CHAPTER TWO

OPTIMAL DISTINCTIVENESS THEORY: A FRAMEWORK FOR SOCIAL IDENTITY, SOCIAL COGNITION, AND INTERGROUP RELATIONS

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Abstract
Optimal distinctiveness theory [Brewer, M. B. (1991). The social self: on being the same and different at the same time. *Personality & Social Psychology Bulletin, 17*(5), 475–482] proposes that individuals have two fundamental and competing human needs—the need for inclusion and the need for differentiation—that can be met by membership in moderately inclusive (optimally distinct) groups. In this chapter, the optimal distinctiveness model and its origins are summarized, and theoretical extensions and empirical tests of the model are discussed. In particular, the empirical review summarizes the model’s consequences for social identification, social cognition, and intergroup relations. The evidence strongly supports the notion that the needs for inclusion and differentiation influence self-categorization resulting in a curvilinear relation between group inclusiveness and group identification. The existing evidence also indicates that the two needs influence perceptions and judgments of the self and others and the nature of intragroup and intergroup relations. The chapter concludes by discussing the interplay of the needs for inclusion and differentiation across levels of the self and how the needs for inclusion and differentiation influence which level of self (individual or collective) is motivationally primary.

1. Introduction
A prevalent conception of contemporary western societies is that society members seek to free themselves from the groups they depend on, that they strive to pursue personal goals and advance individual careers, and that they ultimately want to create a world that is a reflection of the self. Technology is often intended to aid individuals in achieving these aspirations, and yet, ironically, there are clear instances where the freedom that technology provides leads individuals to form new groups defined by that technology. For example, communities have formed around the use of Apple technology (Kahney, 2004/2006), and these communities not only exist to promote the advancement and advantages of such technology, but become social resources in their own right. They become new ways of defining group membership and, as such, they return individuals to the social group.

Our perspective starts with some basic assumptions about the nature of human sociality, specifically that humans are an obligatorily group-living species. Over the course of evolution, human adaptations have been such that individual human beings cannot survive outside of the context of cooperative, interdependent groups (Brewer, 1997, 2003; Brewer &...
Caporael, 2006; Caporael, 1997). Cooperative group living not only provides the benefits of shared resources, division of labor, and mutual protection, but it also entails costs to individuals who must be willing to give resources and effort to contribute to group outcomes. Thus, cooperative living requires both trust (that if I cooperate, others will do their share and reciprocate) and feelings of obligation (to do one’s own share and reciprocate others’ cooperation). If individuals depend on cooperative intragroup interactions as necessary for personal survival, the question becomes how do individuals determine who is likely to reciprocate trust, support, and cooperation?

Some groups survive and function better than others. Among other things, effective cooperation is constrained by group size. On the one hand, groups that are too small may engage strong obligation but the benefits of shared resources are limited. The advantage of extending social interdependence and cooperation to an ever wider circle comes from the ability to exploit resources across an expanded territory and buffer the effects of temporary depletions or scarcities in any one local environment. On the other hand, expansion comes at the cost of increased demands on obligatory sharing and regulation of reciprocal cooperation. Both the carrying capacity of the environment and the capacity for distribution of resources, aid, and information inevitably constrain the potential size of cooperating social networks. Thus, effective social groups cannot be either too small or too large. To function, social collectives must be restricted to some optimal size—sufficiently large and inclusive to realize the advantages of extended cooperation, but sufficiently exclusive to avoid the disadvantages of spreading social interdependence too thin. It was this structural requirement for effective group living that formed a backdrop for the development of optimal distinctiveness theory.

2. **Optimal Distinctiveness Theory**

Optimal distinctiveness theory was developed to fill a gap in extant theories of social identity. The original statements of social identity theory (Tajfel, 1981) and the subsequent development of self-categorization theory (Turner et al., 1987) were based heavily on cognitive processes of

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1 British explorer Percy H. Fawcett, known for his early twentieth century explorations into the South American jungles of the Amazon, was well aware of such tradeoffs. Faced with a variety of threats—such as malaria, anacondas, hostile Indians, and starvation—it might be natural for an Amazonian explorer to practice “safety in numbers,” but such efforts could make matters worse. Fawcett preferred to keep his expedition small, as it would be more capable of living off the land and would simultaneously pose no threat to Indians (Grann, 2009). Moreover, in an event that serves as a reminder of the dangers of the Amazon and the disadvantages of overly inclusive groups, Fawcett had been told of an 80-person party that had to retire from its exploration because so many members were picked off and killed by poison arrows (Grann, 2009).
categorization and perceptual accentuation. This depiction provided an explanation for why and how specific social categorizations and in-group–out-group distinctions become salient but it lacked a driver for the process of identification with in-groups, particularly for chronic, long-term identification. Although the theory postulated that social identity salience had motivational consequences in the form of a striving for positive distinctiveness of the in-group (Tajfel & Turner, 1979), a motivational component was missing from the theory with respect to antecedents of social identity.

For many social psychologists, the idea that social identification—with all its significant emotional and behavioral concomitants—is based solely on “cold cognition” was intuitively incomplete. Because group identity sometimes entails self-sacrifice in the interests of group welfare and solidarity, understanding why and when individuals are willing to relegate their sense of self to significant group identities requires motivational as well as cognitive analysis. Motivational explanations were also needed to account for why group membership does not always lead to identification and why individuals are more chronically identified with some in-groups rather than others.

2.1. Basic premises of the optimal distinctiveness model

We start from the assumption that the requirements of group living have shaped the evolution of human psychology. More specifically, if social differentiation and intergroup boundaries are functional for social cooperation, and social cooperation is essential for human survival, then there should be psychological mechanisms at the individual level that motivate and sustain in-group identification and differentiation.

The optimal distinctiveness model (Brewer, 1991) posits that human beings are characterized by two opposing needs that govern the relationship between the self-concept and membership in social groups. The first is a need for assimilation and inclusion, a desire for belonging that motivates immersion in social groups. The second is a need for differentiation from others that operates in opposition to the need for immersion. As group membership becomes more and more inclusive, the need for inclusion is satisfied but the need for differentiation is activated; conversely, as inclusiveness decreases, the differentiation need is reduced but the need for inclusion is activated. These competing drives hold each other in check, assuring that interests at one level are not consistently sacrificed to interests at the other. According to the model, the two opposing motives produce an emergent characteristic—the capacity for social identification with distinctive groups that satisfy both needs simultaneously.

The basic premise of the optimal distinctiveness model is that the two identity needs (inclusion/assimilation and differentiation/distinctiveness) are independent and work in opposition to motivate group identification.
More specifically, it is proposed that social identities are selected and activated to the extent that they help to achieve a balance between needs for inclusion and for differentiation in a given social context. Optimal identities are those that satisfy the need for inclusion within the in-group and simultaneously serve the need for differentiation through distinctions between the in-group and out-group. In the original statement of the theory, Brewer (1991) tried to capture the essential ideas in the form of a figure that depicted the opposing drives and the point of equilibrium (Fig. 2.1, adapted from Brewer, 1991).

Researchers widely consider the inclusion need, the differentiation need, or both fundamental to self and identity (Baumeister & Leary, 1995; Fiske, 2004; Maslow, 1943; Vignoles et al., 2006), and the idea that individuals prefer a balance between their needs for inclusion and differentiation is not novel. Rather, this notion is the basis for uniqueness theory (Snyder & Fromkin, 1980) as well as a number of theories on individuation (e.g., Codol, 1975; Lemaine, 1974; Maslach, 1974; Ziller, 1964) where the needs for inclusion and distinctiveness are met by comparisons with other individuals. Optimal distinctiveness theory differs from the other motivational theories in that the balance between inclusion and differentiation is achieved at the group level, through identification with groups that are both sufficiently inclusive and sufficiently distinct to meet both needs simultaneously.

![Figure 2.1](image-url)  
**Figure 2.1** Optimal distinctiveness theory: Opposing process model. Reprinted with permission from Brewer (1991). Copyright, Sage/Society of Personality and Social Psychology.
In effect, optimal social identities involve *shared distinctiveness* (Brewer & Silver, 2000; Stapel & Marx, 2007). Individuals will resist being identified with social categorizations that are either too inclusive or too differentiating but will define themselves in terms of social identities that are optimally distinctive. Equilibrium is maintained by correcting for deviations from optimality. A situation in which a person is overly individuated will excite the need for inclusion, motivating the person to adopt a more inclusive social identity. Conversely, situations that arouse feelings of deindividuation will activate the need for differentiation, resulting in a search for more exclusive or distinct identities.

### 2.2. Some qualifications and clarifications

Although hypotheses derived from optimal distinctiveness theory have been tested by different researchers in different contexts, some aspects of the theory are frequently misunderstood. Importantly, the model does *not* postulate that optimal distinctiveness is a property of some groups rather than others and that individuals directly seek identification with such optimal groups. Rather, optimality is a product of current levels of activation of the opposing motives for inclusion and differentiation and group properties that determine its level of inclusiveness and distinctiveness. This leads to three principles that are essential to understanding optimal distinctiveness.

First, *optimal distinctiveness is context specific*. Context affects both the activation of motives or needs and the relative distinctiveness of specific social categories. For example, in the context of an international psychology conference, group identity as a psychologist is inclusive but not optimally distinctive. In this context, shared identity as a social psychologist is both sufficiently inclusive and differentiating. However, at a university faculty meeting, group identity as a psychologist is both inclusive and distinctive, and any subdisciplinary group membership would be excessively differentiating.

Second, *optimal distinctiveness is a dynamic equilibrium*. Even within a given context, optimality is not necessarily fixed because inclusion and differentiation motives are also subject to temporal influences and change over time. For example, when an individual first joins a new social group, inclusion and assimilation needs are likely to be particularly salient. At this stage, the new group member will be concerned that the in-group is sufficiently inclusive and broadly defined that he/she clearly falls within the group boundaries. Over time, however, when inclusion has been sufficiently established, differentiation motives are more likely to be activated and group members become more concerned that the in-group boundaries are defined so that the in-group can be clearly differentiated within its social context.
Third, identity motives vary across situation, culture, and individuals. Asking “how ‘strong’ an individual’s inclusion motive is” is like asking how strong the individual’s hunger motivation is. Like any need or drive, inclusion and differentiation motives vary as a function of current levels of satiation or deprivation. However, individuals may differ in how sensitive they are to changes in levels of inclusiveness. Just as some individuals start feeling ravenously hungry after an hour or two since they last ate, whereas other individuals do not even notice they have not eaten all day, so some people will react strongly to a slight loss of inclusiveness (or slight expansion of group boundaries), whereas others will be more tolerant of a range of in-group inclusiveness.

Put more formally, the model as depicted in Fig. 2.1 has four important parameters—the height (intercept) of the need for differentiation, the height (intercept) of the need for inclusion, the negative slope of the need for inclusion, and the positive slope of the need for differentiation. Of these four, one is presumed to be fixed. The intercept (zero activation) of the need for differentiation is assumed to be at the point of complete individuation (the endpoint of the inclusiveness dimension). All of the other parameters are free to vary; any changes in the intercept or slope of the inclusion drive or the slope of the differentiation drive will alter the point of equilibrium that represents an optimal identity. Thus, the model depicted in Fig. 2.1 is just one member of a class of models containing all possible variations in these parameters, and differences across situations, cultures, and individuals can be represented in terms of variation in the slopes of the two drives (which can vary independently). (See Brewer and Roccas (2001) for a discussion of how cultural differences can be reflected in model parameters and the point of equilibrium.) Again, the overall point is to emphasize that optimal distinctiveness is not a fixed property of groups or of individuals but a consequence of motivational dynamics at both levels.

Another important clarification is that although perceived intragroup inclusion and perceived intragroup differentiation are necessarily oppositional (see Fig. 2.1), the extent to which groups are able to meet group members’ needs for inclusion and differentiation may actually be positively related. As noted previously, the need for inclusion is met through assimilation within the group (intragroup inclusion), whereas the need for differentiation is met through comparisons between groups (intergroup differentiation). Thus, it is possible for groups to be high on both dimensions, and indeed, to the extent that individuals pursue membership in optimally distinct groups in order to be both included and distinctive, then evidence should indicate that greater perceived intergroup differentiation is positively associated with greater perceived intragroup inclusion.

To examine this hypothesis, Leonardelli and Pickett (2009) constructed measures designed to assess the degree to which individuals perceive that a particular group identity confers intragroup inclusion and intragroup
differentiation. Undergraduates were asked to rate the degree to which students within their university were similar to each other (a form of intragroup inclusion) and the extent to which students are different from each other. Analysis revealed that these perceptions were negatively related to each other; not surprisingly, perceived intragroup inclusion was negatively correlated with perceived intragroup differentiation, $r = -0.33$. However, participants were also asked to indicate the extent to which their university is different from other universities—a measure of intergroup differentiation. Results of a correlational analysis indicated that there was no negative association between intragroup inclusion and intergroup differentiation, $r = 0.05$. Moreover, when controlling for feelings of intragroup differentiation, the association between intragroup inclusion and intergroup differentiation was significant and positive, $pr = 0.21$. This finding provides initial evidence for a positive relation between the degree to which a group is able to meet group members’ needs for inclusion and differentiation.

In sum, the theory stipulates that individuals are motivated by two fundamental and competing human needs, and that individuals can simultaneously meet these needs by identifying with moderately inclusive group memberships. Such group memberships meet the need for inclusion within the group and the need for differentiation between groups. Furthermore, although the needs are necessarily oppositional, the extent to which groups are able to meet group members’ needs for inclusion and differentiation may actually be positively related when inclusion is met within and differentiation is met between groups.

3. Implications for Membership Identification and Preference

Optimal distinctiveness theory helps to explain existing evidence in ways not previously offered or addressed by theories on self-categorization, social identity, and uncertainty identity (Hogg, 2007). As one case, it offers an explanation for the psychology of minority–majority relations, or perhaps more generally, it offers a theoretical rationale for why group inclusiveness—as defined by relative in-group size—yields an inverted U-shaped curvilinear effect on group identification. Each of these features is addressed in turn.

3.1. Evidence from minority–majority relations

Minority–majority relations are defined by relative rather than absolute in-group size. Whereas absolute size refers to the number of group members, relative size is contextual. A group of 500 is a numerical majority in a social
context of 600, but a numerical minority in a social context of 6000. Relative in-group size is one way to conceptualize group inclusiveness, where majority groups are considered highly inclusive groups compared to more moderately inclusive minority groups. Just as being a psychologist is not distinctive in the context of a psychology convention, right-handedness is not distinctive in a world in which the vast majority of people are right-handed.

According to optimal distinctiveness theory (Brewer, 1991), individuals are motivated to prefer membership in salient numerical minorities because such groups meet the needs for inclusion and differentiation. Whereas numerical majorities meet the need for inclusion because of their large size, they lack distinctiveness within the social context. Numerical minorities, however, typically meet both needs: the shared identity meets the need for inclusion, and their relatively small size makes the in-group distinct from larger groups. Individuals should thus be more likely to identify with and prefer membership in numerical minorities because these groups are optimally distinct.

Evidence from a variety of studies supports the idea that numerical minorities are perceived to be optimally distinct. On the distinctiveness front, memberships in numerical minorities are recalled more spontaneously as they contribute a sense of distinctiveness to self-definition (McGuire & McGuire, 1988) and lead group members to describe themselves by the characteristics that typify their group (Simon & Hamilton, 1994). On the inclusion front, members of minorities are more likely to consider themselves typical of their group (e.g., Ellemers et al., 1999), and minority groups are perceived to be more homogeneous (e.g., Simon & Brown, 1987), more like an entitative unit (Mullen, 1991), and their members perceived as more similar to each other (Nelson & Miller, 1995) than majority groups.

According to optimal distinctiveness theory, if individuals perceive minority groups to be distinctive and inclusive, then individuals should be more likely to identify with and prefer minority to majority group membership. This prediction is also supported by a good deal of evidence on group members' identification with and evaluations of minority and majority groups. Specifically, members of numerical minorities are more likely to identify with their group than are members of numerical majorities (e.g., Blanz et al., 1995; Ellemers & Van Rijswijk, 1997; Ellemers et al., 1999; Feather, 1995; Lücken & Simon, 2005; Simon & Brown, 1987; Simon & Hamilton, 1994, Experiment 1). This effect has been demonstrated with laboratory-created and real groups using a variety of measures of collective identification.

Relatedly, the literature on in-group favoritism—group members' preferential treatment for their own group over other groups—also suggests that minority group members are more identified with or attached to their in-groups than are members of majority groups. Research on in-group
favoritism (also called in-group bias; for a review, see Hewstone et al., 2002) consistently reveals that members of minority groups spontaneously exhibit greater in-group favoritism than members of majority groups do (Gerard & Hoyt, 1974; for a meta-analysis, see Mullen et al., 1992; see also Bettencourt et al., 1999; Brewer et al., 1993; Leonardelli, 1998; Leonardelli & Brewer, 2001).

One frequent source of confusion is the notion that group members’ greater identification with minority groups could be explained by self-categorization theory’s meta-contrast ratio (Turner et al., 1987). According to self-categorization theory, individuals will perceive themselves to be members of a social category when, in a given context, the ratio of between-group differences to within-group differentiation is greater than one. Because it focuses on a specific intergroup comparison, however, the meta-contrast ratio does not offer an explanation for asymmetries of social identification within a given intergroup context—why one group would be more salient or differentiated within that context than another, and why members of one group would identify more strongly with their group than members of another group. The difference between being right- and left-handed meets the meta-contrast principle for intergroup differentiation on the handedness dimension, but left-handed people are more likely to form a meaningful shared group identity than right-handed people. By focusing on relative distinctiveness within the overall group context, optimal distinctiveness theory can account for this asymmetry.

Additional tests have directly investigated the effects of relative size on group identification and in-group favoritism from the perspective of optimal distinctiveness theory. Abrams (1994a) found that young adults exhibited greater commitment and similarity to their political parties when these parties were in the minority; that is, even in domains where it is more of a political asset to be in the numerical majority, members of minority political parties were more committed to their group membership. Also, Leonardelli and Brewer (2001) distinguished between the more cognitive and evaluative components of collective identity, defining the more evaluative component as “in-group satisfaction,” where group members rated their level of satisfaction with their group. They found that, at least when group members were induced to see themselves as typical group members, minority group members reported greater satisfaction with their group than did majority group members (Studies 2 and 3).

These data are supportive of the notion that individuals like membership in minority groups, presumably, because these groups are optimally distinct. To make stronger inferences about membership preference, however, it is necessary to determine whether individuals actually prefer membership in minority over majority group memberships when given a choice. The accumulated evidence in minority–majority relations, which reveals that numerical minorities are more likely to spontaneously exhibit in-group
favoritism than are members of numerical majorities (e.g., Mullen et al., 1992), has been interpreted in different ways, either as support for minority membership preference (Leonardelli & Brewer, 2001) or as a means to compensate for insecure group membership (Sachdev & Bourhis, 1984). Put another way, the question remains whether minority group members exhibit in-group favoritism because they prefer minority to majority group memberships or because they cannot be a member of the majority group.

To properly infer membership preference, we needed a paradigm where individuals already belong to or are capable of joining a numerical minority and a majority group and can choose between them (Leonardelli, 2002, 2006). The benefits of such a paradigm are twofold. First, it directly assesses membership preferences by allowing comparative evaluations between groups to which membership is accessible. Second, and perhaps most importantly, this paradigm reduces the likelihood of defensive, compensatory, or dissonance-reducing responses as members who may have been motivated to compensate for minority group membership would no longer need to do so as they have access to the more secure, more powerful numerical majority.

A series of studies tested membership preferences for minority and majority groups (Leonardelli, 2006). In one study, undergraduate research participants were first classified into two groups using two classic minimal group categorization schemes: the painting preference and dot estimation tasks (Tajfel et al., 1971). For the painting preference task, participants chose which of two paintings they preferred on a series of 10 trials, were all told the task classified people into one of two categories (Kandinsky or Klee painting preference groups), and ostensibly based on their responses, all were then classified as members of the Kandinsky group. Some participants read that their category was a numerical minority whereas others read that it was the majority. Participants then completed a dot estimation task where they estimated the number of dots on a series of 10 screens, were told that their estimates were used to classify people as “global perceivers” or “detailed perceivers,” and ostensibly based on their responses, all were placed into the global percever group. The reported size of this category depended on the size of the Kandinsky group: those in a Kandinsky minority were assigned to a global percever majority, whereas those in a Kandinsky majority were assigned to a global percever minority.

Thus, all participants were classified into both the Kandinsky and global percever groups; that is, all were placed into two groups, one a numerical minority and one a majority. Size was counterbalanced with category label to control for individuals’ preferences for different tasks or group labels. To control for any order effects that category assignment may have caused, half of the participants completed the painting preference task first, and the other half completed the dot estimation task first.
Participants then completed an assessment of membership preference, a dichotomous choice measure where they were asked to “choose which group you would like to represent” for an upcoming social interaction task where they would be interacting with other members of the selected group. Furthermore, all participants were discouraged from selecting group membership based on the perceived need for a specific group to be represented. They were told that sufficient numbers of members from each group had already chosen to represent them, so that the participant should select to represent the group that they preferred more.

A second seven-point measure of membership preference was also included to test membership preferences where a no-preference rating option was available to participants and they rated which group membership they preferred more; this measure was recoded to range from −3 to +3, where greater positive numbers indicated greater minority membership preference and greater negative numbers indicated greater majority membership preference. Analysis on the overall sample revealed that most participants selected the minority (69/89 = 78%), and a χ² test yielded a significant difference from the no preference percentage (50%). Consistent with choice responses, ratings on the more continuous measure also indicated a general membership preference for numerical minorities (M = 0.71, SD = 1.21), a mean significantly different from zero, the point of no preference. Regardless of category label and classification order, individuals preferred numerical minorities.

Consistent with the evidence on relative size and group identification, these effects strongly support the notion that individuals actually prefer membership in numerical minorities, but it is still possible that minority membership preference resulted from the fact that individuals were also classified as members of the numerical majority, which gave group members a sense of security and allowed them to identify with the smaller group membership. In order to rule out this alternative, another study (Leonardelli, 2006) investigated membership preferences when individuals were faced with the opportunity to join a numerical minority or majority group. As part of a classroom exercise, undergraduates were instructed that their class would be split into two groups, Groups A and B, and that they were to decide which of the two groups they would like to represent; no other details were given about the task. About half were told that Group A was smaller, whereas the rest were told that Group B was smaller. Participants then decided which of the two groups they would represent for a class demonstration and again completed a seven-point measure of membership preference. Consistent with the previous study, 79% (23/29) selected the numerical minority, a frequency significantly different from 50%, and minority membership preference was also evident on the continuous measure (M = 1.28, SD = 1.25), a mean significantly different from zero. The accumulated data—whether collected with measures of group identification,
in-group favoritism, or membership choice or preference—thus point to a membership preference for numerical minorities, consistent with optimal distinctiveness theory.

3.2. Evidence for a curvilinear relation

Minority group members identify more with their group than majority group members do, and this effect reflects one part of a more general curvilinear prediction made by optimal distinctiveness theory: individuals should be most likely to identify with and prefer moderately inclusive rather than extremely inclusive or exclusive groups. In essence, an inverted “U” relationship is expected between group inclusiveness and group identification. Evidence just reported from the studies of minority–majority relations yields insight into the second half of this prediction, namely between comparisons of moderately inclusive and extremely inclusive in-groups. Additional evidence testing a more complete range of group inclusiveness also supports this prediction.

In one study, Lau (1989) used data from the U.S. National Election Studies of 1972 and 1976 to assess the degree of group identification of African-American respondents as a function of social density—the proportion of fellow group members in the immediate environment. Consistent with optimal distinctiveness theory, Lau predicted that there would be a curvilinear (inverted U-shaped) relation between residential density and the respondents’ felt closeness to blacks as a social group. In areas of the country where the number of African-Americans is relatively low, increased numbers should be associated with increased group identification, but where social density is relatively high, increased numbers of blacks in the immediate environment should be associated with decreases in group identification as the salience of blacks as a distinctive social category decreases.

Operationalizing social density as the proportion of black residents in the same census tract as the respondent, Lau (1989) found the predicted curvilinear relationship between density and probability of feeling close to blacks. Black respondents who lived in areas where 40–70% of the residents were black were significantly more likely to identify themselves as “particularly close” to blacks as a social group than were those who lived in highly segregated census tracts or ones where there were few other black residents.

In another study, Bearman and Brückner (2001) investigated adolescents’ commitment to public virginity pledges, where individuals make a public commitment to abstaining from sex until marriage. Such virginity pledges greatly delay adolescents’ transition to first intercourse, but of particular interest here is high school girls’ willingness to pledge in the first place. The researchers found that their respondents’ willingness to pledge was in part a function of the percentage of same sex respondents at their high school who had already pledged. Bearman and Brückner found
that likelihood to commit to a virginity pledge increased as the percentage of respondents increased until 40% of respondents had committed to such pledges; after that, respondents became less likely to pledge as percentage of pledged respondents continued to increase. Joining a community of “pledgers” depended at least in part on the relative size of those already pledging, and the effect of group size was curvilinearly related to willingness to join.

Abrams (2009, Study 1) conducted a direct empirical test of the curvilinear prediction made by optimal distinctiveness theory between group inclusiveness and group identification in a field test investigating young adults’ music preferences. In this study, music preferences could range from widely inclusive (such as pop/rock or disco/dance, which were classified as “superordinate”) to increasingly more exclusive forms of pop or rock music (which were respectively labeled “intermediate,” “subordinate,” and “minority”), to those preferences that could not be classified as pop or rock music (“non-rock”). Abrams demonstrated an inverse U-shaped pattern, where those with moderately exclusive music preferences (“subordinate” group) reported the greatest degree of behavioral identification (through listening to the music and active involvement) and those with extremely inclusive or exclusive preferences (the “superordinate” and “non-rock” categories, respectively) reported the lowest levels of listening and active involvement.

Referring back to Fig. 2.1, a moderate level of group inclusiveness is expected to yield greater group identification because such moderately inclusive groups simultaneously meet the needs for inclusion and differentiation. Some additional studies have helped to identify the role that the inclusion and differentiation needs play in the connection between group inclusiveness (as indexed by group size) and group identification. On the one hand, group inclusiveness is expected to satisfy the needs for inclusion and differentiation linearly, albeit with positive and negative associations, respectively. Some evidence has illustrated this connection; Pickett et al. (2002b, Study 1) found that experimentally arousing the need for inclusion (by having participants recall a time when they had felt excessively different) led group members to consider more inclusive social categories as more important to their identity compared to when a need for differentiation had been induced (by recalling a time when they felt too much like everyone else around them). (For a similar test, see also Sorrentino et al. (2007); the authors arrived at similar conclusions to those drawn by Pickett and colleagues although they argue that the effects of the need state manipulation are more likely to be evident among individuals with high certainty orientation.)

According to optimal distinctiveness theory, group members will identify most strongly with groups that are neither too differentiated nor too inclusive. That is, the extent to which a group meets either need should also have a curvilinear relation with group identification. Research by Badea
et al. (in press) tested this hypothesis. In their Study 1, undergraduates completed a measure of optimal distinctiveness (Pickett et al., 2002a,b)—where increasing scores indicated a desire for inclusion and to increase group size, whereas decreasing scores indicated a desire for differentiation and to decrease group size—and a measure of group identification with their university faculty (students in this study were part of the physics or law faculties). Analysis yielded an inverted U-shaped relation, where high and low scores on the optimal distinctiveness measure indicated lower group identification than those who scored in the middle of the scale. Two additional experiments that manipulated in-group size using minimal groups confirmed these relations when group identification and optimal distinctiveness were assessed under nonthreat conditions. This research lends clear support to the notion that the curvilinear relation between group size and identification is a function of optimal distinctiveness motives.

3.3. Summary of membership identification and preference

In sum, optimal distinctiveness theory makes sense of and interprets existing data on determinants of in-group identification. First, the accumulated evidence strongly points to a preference for minority group memberships based on evidence collected with different types of groups (laboratory-created and natural), with different operations of relative size, and with different dependent measures (collective identification, in-group favoritism, membership choice, membership preference). Second, the evidence indicates that the predicted curvilinear relation between group inclusiveness and group identification occurs across different types of membership groups (race, virginity pledgers, music preferences) and with different operations of inclusiveness (social density, relative size, optimal distinctiveness need satisfaction).

4. Implications for Social Cognition

Similar to other motivational states, activation of the needs for inclusion and differentiation can instigate a range of behavioral and cognitive responses. The previous section focused on the relation between the needs for inclusion and differentiation and levels of group identification. However, research has demonstrated that need arousal can influence not only the groups with which people choose to identify but also how people perceive themselves as group members, how they perceive their groups, and the types of intragroup and intergroup judgments that are made. Of importance, this research highlights the flexibility and range of reactions that individuals exhibit in response to heightened inclusion and differentiation.
needs, and suggests that the needs influence both relatively low-level cognitions as well as higher-order cognitive judgments. In the next section, the implications of optimal distinctiveness theory for social cognition are discussed.

4.1. Self-concept

The self-concept is characterized by both malleability and stability, and the content of people’s self-concepts has been shown to vary as a function of the social context and individuals’ motivational states (e.g., Markus & Kunda, 1986). In a classic demonstration, Markus and Kunda (1986) found that the desire to see the self as unique led to heightened accessibility of concepts related to difference from others, whereas the desire to see oneself as similar to others led to heightened accessibility of concepts related to similarity. Self-concept changes have also been demonstrated in response to self-threats. For example, mortality salience has been shown to heighten the clarity and coherence of the self-concept, particularly among individuals who value structured self-knowledge (Landau et al., 2009). Similar to how other motivations shape how perceivers view themselves, the needs for inclusion and differentiation can also bring about important self-concept changes.

A key tenet of self-categorization theory is that categorization of the self as a group member entails a shift from defining the self in terms of idiosyncratic traits to defining the self in terms of the traits and attributes that are prototypic of the group (Turner et al., 1987). Although all group members are presumed to engage in this perceptual shift as part of the categorization process, individuals can vary in their prototypicality. A prototypical group member is someone who embodies the central features and attributes of a social category. More specifically, “the more a group member differs from out-group members and the less he or she differs from other in-group members ... the more that individual will be perceived as prototypical of the group” (Oakes et al., 1998, p. 80).

Prototypical group members tend to occupy secure positions within the group and generally experience feelings of high in-group inclusion (Oakes et al., 1998). Thus, one way that individuals can satisfy the need for in-group inclusion is to alter the self to be more consistent with the group prototype. Altering the self to be more consistent with the group prototype can be achieved in a variety of ways. For example, group members can change their behavior or appearance or adopt the beliefs and attitudes that are typical of the group. Prototypicality can also be achieved by perceiving the traits that are stereotypical of the group as being descriptive of the self. This process has been described in the research literature as self-stereotyping (e.g., Brown & Turner, 1981; Hogg & Turner, 1987).
Because prototypicality involves both a shift toward the in-group prototype and a shift away from the out-group prototype, heightened prototypicality can also serve the need for differentiation. Individuals who are already highly identified with a specific group membership are particularly likely to seek enhanced prototypicality with that group in response to threats to inclusiveness or differentiation.

A series of studies was conducted by Pickett et al. (2002a) to demonstrate that arousing either the need for inclusion or the need for differentiation can result in compensatory self-concept changes. Specifically, need arousal was hypothesized to lead to increased levels of self-stereotyping. In three studies, Pickett et al. (2002a,b) experimentally manipulated participants’ need for inclusion by telling participants that their score on a personality test was very discrepant from the typical or average score of other in-group members. Participants in the need for differentiation condition were told that their personal score was close to the in-group mean, but that the personality distribution of the in-group overlapped highly with that of a relevant out-group (i.e., the in-group was not distinctive). Control participants were told that their personal score was quite close to the in-group mean and that very little overlap existed between the in-group and out-group personality distributions. Participants received this information in both verbal and graphical forms (see Fig. 2.2). Participants were then provided with a list of traits and embedded in this list were traits that had been pretested as being stereotypical of the in-group as well as traits that had been shown in pretesting to be stereotype-irrelevant.

It was predicted that participants in both the need for inclusion and the need for differentiation conditions would rate the stereotype-relevant traits as being more descriptive of themselves—that is, they would engage in greater self-stereotyping—compared to control participants. Support was found for this prediction across the three studies. That is, when participants were told that their personality score indicated that they were quite different from other members of the in-group (the need for inclusion condition), they compensated by perceiving stereotypical in-group traits (but not stereotype-irrelevant traits) as being more descriptive of the self. The same effect also occurred for participants who had been told that considerable overlap exists between the in-group and out-group distributions (the need for differentiation condition). These participants also engaged in greater self-stereotyping.

The third study of this paper indicated that these self-stereotyping effects may have both private and public components. In this study, participants were asked to describe themselves verbally to a hypothetical in-group member (the in-group for this study was sorority members), and these descriptions were videotaped and coded for stereotypicality—that is, the extent to which the sorority member appeared to be social, outgoing, snobby, and superficial. These videos were also coded on a set of stereotype-irrelevant
traits—*mature*, *funny*, and *hostile*. Highly identified group members in the need for inclusion and the need for differentiation conditions presented themselves in a more stereotypical fashion compared to control participants. These data suggest that people respond to marginal in-group status or high intergroup similarity by changing both how they perceive the self and how they present the self to others.

Other researchers have demonstrated parallel effects of threats to inclusion or differentiation on individuals’ self-perceptions. Moons et al. (2009) threatened in-group inclusion using a manipulation adapted from Pickett et al. (2002a,b). Participants in the threat condition were told that their performance on a personality measure indicates that they are quite different from other in-group members. Participants in the no-threat condition received no feedback about where they stood in relation to other group members. All participants were given information about the average level of two emotions (anger and happiness) exhibited by in-group members and were then asked to indicate the degree to which they themselves experience those emotions. Results of the study demonstrated greater emotional

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**Figure 2.2** Graphical representation of the personality score feedback used to manipulate identity motives (Pickett et al., 2002a). The dashed line represents the score that the individual participant received in each of the three conditions.
convergence under conditions of inclusion threat, indicating that the process of self-stereotyping can extend beyond traits to actual emotional experiences. In a similar vein, Spears et al. (1997) threatened the distinctiveness of participants’ in-group (psychology students) by telling participants that psychology students are quite similar to business students. Under these conditions, highly identified group members tended to see themselves as more similar to the average psychology student (i.e., they engaged in self-stereotyping).

In addition to producing effects on trait and emotional self-stereotyping, the needs for inclusion or differentiation can also lead to other self-concept changes that bring the individual closer to the group. For example, Burris and Jackson (2000) gave participants who were either high or low on a measure of intrinsic religious orientation—the extent to which a person is devoutly committed to religion as an end in itself—false feedback that either threatened or bolstered their self-perceptions on a dimension that was important to religious group membership (helpfulness). Participants in the threat condition were specifically told that compared to other group members, they ranked lower in helpfulness than they actually perceived themselves to rank (as indicated by their pretest scores). This feedback suggested to participants that they may not embody a characteristic that is important to in-group inclusion. Participants who were high in intrinsic religious orientation (i.e., those for whom religious group membership was very important) responded to threat by showing a significant increase in how identified they were with the group and how good and worthy they felt as group members, as evidenced by their scores on specific collective self-esteem items (Luhtanen & Crocker, 1992). When the group membership was important, threats to the participants’ standing in the group led to the compensatory response of perceiving the self as being an even better group member. Thus, another way that group members can cope with threats to in-group inclusion is by exaggerating their self-conceptions as good, worthy in-group members.

The research literature on newcomers to groups also suggests that insecurity about one’s standing within a group can lead to changes in the self. According to Moreland and Levine’s group socialization model (Moreland & Levine, 1982, 2002), new group members engage in an active process of socialization where there are attempts by both the new member and the group to achieve closer self-group alignment. For example, new group members are more likely to behave in role-congruent ways, monitor the behavior and outcomes of other group members, and seek feedback from other group members about their own behavior (Moreland et al., 2001). Because new group members have not been fully accepted by existing group members, new group members often feel that their inclusion within the group is not secure and that they must assimilate to the group in order to avoid expulsion. This process of socialization can result in significant changes in the self-concept of new group members.
4.2. Group perception

One conclusion that may be drawn from the previous section is that changing the self to be more prototypical (to the extent that this is possible) is one means of mitigating threats to inclusion and distinctiveness. However, changing the self is not the only option available for achieving greater in-group inclusion and intergroup distinctiveness. Another way of establishing in-group inclusion and enhancing group distinctiveness is mentally altering how one perceives the in-group and the out-group. Enhancement of both in-group and out-group homogeneity simultaneously increases intergroup contrast and reinforces inclusion within the in-group (Brewer, 1993a). If a woman wants to see males and females as very distinct from each other, she may simply come to believe that, as a group, women are very similar to each other and men are very similar to each other. The woman may also call on the stereotypes that exist of men and women and perceive members of each of the groups as conforming more closely to their respective group stereotypes. In so doing, the woman would perceptually increase group distinctiveness (thereby satisfying the need for distinctiveness) and enhance in-group cohesion (thereby satisfying the need for inclusion).

These ideas were tested in a study by Pickett and Brewer (2001). Study participants (Arts and Humanities students) were provided with feedback that indicated that they were very different from other in-group members (need for inclusion condition); that they were very similar to other in-group members, but that the in-group was highly similar to an out-group (need for differentiation condition); or that they were very similar to other in-group members and the in-group was different from the out-group (control condition). Participants were then asked to rate how homogenous they perceived members of the in-group and out-group (Natural Science majors) to be. To measure perceived in-group and out-group homogeneity, Pickett and Brewer (2001) used a similarity task (Park & Judd, 1990) and a measure of group stereotypicality. In the similarity task, participants were asked to rate how similar they believed Arts and Humanities students to be along four different dimensions—personality, academic ability, social life, and in general. Participants repeated the similarity task a second time for Natural Sciences students, rating how similar they believed Natural Sciences students to be along the same four dimensions. Averaging across the four dimensions, a clear effect of need arousal emerged (see Table 2.1). Participants in the need for inclusion and differentiation conditions perceived the in-group and out-group to possess greater intragroup similarity than did control participants.

The perceived stereotypicality of the in-group and out-group was assessed using a percentage estimates task (Park & Judd, 1990). In this task, participants received a list of stereotypic traits of Arts and Humanities students followed by a list of stereotypic traits of Natural Sciences students and were asked to estimate the percentage (from 0% to 100%) of students
within each of these groups that they believe possess each trait. Higher estimates of the percentage of group members that share these traits are indicative of a more stereotypical perception of the groups. As was the case with the similarity measures, participants in the need for inclusion and the need for differentiation conditions perceived the in-group and out-group more stereotypically than did participants in the control condition. These results suggest that threats to in-group inclusion and intergroup distinctiveness may motivate individuals to establish clearer intergroup boundaries through mechanisms such as enhanced intragroup similarity and stereotypicality.

As described in previous sections, the needs for inclusion and differentiation have been shown to be associated with a preference for groups that can best meet those needs (e.g., Abrams, 2009; Andrijiw & Hyatt, 2009; Dimmock, 2009; Hornsey & Hogg, 1999). When individuals have a desire for greater in-group inclusion, they can selectively activate and identify with groups that are more inclusive (e.g., categorizing the self as a psychologist instead of a social psychologist). By the same token, when individuals desire greater differentiation, they can categorize the self in terms of more exclusive identities. However, this is only one potential means of satisfying the needs for inclusion and differentiation. Individuals can also alter their perception of or definition of a given in-group, with which they are already identified, to make it fit existing need levels. Rather than look for new groups to meet current need states, individuals can adapt or modify their cognitive representation of existing in-groups to meet changes in needs for greater inclusiveness or distinctiveness. The more an individual is identified with a particular in-group, the more likely they would be to adapt that in-group to meet their needs rather than switch to alternative group identities.

Based on this theorizing, Pickett et al. (2002a,b) hypothesized that need arousal could lead individuals to overestimate or underestimate the size of an

<table>
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<td>5.04 a</td>
<td>5.12 a</td>
<td>5.18 a</td>
</tr>
</tbody>
</table>


Note: Higher numbers reflect greater perceived in-group homogeneity. Cell means within the same column that do not share a common letter differ significantly from each other at the $p < 0.05$ level.
existing important social identity group. In their study, Pickett et al. (2002a,b, Study 2) gave highly identified Ohio State undergraduates feedback designed to arouse either the need for inclusion, the need for differentiation, or neither need (control) in relation to participants’ Ohio State identity. Participants were then asked to estimate the size of the in-group (Ohio State undergraduates) and also indicate their satisfaction with the size of the group (i.e., whether the group had too many or too few members).

Results of this study revealed a clear pattern of effects. Participants in the need for inclusion condition significantly overestimated the size of the group, whereas participants in the need for differentiation condition tended to underestimate the size of the group. Control participants’ estimates were quite accurate and did not significantly differ from the true size of the group (see Fig. 2.3). In addition, participants in the need for inclusion and need for differentiation conditions significantly differed in terms of their satisfaction with the size of the group. Need for differentiation participants tended to feel that the group had too many group members compared to need for inclusion participants. Subsequent correlational analyses supported the conclusion that participants’ satisfaction with the size of the in-group predicted their desire to restrict (or expand) group membership.

Taken together, the results of this study indicate that the needs for inclusion and differentiation can have significant effects on group perception, such that features of the group that may seem to be fairly objective (e.g., group size) are subject to reinterpretation in ways that can help achieve need satisfaction.

![Figure 2.3](image-url)  
*Figure 2.3* Need state on perceived in-group size (Study 2). Taken from Pickett et al. (2002b). Copyright Sage/Society for Personality and Social Psychology.
4.3. Social judgments

Although the desire for optimal distinctiveness is most likely to affect how individuals perceive the self and their in-groups, other types of judgments might also be implicated in the process of need satisfaction. The needs for inclusion and differentiation can affect social judgments in a variety of ways. First, similar to how other goals and motivations operate, it is expected that individuals should come to evaluate more positively objects, behaviors, people, etc. that are viewed as helping them meet their goals. For example, individuals who have a high need for inclusion should be more attracted to group objects and symbols that convey in-group inclusion (e.g., a team sweatshirt). Conversely, the need for differentiation should lead to greater valuation of those objects and attributes that provide a basis for distinguishing the in-group from other groups. Second, heightened needs for inclusion and differentiations can change group members’ cognitive frame of reference. The desire for greater group distinctiveness may direct attention inward such that subgroup differentiation can occur (in the case of large, majority groups) or it may direct attention outward toward those features that distinguish the in-group from the out-group. Under conditions of heightened need for inclusion, group members are expected to be focused on shared features of the in-group in contrast to the out-group. These frame-of-reference changes may then have other judgmental effects, such as directing with whom group members compare the self (Brewer & Weber, 1994). Finally, the desire for optimal distinctiveness may act more generally as a directional motivation that biases cognitive processing directly—for example, affecting consensus estimates (Simon et al., 1997). In this section, we consider the existing research evidence on the effects of optimal distinctiveness needs on social judgment.

A common finding in the social psychological literature is that people evaluate means to a currently activated goal positively. For example, if a new Ph.D. recipient possesses the goal of being seen as a core member of his or her academic field, then objects and symbols that convey membership (both to the self and to others)—for example, a mug with the name of an important society membership emblazoned on it—should become highly valued, and there should be a greater desire to own the object. When the needs for inclusion or differentiation have been aroused, the desired end-state is either greater in-group inclusiveness or greater distinctiveness. In one study, Timor and Katz-Navon (2008) examined the adoption of new consumer products and found that the probability of adopting a new product by consumers varied predictably as a function of participants’ reported levels of inclusion and differentiation needs and as a function of how many other people participants believed already owned the product. For example, participants who had a high need for differentiation and a low need for inclusion were less likely to adopt products that they perceived as
being owned by a large number of other people. The opposite pattern emerged for participants who had a high need for inclusion and a low need for differentiation. These participants were more likely to own products that many other people also owned. These results suggest that arousal of the needs for inclusion and differentiation can bias people’s judgments of goal-relevant objects.

In a study of intergroup comparisons, Brewer and Weber (1994) tested the prediction that optimal group distinctiveness would shape social comparison processes. These researchers manipulated in-group size and examined its effect on participants’ reactions to in-group and out-group comparison targets. Based on the predictions of optimal distinctiveness theory, Brewer and Weber (1994) hypothesized that being a member of a large majority group would arouse participants’ need to differentiate the self from other in-group members, thereby making the relevant target of comparison other members of the in-group. However, membership in a relatively small minority group would enhance in-group assimilation and intergroup comparison. The experiment consisted of a 2 (majority or minority in-group size) × 2 (upward or downward comparison) × 2 - (in-group or out-group target) between-subjects factorial design. Participants were categorized into majority or minority groups based on a bogus perceptual test and were then presented with a videotaped interview of either an in-group or out-group member who was portrayed as being either highly competent (an upward comparison target) or incompetent and unsuccessful (a downward comparison target).

These researchers found that majority group members exhibited interpersonal (i.e., within group) comparison effects: exposure to an in-group upward comparison target resulted in lower self-ratings, whereas an out-group upward comparison target had no effect on participants’ self-evaluations. By contrast, subjects in the minority in-group showed the opposite pattern: exposure to an in-group comparison target resulted in assimilation, such that participants’ self-ratings were higher after exposure to the in-group upward comparison target than after exposure to an in-group downward comparison. Furthermore, minority group members showed contrast effects in response to out-group members: participants’ self-ratings were lower after exposure to an out-group upward comparison target than they were after exposure to an out-group downward comparison target. Brewer and Weber (1994) concluded from these findings that individuals’ responses to social comparison targets vary as a function of the distinctiveness of the in-group.

One type of judgment that individuals make fairly regularly is assessing how widely shared their beliefs, attitudes, and preferences are. Social psychological research has demonstrated that these judgments are often shaped by motivations such as social desirability (e.g., Krueger & Clement, 1994; Suls et al., 1988) and are also affected by threats to the self (e.g., Sherman
et al., 1984). Simon et al. (1997) hypothesized that one way of coping with threats to inclusion and differentiation is by altering one’s perception of how many other people share one’s views. Simon et al. (1997) argued that people can feel included in social categories by perceiving themselves as sharing attributes with other group members. Conversely, the desire for (personal) differentiation can be satisfied by underestimating consensus for one’s views (e.g., Campbell, 1986). In addition, these researchers predicted that threats to inclusion and differentiation would have greater impact under conditions of mortality salience because, according to their theory, the needs for inclusion and differentiation serve a higher-order terror management function. Achieving optimal distinctiveness (simultaneously fitting in and standing out) can help to affirm one’s worldview and enhance self-esteem, which can then buffer the self from anxiety regarding death and mortality.

To test their hypotheses, Simon et al. (1997) gave participants personality feedback that described participants as either being socially deviant (need for inclusion condition), conformist (need for differentiation condition), or neutral (control condition). Participants were also randomly assigned to write about either their own mortality or another aversive experience (an upcoming exam). Participants then completed a social projection measure. Using materials adapted from Krueger and Clement (1994), these researchers had participants indicate their degree of endorsement of a series of statements (e.g., “I like poetry”) and also indicate what percentage of the population they thought would endorse each of the statements. As predicted, under conditions of mortality salience, participants who received feedback indicating that they were socially deviant estimated higher consensus for their beliefs than control participants. By contrast, participants who were told that they were conformist reported significantly lower levels of consensus for their beliefs than control participants. These results suggested that individuals may strategically alter their judgments of consensus in a way that meets currently activated needs for inclusion or differentiation.

4.4. Summary of social cognition

In sum, a growing body of research demonstrates that the needs for inclusion and differentiation can alter perceptions of the self, perceptions of the group, and social judgments in ways that allow individuals to achieve a sense of optimal distinctiveness. In response to a heightened need for inclusion or differentiation, individuals have been shown to engage processes such as emotional and trait self-stereotyping, altering judgments of group memberships through perceptions of relative size or enhanced perceptions of both in-group and out-group homogeneity, perceptions of consensus, and social comparison. Thus, studies employing different methods for arousing or activating the needs for inclusion or differentiation provide convergent
evidence that individuals respond to deprivation of these identity needs by altering their cognitive representations of the self, the in-group, or the social context in ways that increase need satisfaction and restore optimal identity.

5. Implications for Intergroup Relations

With respect to intergroup behavior, social identity theory (Tajfel & Turner, 1979) has focused on the phenomenon of in-group favoritism, the pervasive tendency for group members to exhibit preferential treatment of members of their own in-group over members of out-groups (Brewer, 1999; Tajfel et al., 1971). Optimal distinctiveness theory provides another perspective on the motivations underlying in-group bias and favoritism, proposing that members of groups at different levels of inclusiveness exhibit such intergroup discrimination, but do so for different reasons (Pickett & Leonardelli, 2006). On the one hand, individuals may turn to in-group favoritism to achieve or restore in-group optimality, whether to enhance their sense of inclusion or imbue their group (and themselves by extension) with a sense of distinctiveness. On the other hand, individuals who are already members of optimally distinct groups may exhibit in-group favoritism to maintain membership in an optimally distinct group.

The following sections summarize research that we and others have conducted investigating the connection between optimal distinctiveness and intergroup behavior. The first section reviews evidence documenting how membership in optimally distinctive and nondistinctive group memberships (minority and majority groups, respectively) can both lead to in-group favoritism, but that this favoritism originates from different motivational bases. The second and third sections document how arousal of the needs for inclusion and differentiation can manifest as intergroup behavior, and the fourth section discusses the strength of optimal distinctiveness motives relative to other motives (i.e., intergroup status) as engines for intergroup behavior.

5.1. Intergroup behavior in minority–majority relations

The goal of our first research study (Leonardelli & Brewer, 2001) was to test whether minority and majority group members both exhibit in-group favoritism, and whether they do so for different reasons. Evidence had already documented that members of numerical minorities spontaneously exhibit greater in-group favoritism than majority group members (e.g., Gerard & Hoyt, 1974; for a meta-analysis, see Mullen et al., 1992). The typical explanation for the effect had been that in-group favoritism reflects a desire to compensate for a group membership perceived to be less powerful,
less secure, or of lower status than numerical majorities (e.g., Bettencourt et al., 1999; Ellemers et al., 1992; Ferguson et al., 1990; Jost & Banaji, 1994; Levine & Moreland, 1998; Sachdev & Bourhis, 1984, 1991; Simon et al., 2001). By contrast, optimal distinctiveness theory (Brewer, 1991; Leonardelli & Brewer, 2001) argues that in-group favoritism by minority group members is an expression of membership preference and support, and the lower in-group favoritism exhibited by majority group members reflects disengagement from a nondistinctive (and nonpreferred) group membership (for consistent theoretical support, see also Imhoff & Erb, 2009). However, to the extent that majority group members are induced to identify with the majority group, so that disengagement is no longer an option, they would be motivated to find other means to achieving distinctiveness, including exhibiting in-group favoritism.

Three experiments tested these predictions. The first examined whether minority and majority group members would both exhibit in-group favoritism when they were induced to identify with their group. According to optimal distinctiveness theory, members of numerical minorities should already be engaged in and satisfied with their group identity, and thus, inducing collective identification will not affect their level of in-group favoritism. By contrast, majority group members should be dissatisfied with and thus disengaged from their nondistinctive group membership, but if collective identification were experimentally induced, majority group members will turn to other ways of responding to nondistinctiveness, such as through in-group favoritism. Thus we predicted an interaction between relative in-group size and social identity induction, where in-group favoritism will be high for minority group members regardless of the identity induction, but that majority group members will exhibit greater in-group favoritism under high rather than low identity induction.

To test this predicted interaction, undergraduate participants were first randomly assigned to minority or majority group membership using the minimal group paradigm (Tajfel et al., 1971), with groups formed from a dot estimation task that ostensibly represented 20–25% or 75–80% of the population, respectively. We created a collective identification induction by employing a biased questionnaire manipulation (Salancik, 1974), where group members induced to identify with their group were led to believe that behaviors descriptive of the in-group were also descriptive of themselves.

Participants then completed a four-item measure of in-group favoritism, where for each item they selected which hypothetical payoff from a series of payoffs they would give to a member of their group (other than themselves) and a member of the out-group (e.g., see Fig. 2.4). For this measure (adapted from Tajfel et al., 1971, Matrix Type B in Study 1), payoffs were interdependent such that higher payoffs to the in-group member meant lower payoffs to the out-group member. Choices could range from favoring the out-group, to
minimizing differences, to favoring the in-group, and were scored such that positive numbers indicated greater in-group favoritism. Analysis of the payoff choices yielded a significant interaction effect. Under low induction, consistent with past research (e.g., Gerard & Hoyt, 1974), minority group members spontaneously exhibited greater in-group favoritism than majority group members. However, under high induction, minority and majority group members exhibited in-group favoritism to the same degree. Additional analyses revealed that high relative to low identity induction yielded greater in-group favoritism for majority group members, but that minority in-group favoritism remained high regardless of induction. This study confirmed that with sufficient identification, minority and majority group members exhibit in-group favoritism. However, we expected the motivational basis to be different for minority and majority group members, and the subsequent two studies investigated how that might be so.

According to optimal distinctiveness theory, in-group favoritism is an expression of membership preference and group support for minorities, but for majorities, it is expected to reflect an effort to make their nondistinctive (and thus, dissatisfying) group more distinctive. Such different motivational explanations should be manifest in different associations between the group members’ satisfaction with their group and their level of in-group favoritism. Degree of in-group favoritism by minority group members was hypothesized to be an expression of group satisfaction and support, and thus, it was expected that in-group satisfaction would positively predict minority in-group favoritism: as in-group satisfaction increases, minority in-group favoritism increases. On the other hand, in-group favoritism by majority group members was hypothesized to be an attempt to make the nondistinctive (and thus, dissatisfying) majority group more distinctive; as a result, it was expected that in-group satisfaction would be negatively related to majority in-group favoritism such that the more dissatisfied group members were with their group, the more they would exhibit in-group favoritism.

![Figure 2.4](image-url) This example represents a standard measure of in-group favoritism (taken from Tajfel et al., 1971, Matrix Type B, Experiment 1), a zero-sum matrix, where individuals decide on whether to exhibit in-group favoritism, out-group favoritism, or minimize differences. The oval illustrates how individuals respond to these matrices (by circling one column of numbers).
Our second experiment tested this predicted interaction between relative size and in-group satisfaction. Research participants were randomly assigned to membership in a minimal minority or majority group using the procedure from the first study, and all group members were induced to identify with their group using the high induction procedure from Study 1 so that majority group members would also exhibit in-group favoritism to the same extent as minority group members. Participants then completed a four-item measure of in-group satisfaction designed for this study (e.g., “I am satisfied with this group”). Finally, participants completed the measure of in-group favoritism from the first study. Submitting in-group favoritism scores to a regression analysis revealed a significant interaction between relative in-group size and in-group satisfaction (Fig. 2.5). For minority group members, in-group favoritism increased as in-group satisfaction increased, but for majority group members, in-group favoritism increased as in-group satisfaction decreased. This interaction is consistent with the notion that minority in-group favoritism is an expression of membership preference, whereas majority in-group favoritism is a compensatory response to their group’s lack of distinctiveness.

The data from Study 2 supported the notion that in-group favoritism by minority and majority group members would manifest as an expression of membership preference or to gain group distinctiveness, respectively. Study 3 sought to gain additional support by testing whether minority and majority in-group favoritism reflect different underlying social orientations (Messick & McClintock, 1968; Tajfel et al., 1971). Social orientations are individuals’ preferences in interdependent contexts often reflecting whether

![Figure 2.5](image-url)
individuals are motivated to be prosocial (other-oriented) or proself in their distributions of resources. Of particular interest to our predictions is the distinction between two social orientations for in-group favoritism—absolute and relative in-group favoritism (also referred to as “maximum in-group profit” and “maximum differentiation,” respectively). These two social motives differ in an important way: With absolute in-group favoritism, group members are motivated to maximize the absolute value of the in-group’s outcome (regardless of the outcome to the other group), whereas with relative in-group favoritism, group members are more concerned with maximizing the favorable difference between their own group’s outcome and the other group’s outcome.

In-group favoritism on measures such as those used in Studies 1 and 2 do not differentiate between these orientations and could reflect either. To identify which orientation individuals exhibit, researchers require measures that distinguish between these social orientations, such as by using the Tajfel pull score matrices (Billig & Tajfel, 1973; Tajfel et al., 1971, Experiment 2) or other distribution choice measures (e.g., Bornstein et al., 1983a,b; Griesinger & Livingston, 1973; Liebrand, 1984). Figure 2.6 contains a sample matrix from the Tajfel matrices (which is what we used in the following study) with payoffs that distinguish between absolute and relative in-group favoritism; in the extreme, those who prefer relative in-group favoritism would prefer outcomes on the left, whereas those who prefer absolute in-group favoritism would prefer outcomes on the right.

These are the potential rewards for:

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</tbody>
</table>

Figure 2.6 This example of a Tajfel allocation matrix (taken from Tajfel et al., 1971, Matrix Type B, Experiment 2) assesses different orientations (“pulls”) group members have to exhibiting in-group favoritism. This particular matrix contains payoffs that emphasize the different orientations for absolute and relative in-group favoritism; in the extreme, those who prefer relative in-group favoritism would prefer outcomes on the left, whereas those who prefer absolute in-group favoritism would prefer outcomes on the right.

The matrix in Fig. 2.6 illustrates the Tajfel pull score matrices and how they are arranged to create competing pulls between one type of social orientation and another (in the example matrix, the competition occurs between absolute and relative favoritism). However, the calculation of pull scores is more complex, requiring participants’ responses on another matrix where the orientations are not in competition. It is highly recommended that readers interested in using the Tajfel pull score matrices read one of the available discussions on calculating pull scores before using these matrices (e.g., Bourhis et al., 1994).
According to optimal distinctiveness theory, in-group favoritism by minorities and majorities is an expression of membership preference or an attempt to make their nondistinctive group more distinctive, respectively. We expected that minority group members would be more likely to exhibit absolute in-group favoritism because it represents the strongest signal of group support, but that majority group members would be more likely to exhibit relative in-group favoritism because it could be used to differentiate the in-group from the out-group.

Study 3 tested these predictions. Participants were randomly assigned to a minority or majority category, induced to identify with their group, and completed the Tajfel pull score matrices. Analysis revealed that minority group members were more likely to exhibit absolute in-group favoritism than majority group members. By contrast, majority group members only exhibited relative in-group favoritism.

The evidence collected by Leonardelli and Brewer (2001) supports the predictions from optimal distinctiveness theory. They found that, with sufficient group identification, minority and majority group members exhibit in-group favoritism to similar degrees, but do so in different ways. Minority group members exhibited greater in-group favoritism with greater group satisfaction, and exhibited greater absolute in-group favoritism than majority group members, evidence consistent with the notion that minority in-group favoritism is an expression of membership preference and support. By contrast, majority group members exhibited greater in-group favoritism with greater in-group dissatisfaction and exhibited relative in-group favoritism, consistent with the notion that majority in-group favoritism is motivated to achieve group distinctiveness. The above evidence goes far to support the notion that minority and majority in-group favoritism serve different functions, and since then, research has sought to more specifically identify the regulatory functions that govern minority in-group favoritism.

Based on their evidence, Leonardelli and Brewer (2001) concluded that in-group favoritism by minority group members was an affirmation of the in-group identity, that is, an expression of membership preference and in-group support. Elaborating on this motivational premise, Leonardelli (2010) argued that in-group favoritism for optimally distinct in-groups serves a membership maintenance function. This membership maintenance motive is rooted in the psychological experience of “member self-integrity,” where group members evaluate whether they are currently good group members and use this psychological experience to regulate whether they exhibit expressions of group support. More specifically, member self-integrity is expected to regulate and maintain group membership by operating as a negative feedback loop (Abrams, 1994b; Carver & Scheier, 1982; Miller et al., 1960), which yields three predictions. First, as member self-integrity decreases, group members should be more likely to subsequently exhibit group-serving behaviors (such as in-group favoritism).
the extent that group members are successful in exhibiting these group-serving behaviors, group members’ sense of member self-integrity should subsequently increase (i.e., they should feel like they have successfully maintained their membership). Third, after recently exhibiting an expression of group support, group members should be less likely to exhibit group-serving behaviors again in the near future.

Leonardelli and Galinsky (2010) tested whether this model of membership maintenance could explain in-group favoritism by minority group members. They devised a measure of member self-integrity where group members rate to what degree they feel they are meeting the standards of good group membership. This measure was then used to test the three predictions derived from the negative feedback loop model. Specifically, for minority group members only, it was proposed that (1) as member self-integrity decreases, in-group favoritism should subsequently increase, (2) as in-group favoritism increases, member self-integrity should subsequently increase, and (3) prior expressions of group support should lead to less subsequent in-group favoritism. Finding support for all three predictions would be consistent with the notion that in-group favoritism by minority group members reflects their motivation to maintain membership in the numerical minority. By contrast, members of numerical majorities are expected to be dissatisfied with their group’s lack of distinctiveness, and in-group favoritism by them should be more likely to reflect the motivation to achieve distinctiveness rather than to maintain membership. Thus, these predictions were expected to apply only for members of the numerical minority.

Three studies tested each of these predictions in turn. In one study, we tested whether lower member self-integrity is associated with subsequently greater in-group favoritism by minority but not majority group members. In this study, participants were asked to first self-select one of their existing social category memberships and rate the degree to which they perceived their social category to be smaller or larger than a comparison group. After doing so, they then rated their degree of member self-integrity, and then completed the Tajfel pull matrices (Tajfel et al., 1971). As noted by Leonardelli and Brewer (2001), in-group favoritism by minority group members is expected to manifest as absolute in-group favoritism (as this is the strongest expression of group support). As a result, we expected that lower member self-integrity should be associated with higher absolute in-group favoritism for minority but not majority group members, whereas we did not expect this interaction to occur on relative in-group favoritism.

A hierarchical regression analysis revealed a significant interaction on absolute in-group favoritism (Fig. 2.7). Consistent with predictions, minority group members who reported relatively low member self-integrity exhibited the highest level of absolute in-group favoritism. However, analysis of relative in-group favoritism did not yield this interaction. This study thus supported
the first prediction of the membership maintenance model, namely that lower member self-integrity yielded greater in-group favoritism. Furthermore, that this effect was limited to minority, but not majority, group members support the notion that minority group members are more likely than majority group members to be motivated to maintain group membership.

In another study, we tested the second half of the negative feedback loop, namely that greater in-group favoritism should yield greater subsequent feelings of member self-integrity. Furthermore, if membership maintenance was primarily the motive to describe minority rather than majority in-group favoritism, then this effect should be limited to minority rather than majority group members. To test this interaction, participants recruited from an online research pool were randomly assigned into minimal groups using a categorization task created for this study, where participants reported which of the two images in a series of optical illusions came to mind first. Ostensibly based on their responses, participants were classified as members of the “spatial” group and were randomly assigned to learn that their social category was in the minority or majority relative to the other “temporal” group. Because the study investigated the consequences of exhibiting in-group favoritism, it was important that majority group members also exhibit in-group favoritism; thus, all participants were then induced to identify with their group (Leonardelli & Brewer, 2001).

Figure 2.7 Relative in-group size (continuous) \( \times \) member self-integrity (continuous) on absolute in-group favoritism scores (Study 2). Taken from Leonardelli and Galinsky (2010).
Participants were then randomly assigned to one of three conditions, whether to complete a measure of in-group favoritism, to complete a control measure where participants allocated hypothetical payoffs to two randomly selected individuals, or to receive no measure at all. Finally, participants completed the measure of member self-integrity. If in-group favoritism was intended to maintain group membership, then it was expected that minority group members who could exhibit in-group favoritism would report higher levels of member self-integrity than those from the control or no measure conditions. However, because majorities were not expected to be motivated by membership maintenance, their member self-integrity scores were not predicted to differ across the different measurement conditions.

Analyses revealed the predicted interaction: minority group members who had the opportunity to exhibit in-group favoritism reported greater member self-integrity than minority group members who did not, and more than majority group members who did. Internal analyses conducted with participants who had the opportunity to exhibit in-group favoritism also revealed that member self-integrity increased as the level of in-group favoritism increased, and this correlation was significant for minority, but not majority, group members. In-group favoritism by minority, but not majority, group members led to feelings of member self-integrity.

These two studies supported the notion that, for minority group members only, lower member self-integrity leads to higher subsequent in-group favoritism, and that higher in-group favoritism yields greater member self-integrity, consistent with a membership maintenance explanation. A third prediction was tested in Study 3, namely that, were minority group members given an alternative means of exhibiting group support, then they should exhibit less in-group favoritism. Such evidence would support the notion that membership maintenance not only explains why in-group favoritism is exhibited by minority group members, it also helps to explain when they will do so: when they have not already maintained group membership through alternative means of group support. As before, given that in-group favoritism by majority group members is not expected to be regulated by a membership maintenance motive, these effects should occur for minority but not majority group members.

To conduct this test, participants were first classified into minimal groups using a painting preference task, and were told that they belonged to a numerical minority or majority relative to another painting preference group. All participants were induced to identify with their group so that the study could investigate whether alternative expressions of group support would reduce the in-group favoritism of minority or majority group members. Finally, prior to completing measures of in-group favoritism, participants were randomly assigned to engage in or not engage in an alternative expression of group support. This manipulation was modeled on one pulled
from the self and identity literature (e.g., McQueen & Klein, 2006), where individuals express how important particular values are to them personally. Previous research assumes that such personal “self-affirmations” strengthen individuals’ sense of global self-integrity, where they feel good, moral, and competent (Steele, 1988; see also Sherman & Cohen, 2006). To create a strong expression of group support, we adapted this manipulation so that some participants conducted a “collective self-affirmation,” and wrote about the relevance of important values to making a contribution to their group. Other participants were assigned to conduct a personal self-affirmation, where they wrote about the relevance of important values to themselves personally, or to a control condition, where they did not write about anything.

We predicted that minority group members in the collective self-affirmation condition would report lower in-group favoritism than those in the personal self-affirmation and control conditions, because we expected that membership maintenance is regulated primarily by expressions of group support rather than any form of (personal) support. Furthermore, we expected that these effects would be limited to minority rather than majority group members. The self-affirmation manipulation, which targets different types of personal or group expressions of support, has no direct consequence for achieving group distinctiveness, the motive we expect to explain majority in-group favoritism. As such, we expected the manipulation to have no effect on majority group members’ in-group favoritism.

Analysis of in-group favoritism revealed a significant interaction as predicted. Whereas majority in-group favoritism did not differ across conditions of the self-affirmation manipulation, minority in-group favoritism was lower in the collective self-affirmation than in the other two conditions.

Overall, the research in this domain established a number of conclusions. First, it demonstrated that, with sufficient identification, minority and majority group members can exhibit in-group favoritism to similar degrees, but that this favoritism serves fundamentally different functions. Second, in-group favoritism by majority group members appears to be motivated to achieve group distinctiveness. Third, in-group favoritism by minority group members appears to be motivated by a membership maintenance motive rather than as a means to compensate for membership in an insecure group.

5.2. Achieving inclusion through intergroup behavior

The research findings discussed thus far provide insight into the nature of in-group favoritism exhibited by moderately inclusive (minority) and highly inclusive (majority) groups. But as noted earlier, there is reason to believe individuals may also exhibit in-group favoritism to meet their need for inclusion in an effort to gain acceptance or inclusion. Empirical support
(albeit indirect) exists for this prediction. Research investigating peripheral membership in groups (e.g., Jetten et al., 2002; Noel et al., 1995) reveals that peripheral in-group status (current or anticipated) can influence levels of in-group bias. For example, Noel et al. found that fraternity and sorority pledges, individuals who see themselves as peripheral members of their pledged fraternity or sorority, were more likely to exhibit out-group derogation than were active (i.e., core) fraternity and sorority members. Importantly, this effect was only observed in the public condition, where participants’ out-group derogating responses were known to other group members. This suggests, then, that when the need for inclusion has been activated (e.g., through manipulations of peripheral status), in-group bias may be more likely to occur when it can be used as a means of signifying to other group members that one is loyal to the group and thus deserves to be included within it.

In addition, work by Jetten et al. (2002) suggests that for peripheral in-group status to produce in-group favoritism, individuals must believe that their atypical status will change. Jetten et al. reported that peripheral group members who believed their peripheral status would improve over time were more likely than peripheral members who did not think their status would improve to exhibit in-group favoritism. Although these studies did not specifically measure inclusion need arousal, the work does point to a link between conditions where the need for inclusion is likely to be unmet (e.g., being a marginal group member) and increased levels of in-group bias. Further research is needed, however, to obtain clear empirical support for the relation between heightened inclusion need arousal and levels of in-group bias and to elucidate the moderators of this relation.

More recently, Zhong et al. (2008) explored the connection between inclusion needs and group identification in a particularly novel way, by investigating the effects of negational categorization on intergroup behavior. To date, most research on social categorization processes has investigated what could be called affirmational categorization, where groups of people are defined by what they represent (we are social psychologists, Catholics, Liberals, Americans). However, groups of people can also be defined by what they are not (we are not economists, racists, elitists, European). In a series of studies, we revealed that first, when the need for differentiation is activated, individuals generated more negational categories than when their need for inclusion was activated and relative to a control condition, supporting the notion that negational categories primarily contribute a sense of group distinctiveness. Second, three studies demonstrated that, using minimal group procedures, members of negational relative to those in affirmational categories were more likely to exhibit out-group derogation.

We argued that the out-group derogation effect was due to negational group members’ perpetuation of an existing contrast between self and
Out-group that negational categorization naturally manifests, which might have a motivational element as well. Given the absence of in-group inclusiveness in negational categories, it is possible that members of negational categories more than those in affirmational ones would feel that out-group derogation was one way to maintain what little shared sense of categorization there is. Exhibiting out-group derogation is a way of maintaining the meta-contrast ratio, that is, of keeping intergroup difference greater than intragroup difference. For these reasons, we argued that creating a sense of in-group inclusiveness would help to reduce out-group derogation, as it would focus group members on in-group similarities rather than out-group differences. In two studies, creating a sense of inclusiveness through a “we” prime (Study 3) or through depersonalization (Study 4) reduced the degree of out-group derogation that members of negational categories exhibited.

5.3. Achieving distinctiveness through intergroup behavior

Support also exists for the claim that a need for distinctiveness motivates in-group favoritism, as indicated by the findings for majority groups summarized previously. The role of distinctiveness motives in intergroup behavior is also supported by research on intergroup similarity (e.g., Brown & Abrams, 1986; Diehl, 1988; Jetten et al., 1996, 2001, Study 2; Mummendey & Schreiber, 1984; White & Langer, 1999). This research is based on the idea that very high levels of similarity between groups can threaten group members’ sense of their group’s distinctiveness and provoke in-group favoritism in an effort to restore distinctiveness. Consistent with this idea, a meta-analysis (Jetten et al., 2004) found that high intergroup similarity was associated with in-group favoritism on behavioral measures of discrimination (e.g., reward allocation) among those highly identified with the in-group (although there was an opposite effect on judgmental measures).

Hornsey and Hogg (1999) also yielded evidence supporting this prediction. These researchers were interested in investigating nested categorization contexts, where individuals belong to subgroups nested within more inclusive superordinate groups. According to optimal distinctiveness theory (Brewer, 1993b), the more inclusive superordinate groups are perceived to be, the more group members should be motivated to turn to the more exclusive subgroups within the superordinate by exhibiting greater identification with or favoritism for their subgroup. Hornsey and Hogg (1999) tested this prediction with University of Queensland students, in either math-science or humanities faculty areas, and were led to perceive their university as the superordinate group and their faculty area as their subgroup relative to other faculty areas. Hornsey and Hogg (1999) first measured perceptions of superordinate inclusiveness, to determine whether group members felt the superordinate category was too inclusive. In addition,
the researchers experimentally manipulated category salience. Participants first completed a “psychological perceptiveness task,” where they interpreted what was happening in a picture. Participants in the superordinate condition were then told that their responses would be compared to responses of members in another social category, town planners. Participants in the simultaneous condition completed the same task, and were told that their responses would be compared to those of town planners and that responses by math-science students would be compared to those by humanities students. It was expected that participants in the superordinate condition would feel part of a highly inclusive category and would thus be more likely to engage in subgroup differentiation.

Participants then rated their subgroup identification and intergroup behavior. Analysis revealed that greater perceptions of superordinate inclusiveness were associated with greater subgroup differentiation whereby subgroup members expressed a preference for their subgroup over the other subgroup. Interestingly, additional analyses revealed that this effect appeared to be nonlinear; when the superordinate group was perceived to be fairly distinctive (i.e., when analysis of superordinate inclusiveness was conducted with scores from the bottom half of the scale) no relation between superordinate inclusiveness and subgroup differentiation was observed. Rather, the positive relation between superordinate inclusiveness and subgroup differentiation was evident when the analysis was conducted with superordinate scores from only the top half of the scale. Thus, only when the superordinate category was perceived to be highly inclusive that group members exhibited higher levels of subgroup favoritism. This evidence is consistent with the notion that too much inclusiveness leads group members to preserve and retain the distinctiveness of their subgroup.

5.4. Relative strength of different identity needs

The accumulated evidence indicates that, all things being equal, individuals will prefer membership in more distinctive groups, particularly numerical minorities. However, there are other bases for in-group identification and intergroup behavior (Correll & Park, 2005). For example, social identity theory (Tajfel & Turner, 1979) argues that a motivational basis governing intergroup behavior is the need for positive distinctiveness and self-esteem; when membership in a particular social category is incorporated in an individual’s self-concept, self-esteem increases as the relative status of the in-group increases in comparison to relevant out-groups. Thus, other things being equal, individuals should prefer to identify with groups that are positively valued or occupy high social status relative to other groups.

But other things are rarely equal. In many contexts, minority size is confounded with disadvantages in status or power. Under these circumstances, the need for positive social identity and the need for distinctiveness
may come into conflict. Membership in a high-status majority group may satisfy social esteem needs, but does not achieve optimal distinctiveness. Conversely, categorization into a low-status minority group provides for distinctive social identity but makes it more difficult to derive positive social value from that group membership. Thus, the extent to which members of majorities and minorities value and identify with their respective groups should be moderated by the relative importance of the needs for distinctiveness and the maintenance of positive self-esteem.

Brewer et al. (1993) sought to test this need strength hypothesis. In particular, they examined whether minority and majority group members would be particularly likely to exhibit favorability for their in-group depending on their group’s status and whether their need for differentiation had been aroused. A three-way interaction was predicted: under control conditions, the combined presence of majority size and status should yield greater in-group favoritism, but when the need for differentiation has been aroused, minority group members should be more likely than majority group members to exhibit in-group favoritism, regardless of level of in-group status.

The need for differentiation was manipulated at the outset of the study. Participants were randomly assigned to a control condition where they read standard assurances about confidentiality and were allowed to generate an ID number to be used during the course of the study. Those in the “depersonalization” condition, however, received an instruction set intended to increase the need for differentiation:

Since in this study we are not interested in you as an individual but as a member of the college student population, we do not ask for any personal information. However, for statistical purposes we need to match up different questionnaires completed by the same person. In order to do this, we have assigned you an arbitrary code number that is to be used throughout this session. . . . We are running this study in order to assess the attitudes and perception of students in general. For the purposes of this study you represent an example of the average student no matter what your major is. We are only interested in the general category and not in individual differences.

After completing the instruction set, participants were randomly assigned to social categories using the minimal group paradigm, in particular “overestimator” or “underestimator” categories; at this time, participants also were told that they belonged to a relatively large or small social category. The majority category was counterbalanced with category label. Participants then completed a test that was described either as a “Pattern Preference” or “Perceptual Intelligence” test, where the test description was intended to create status-neutral or status-value differences based on group membership performance. Participants then received feedback,
where overestimators consistently scored higher on the tests than underestimators. As a result, participants were thus assigned to either a status-neutral condition (for those who completed the pattern preference test) or membership in a high status or low status group (for those who completed the perceptual intelligence test). Finally, participants completed trait evaluations of their group and the other group, which represented the measure of in-group favoritism.

Analysis revealed a three-way interaction between depersonalization, relative in-group size, and relative in-group status on positive in-group traits. Under control conditions, majority size and status both led to more positive in-group trait ratings; however, under depersonalization, minority size led to more positive trait ratings, and there was no main effect of group status, nor did it interact with relative size. Under depersonalization, minority size mattered more than in-group status.

5.5. Summary of intergroup relations

The literature reviewed here supports the claim that the needs for inclusion and differentiation motivate in-group favoritism. First, evidence from studies on minority-majority relations is consistent with the notion that in-group favoritism by minority and majority group members occurs out of a desire to maintain or achieve optimal distinctiveness, respectively. Second, evidence also directly supports the notion that arousal of the needs for inclusion and differentiation will motivate in-group favoritism. Although optimal identity needs are not postulated to be the only motives underlying in-group favoritism, when these motives are strong, they may take precedence over other social needs, such as status-seeking.

6. Recent Advances and Future Directions

6.1. Extending the optimal distinctiveness model

Optimal distinctiveness theory was originally intended to apply exclusively to the collective social self. However, the basic underlying tension between inclusion and differentiation most likely plays itself out in other aspects of self-construal as well. Brewer and Gardner (1996) postulated that there are three distinct levels of self-representation that constitute the “social self.” In place of existing dichotomies that contrasted individual/independent versus interpersonal/interdependent self-construals (Cross & Madson, 1997; Markus & Kitayama, 1991) on the one hand, or personal versus social/group identities (Hogg & Abrams, 1988; Turner et al., 1987) on the other, they proposed a tripartite model, distinguishing among individual, relational, and collective self-representations. Further, they suggested that these are not
simply three aspects of a single self-system, but rather three separate systems with different identity properties, loci of agency, and motivational concerns (Sedikides & Brewer, 2001). Brewer and Gardner (1996) also noted that, analogous to the inclusion versus differentiation motives that determine optimal collective identities, opposing needs for differentiation and assimilation may also be involved in individual and relational selves to determine optimal identities at those levels as well (see also Brewer & Roccas, 2001).

This extension of the opposing motives model is depicted in Table 2.2. At the collective level, the conflict is between belonging and inclusion on the one hand, and separation and distinctiveness on the other. At the individual level, the needs are expressed in the opposition between the desire for similarity on the one hand and the need for uniqueness on the other (Snyder & Fromkin, 1980; see also Hornsey & Jetten, 2004). The distinction between inclusiveness–distinctiveness and similarity–uniqueness is subtle but important. Similarity refers to the degree or extent of overlap between one’s own characteristics (attributes, attitudes, etc.) and those of another individual or a group prototype. Inclusion refers to the number of others with whom one shares a collective bond (which may be based on a single shared characteristic).

At the interpersonal (relational) level, the tension is represented by conflicts between the need for autonomy and the need for interdependence and intimacy with specific others. The literature on romantic attachments, in particular, acknowledges that close relationships are characterized by tension between intimacy and autonomy. Ideal relationships serve both needs, and secure attachment figures provide for both supportive nurturance and autonomy and initiative (Shaver & Mikulincer, 2007). Insecure attachment can be engendered by overprotective nurturance as well as by rejection or unresponsiveness.

The extended optimal distinctiveness model views the individual social self as a complex of regulatory systems. At each level, the person must achieve some optimal balance between these conflicting motives for defining self in relation to others. In order to survive and function effectively, each person must maintain an optimal level of self-integrity, achieve and

<table>
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<tr>
<th>Level of self</th>
<th>Motivational pole</th>
<th>Differentiation</th>
<th>Assimilation</th>
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<tbody>
<tr>
<td>Individual</td>
<td>Uniqueness</td>
<td>Similarity</td>
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<tr>
<td>Relational</td>
<td>Autonomy</td>
<td>Intimacy/interdependence</td>
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<tr>
<td>Collective</td>
<td>Separation</td>
<td>Inclusion/belonging</td>
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Adapted from Brewer and Roccas (2001; Table 12.1, p. 223).
sustain a sufficient number of close relationships that meet competing needs
for intimacy and autonomy, and maintain secure inclusion in optimally
distinctive groups. Fulfilling each of these needs requires the basic compo-
nents of a regulatory system (Carver & Scheier, 1982; Miller et al., 1960),
including an assessment function that monitors and registers the individual’s
current state of need satisfaction, a comparator function that evaluates the
current state against an ideal or goal state, and an activation (monitoring and
coping) function that responds to discrepancies detected by the comparator
and remains active until the discrepancy is reduced or eliminated
(Leonardelli, 2010; Pickett & Gardner, 2005). Just as hunger and thirst
respond to different cues of physiological deprivation and activate different
cravings and goal representations, the relational and social self are regulated
by different cues to satisfaction and deprivation. Each system is sensitive to
different states of social connectedness (e.g., What is my current level of
intimacy in my relationship with this person? Am I feeling too different
from others in this social context? Are the boundaries of my group being
maintained?), and the individual must be prepared to respond with appro-
priate corrective action when assessed states of distinctiveness and inclusion
deviate from optimal balance at any level of the social self.

6.2. Establishing motivational primacy

The idea that distinct levels of self-representation exist within the individual
has inspired some researchers to ask the question of which level of self is
motivationally primary (see Gaertner et al., 1999, 2002). In other words, are
there self-representations that individuals seem to care more about and that
are more central to directing thoughts, behaviors, and actions? Gaertner and
his colleagues have offered three hypotheses for which level of self might
be motivationally primary: primacy of the individual self, primacy of the
collective self, and situational-primacy (the idea that primacy may be
determined by which level of self is salient within a particular social context;
Gaertner et al., 1999, 2002).

To date, the empirical research that has attempted to test these hypoth-
eses has assessed primacy primarily by examining which self individuals are
more likely to protect under conditions of threat. Alternatively, the research
examined which self are individuals more prone to actively enhance. Using
this criterion for motivational primacy, researchers have concluded that the
individual self is motivationally primary, as participants appeared to be more
likely to protect the individual self from threat and enhance the individual
self relative to the collective self (e.g., Gaertner et al., 2002). However, this
evidence can also be interpreted as support for the fragility and insecurity of
the individual self rather than its primacy. Furthermore, the fact that
individuals appear to react more strongly to insults and threats to the
individual self than the collective self does not imply that people are
generally more likely to pursue motives associated with the individual self than the relational or collective self, or that goals associated with the individual self are more likely to spur action than goals associated with the other selves. In sum, the research that has been used as evidence for motivational primacy of the individual self (e.g., Gaertner et al., 1999, 2002) has failed to examine actual motivation or goal pursuit.

Thus, the issue of which level of self is motivationally primary is by no means resolved, and, from our perspective, the more interesting question is how the needs for inclusion and differentiation might play a role in determining the primacy or salience of a given level of self-representation. In the original description of optimal distinctiveness theory, Brewer (1991) put forth the idea that identification and loyalty should be strongest for those group identities that are best able to satisfy both needs simultaneously. An extension of this idea is that individuals might activate levels of self-representation that are, within a given social context, more successful at resolving the tension between the motivational poles that characterize that level of self-representation (see Table 2.2). For example, if a person has not successfully managed to resolve the needs for autonomy and relatedness in his or her primary interpersonal relationships, this person might be more satisfied at defining the self at the collective level to the extent that there are collective identities in which the needs for inclusion and distinctiveness are being successfully met. Or alternatively, if the needs for similarity and uniqueness are not well balanced at the level of the individual self, a person might use the collective self as a more chronic basis for self-definition. In short, we offer an additional hypothesis and propose that the primacy of a given level of self-representation may be determined by how satisfied individuals feel at that level of self-representation and that satisfaction should be determined, at least in part, by the extent to which the needs for inclusion and differentiation are being met.

6.3. The role of social recognition

One issue that has not been discussed in much detail in this chapter is the role that social recognition plays in the satisfaction of the needs for inclusion and differentiation. Among psychologists, one of the best-known concepts emerging from the symbolic interactionist movement is the looking-glass self. Cooley (1902) coined this term to refer to the idea that people perceive themselves through the eyes of others. In other words, how we view ourselves is shaped by how we think we appear to others and how we think others judge us. Not only do people rely on others to help define the self, but they also find it important to communicate their self-conceptions to others (e.g., Wicklund & Gollwitzer, 1982). Research on collective self-verification (Chen et al., 2004; Gomez et al., 2009) indicates that people are motivated to have their views of their collective self verified by others and
that this is particularly the case when the collective self-views are strongly held and when group identification is high. Finally, the importance of social recognition is highlighted by recent research examining the concept of group-identity completion (Ledgerwood et al., 2007). Ledgerwood et al. found evidence that group members seek to communicate their group identity to others through socially recognized symbols, just as individuals self-symbolize to communicate personal identities. Furthermore, these symbols of group identity appear to take on heightened importance and value when group members experience a threat to their collective identity (i.e., when the group is not being adequately recognized).

This research suggests that an important component to satisfaction of the needs for inclusion and differentiation may be having other people recognize and verify one’s inclusionary status or the distinctiveness of one’s group. Prior research testing optimal distinctiveness theory has generally not included conditions where verification or recognition has been manipulated. However, we predict that social verification of collective self-views is an important component of need satisfaction and that under conditions of threat, people will work especially hard at attaining this recognition—for example, through the acquisition of group symbols or explicit attempts to manipulate others’ views (Swann, 1987). Thus, one avenue for future research is to examine need satisfaction within a truly social context so that the process of how individuals negotiate their collective identities with others can be studied.

7. Conclusion

Optimal distinctiveness theory (Brewer, 1991) proposes that individuals have two fundamental and competing human needs—the need for inclusion and the need for differentiation—that can be met by membership in moderately inclusive (optimally distinct) groups. This paper demonstrates that the needs for inclusion and differentiation matter to the psychology of group life in terms of how individuals identify with groups, perceive them, and compete on behalf of their group memberships. We argue that these motives have their origin in an evolutionary past in which humans’ primary strategy for survival involved intense interdependence in distinct, bounded social groups. Security and survival depended on inclusion in stable, clearly differentiated social groups. As a consequence of our evolutionary history, our sense of personal security and certainty are maximized in the context of shared in-group membership and clear in-group–out-group distinctions.

Human psychology was not forged under the conditions of global interdependence that characterize today’s complex social world. The challenge now is to learn to accommodate the human need for distinct in-group
identities with the necessity for intergroup acceptance and cooperation to solve contemporary world problems. A better understanding of the opposing motives that underlie social identity may suggest alternative ways to meet these fundamental psychological needs in order to reap the benefits of in-group belonging without the social costs of intergroup discrimination and conflict.

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