberative behaviours under different identity frames (nationalism versus patriotism). Dovidio et al. (1997, 2002) hypothesised and found that implicit measures of in-group bias may be most predictive of spontaneous behaviour, while explicit measures may relate better to deliberative behaviour (also see Fazio et al. 1995). It would be interesting to see if this pattern of effects emerged when identification was constructed in terms of nationalism and patriotism. We speculate, however, that there may be differential patterns of effects depending upon identity frame. Because implicit and explicit measures are likely to be responded to in terms of the same memory contents and processes under an inter-group (nationalism) frame (i.e., an accessible inter-group identity), and thus measuring the 'same form of bias', both measures may be equally positively associated with spontaneous and deliberative behavioural measures. Under a patriotism (intra-group) frame, however, we may see the typical pattern of effects shown in previous research because, under this frame, implicit and explicit attitudes are tapping into different memory contents and processes and measuring qualitatively distinct forms of bias.

Remaining in the behavioural domain, we suggest that one further interesting avenue for future research would be to examine the impact of different forms of national identification (nationalism and patriotism) on automatic behaviour, in response to exposure to an out-group (e.g., asylum seekers or immigrants). Past

research on automatic behaviour has shown that priming of social stereotypes may unconsciously influence behaviour. That is, the activation of social stereotypes can lead people to unintentionally act in line with traits typical for the stereotype. Bargh, Chen & Burrows (1996), for example, showed that people primed with the stereotype of the elderly subsequently walked more slowly down the corridor after leaving the experiment (also see Dijksterhuis & van Knippenberg, 1998; and Dijksterhuis & Bargh, 2001, for a review of automatic behavioural effects). Participants in the study were (relatively young) students and thus the group of elderly people could reasonably be considered to be an out-group. After noticing the peculiarity of this finding, its inconsistency with research on inter-group relations (e.g., Brewer, 1979, Brewer & Brown, 1998; Tajfel & Turner, 1986), researchers attempted to reconcile the discrepancy (e.g., Schubert & Haftner, 2003; Spears, Gordijn, Dijksterhuis & Stapel, 2004). Acknowledging previous research that had shown that people tend to differentiate themselves from out-group members in an attempt to construct or maintain a positive in-group identity (e.g., Tajfel & Turner, 1986), researchers suggested that we should be able to observe automatic behavioural contrast effects and implicated inter-group comparisons as a key process (e.g., Schubert & Haftner, 2003; Spears et al. 2004). Spears et al. (2004), for example, found that participants coloured pictures more messily when neatness was associated with an out-group rather than an in-group.

Nationalism and patriotism represent different comparison processes in identification: inter-group and temporal respectively. Making these orientations accessible prior to automatic behavioural measures may result in different patterns of effects. We suggest that, because it is composed of an inter-group comparison, a 'nationalistic' identity would tend to result in automatic behavioural contrast from an out-group stereotype, whereas patriotism may tend to result in automatic behavioural assimilation. For example, 'nationalistic' but not 'patriotic' identifiers may be less dishonest when the negative stereotype 'dishonesty' is associated with asylum seekers than when it is associated with British people. Such research would help to advance our understanding on the effects of identification on automatic behavioural effects.

8.7 Final conclusions

The results presented throughout this research provide compelling evidence that the way in which national identification is constructed does affect negative out-group evaluations. This was perhaps most clearly illustrated when examining the relationship between identification and implicit in-group bias and when examining IEC. Our three experimental studies converged in showing that the link between identification and in-group bias was stronger when identification was constructed in terms of nationalism than when identification was constructed in terms of patriotism. Similarly, the same studies illustrated that there was greater IEC under the nationalism than under the patriotism frames. That the accessibility of a salient inter-group identity may be a causal factor for IEC was further demonstrated in our meta-analytic integration of the present literature on IEC. Here we witnessed a positive relationship between inter-group context salience (and the assumed corresponding inter-group identity) and IEC.

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