SOCIAL IDENTITY COMPLEXITY: NEW METHODS AND DIRECTIONS

A Thesis

Presented in Partial Fulfillment of the Requirements for the Degree Master of Arts in the Graduate School of The Ohio State University

By

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2005

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ABSTRACT

Social identity research has typically investigated ingroup identification one group at a time, despite the intuitive fact that individuals have numerous ingroup identifications at any given time. The theory of social identity complexity is an attempt to model how individuals integrate and represent their multiple social group memberships. The present research seeks to expand on both the methods used in previous work on social identity complexity as well as expand the range of variables investigated in relation to social identity complexity. Study 1 replicated previous results tying social identity complexity and tolerance-related variables (Brewer & Pierce, 2005) in a computer-based paradigm with college student participants. In Study 2, an attempt was made to influence social identity complexity indirectly by manipulating distinctiveness motivations, but no significant effects of the manipulation were obtained. Study 3 expanded previous research on social identity complexity by directly comparing data from white participants with data from racial/ethnic minority participants, demonstrating significant differences in social identity complexity scores and suggesting the possibility of qualitatively different representations between the two groups. It is concluded that future investigations should develop additional methodologies for the investigation of social identity complexity as well as expand work on individuals, such as minority group members, whose social identity structure varies significantly from that of others.
ACKNOWLEDGMENTS

I first thank my adviser, Marilynn Brewer, for all her assistance, support, and guidance in the long process of completing my Master’s thesis and degree requirements.

I wish to thank my research assistants, Dina Karvounides and Lauren Pinto, for their dedication and reliability in their work with the projects comprising this thesis.

I also wish to express my gratitude to the OSU Graduate School and the National Institutes of Mental Health, who have generously funded my educational activities.

Lastly, my sincere thanks go out to all members of the Brewer Lab and Social Cognition Research Group for insight, guidance, and support throughout my time here, including Bob Arkin and Russ Fazio for their generous agreement to serve on my examination committee.
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CHAPTER 1

INTRODUCTION

Social identity research seeks to explain how people integrate the groups to which they belong into their idea of self and how people behave as group members. This research, as well as intergroup relations research and most other social psychological research regarding group membership, have, with notable exceptions, largely focused on single, distinct group memberships as the focus of analysis (Brewer & Brown, 1996). It is obvious in principle that people in fact have multiple social group memberships, but research on how an individual’s group memberships relate to one another, or on how multiple group memberships affect intergroup relations has thus far been limited.

Social Identity Complexity

Some recent work (Roccas & Brewer, 2002) has proposed that individuals mentally integrate their multiple social group identities in a manner that varies on a dimension called social identity complexity (SIC). Social identity complexity refers to the extent to which individuals tend to represent their multiple group memberships such that different identities are both differentiated and integrated in an individual’s subjective cognitive representation of the combined ingroups. Put another way, an individual may perceive his or her ingroups as having highly overlapping sets of
members, such that the combined group identities may even form a single, exclusive compound category (e.g. white female heterosexual doctors). This would be described as a *simple* identity structure. The opposite end of the continuum would be characterized by an individual who recognizes that his or her ingroup memberships are composed of distinct member sets and who considers the sum of all those distinct sets to be a large, inclusive ingroup. This would be described as a *complex* identity structure (e.g. whites *and* females *and* heterosexuals *and* doctors.)

It is important to note that because ingroups defined by different category types are typically only partially overlapping, the extent to which any given individual represents his or her ingroup memberships as overlapping or distinct may vary along on a continuum, rather than in a strictly dichotomous fashion. Some individuals may have subjective representations of group memberships that are essentially collapsed across all categories (and hence would be considered as having a very simple identity structure), but on the whole one would expect variation along a continuum of social identity complexity levels.

A concrete example may prove useful to illustrate the concept. Imagine an individual named Laura who is an Italian-American, Catholic, a Republican, and works as an engineer and lives in a suburb. From this brief description, there are no fewer than five social identities that Laura may possess: Italian-American, Catholic, Republican, engineer, and suburbanite. These identities reference large collectives that Laura cannot possibly interact with on a daily basis, but of which Laura has subjective conceptualizations. Among these conceptualizations are ideas about how these groups overlap. Laura might, for instance, believe that virtually all Italian-
Americans are also Catholic. She might also believe that all engineers are Republicans, but that most engineers are not also suburbanites like she is.

These general ideas about the relationships among the membership groups that one possesses are directly connected to one’s level of social identity complexity. If Laura perceives her groups as so highly overlapping as to be almost identical in membership, then we may describe Laura as having a very simple identity structure. If, on the other hand, Laura tends to conceive of her multiple ingroups as not entirely overlapping and easily recognizes the probability of non-Republican engineers and non-Catholic Italian-Americans, then we may describe Laura as having a more complex identity structure.

Social identity complexity is conceptualized as being analogous to the idea of cognitive complexity as described by Tetlock (1983), where complexity is characterized by both differentiation and integration of cognitive information. Social identity complexity depends on the recognition of both the existence of multiple group memberships and the lack of convergence among those memberships. Like cognitive complexity, social identity complexity is therefore theorized to be subject to contextual and motivational determinants as well as chronic individual differences.

In the limited research on social identity complexity up to this point (Roccas & Brewer, 2002; Brewer & Pierce, 2005), the operationalization of an individual’s social identity complexity has been a self-report measure -- directly asking individuals about the extent to which they perceive the memberships and characteristics of their social groups to be overlapping. The extent of the perceived overlap among an individual’s ingroup memberships has been averaged to form a score on an arbitrary
10-point scale that is theorized to reflect an individual’s SIC. According to Roccas and Brewer (2002), individuals who perceive a greater overlap among their identities (i.e., high scorers) have simpler identities, while those who perceive less overlap (i.e., low scorers) have more complex identities. Therefore, an individual’s overlap score is inversely related to his or her social identity complexity.

Social Identity Complexity and Tolerance

Roccas and Brewer (2002) hypothesize that social identity complexity should be associated with tolerance toward outgroups for both cognitive and motivational reasons. They note that individuals with high social identity complexity are more likely to be cognitively aware that individuals who are outgroup members on some group dimension are likely to be an ingroup member when considered on some different dimension. Also, the motivation to favor one’s ingroup may be diminished when one recognizes the partially overlapping nature of ingroup memberships, which reduces both the importance of the ingroup in intergroup comparisons as well as the significance of any particular social identification for an individual’s self-definition and collective self-esteem.

Roccas and Brewer (2002) presented initial data suggesting that higher social identity complexity was associated with higher endorsement of openness, lower power orientation, and higher universalism values on the Schwartz Value Inventory (Schwartz, 1992). The authors also demonstrated that individuals under threat conditions showed decreased complexity, suggesting that threatening circumstances lead to deceased complexity and hence may account indirectly for findings that show that threat leads to increased ingroup favoritism (e.g. Branscombe & Wann, 1996.)
More recently, Brewer and Pierce (2005) assessed the relationship between social identity complexity and tolerance in a large-sample mail and phone survey of adults from Ohio. A mail survey was used to identify potential participants for a phone survey as well as to obtain a listing of group memberships from each respondent. These group memberships were then used to construct a personalized phone interview for each respondent contacted. Specifically, three of the participant's own identified memberships were used when asking each respondent about the extent of the overlap between each of these groups (as well as the group "American"). The phone survey also collected responses on items measuring attitudes toward affirmative action and multiculturalism, as well as emotional distance from outgroups as measured by "feeling thermometer" questions. These variables were then tested for a relationship to the overlap measure of social identity complexity.

The results confirmed previous expectations and findings, with social identity complexity being associated with tolerance-related policy preferences and more positive affect toward outgroups. The overlap score across 4 ingroups was significantly correlated with attitudes toward affirmative action (β = .193, p < .01), multiculturalism (β = .105, p < .10), and affect toward outgroups (β = .149, p < .05) after controlling for age, education, and ideology. The finding seems particularly compelling when it is noted that the overlap scores computed in this study did not include the participants' racial and ethnic group memberships, but was based on categories such as church membership and sports fandom groups. The subjective
representation of these non-ethnic groups by individuals was nonetheless related to
tolerance of ethnic outgroups in the manner predicted by Roccas and Brewer (2002).

Superordinate Representation and Tolerance

Other recent research provides an additional theoretical explanation of the
process by which social identity complexity might influence intergroup tolerance.
Mummendey and Wenzel (1999) theorize that the first step in determining whether an
outgroup will be tolerated is the possible inclusion of that outgroup in some
superordinate group along with the ingroup. In line with self-categorization theory
(Turner, 1987), they suggest that an individual’s prototype of the superordinate group
is the standard by which all groups within that superordinate are judged. In many
cases, individuals generalize the attributes of their own ingroup to their prototype of
the superordinate. This “ingroup projection” leads to normative judgments about
other outgroups included within the superordinate such that if an outgroup is
considered part of the superordinate, then there will be a comparison of its attributes
to the normative ingroup prototype, and hence potential judgment of the outgroup as
nonnormative and hence inferior.

In Mummendey and Wenzel’s model, this intolerance of outgroups could be
reduced under either of two conditions. The first way in which tolerance be increased
is if the outgroup is not considered part of the superordinate, in which case a negative
comparison of the outgroup against the ingroup-based prototype will not occur. The
second route to tolerance within a superordinate context is if an individual’s
representation of the superordinate is such that it includes the attributes of the
outgroup.
The authors note that the manner of defining the prototype of a superordinate group resulting in the most “dramatic and theoretically challenging form of tolerance” would be a highly complex representation of the superordinate (Mummendey & Wenzel, 1999; p. 168). The relevance of social identity complexity as a complement to this theory is of interest here. Individuals with greater social identity complexity represent their ingroups in such a way as to form a more complex representation of their identity. Hence if the prototype of a superordinate group is derived from an individual’s perception of his or her ingroup(s) (Turner, 1987), greater social identity complexity could lead to a more complex (and therefore more inclusive) representation of the superordinate. A more complex and inclusive representation of the superordinate group would, as noted above, form a powerful basis for intergroup tolerance within that superordinate context. This is potentially a vital theoretical link between social identity complexity and tolerance.

The Present Research

The present research aims to enhance our understanding of the antecedents, correlates, and consequences of social identity complexity. The studies presented here are distinct from one another but are connected to the general project of understanding social identity complexity. Study 1 seeks to replicate previous research on social identity complexity and tolerance in a computer-based laboratory research setting with undergraduates as participants. Study 2 examines the possibility that distinctiveness motivations might situationally influence social identity complexity. Study 3 examines the additional variables of minority group status and identity importance in the investigation of social identity complexity and tolerance.
CHAPTER 2

STUDY 1: MEASUREMENT AND CORRELATES OF SOCIAL IDENTITY COMPLEXITY

The goal of this study was to create a new research methodology investigating social identity complexity in a university laboratory setting. Study 1 served both as feasibility testing with regard to the challenge of standardizing a method for obtaining data on a set of participant-generated group identifications, and as a replication of previous work regarding the relationship between social identity complexity and tolerance (Brewer and Pierce, 2005).

Method

Participants. Participants were 62 students (23 men, 39 women) from Ohio State University who participated in exchange for partial completion of an introductory psychology course requirement. For the purposes of these analyses, only data from participants self-identifying as white were used (n=43) in order to match the methodology of the work being replicated, and because the sample size of racial minority participants was too small for meaningful analyses.

Procedure. All participants completed the same materials in the order the materials are described below, all on a personal computer using MediaLab. After completing all materials, the participants were debriefed, thanked, and dismissed.
Materials. After an initial welcome screen informing the students that the experiment would involve questions about group memberships, the participants received the *Group Elicitation Questionnaire* (GEQ). This consisted of specific instructions on how to respond to the questions, followed by a series of seven questions, each presented on a separate screen. Each question asked the participant to identify which of a set of groups he or she belonged to. Each question presented a separate category of membership – religion, race/ethnicity, sports fandom, social class, political partisanship, regional origin, and home city size (see Appendix A for a complete listing the questions and available responses for each category.)

Next, the participants were shown a screen displaying all their previously selected group memberships, as well as the group “college students.” They were then asked to select one group from the list that they felt was important to them, and type it exactly as it was displayed. This task was repeated for a total of four selected group memberships, reminding the participants which group memberships they had already entered. This yielded four groups for each participant as the basis for later questions that would be asked. Participants then provided the name of the group of the four they previously selected that they felt was most important to them, and were asked for their gender.

The social identity complexity *overlap task* was then administered. The social identity complexity overlap task consists of a series of questions asking about the perceived overlap in membership between two of a participants’ four groups obtained from the GEQ (e.g., “How many college students are Republicans?”) Participants received instructions about the nature of the task and how to respond, and then
received each of all 12 possible pairings among their four provided groups (6 pairs rated in both directions) and responded on a 0-10 scale, with 0 equivalent to “None are.” and 10 equivalent to “All are.” (see Appendix B for a full example of an individual item from this task.)

Participants then completed a tolerance questionnaire consisting of three subsections. The first section consisted of a series of eight issue statements meant to assess attitudes toward tolerance-related issues potentially relevant to university students (See Appendix C for a listing of items used.) Participants responded to each issue statement on a 5-point Likert scale with a range of 1 (Disagree strongly) to 5 (Strongly agree). Each item was presented on a separate screen.

Another section of the tolerance questionnaire consisted of five items designed to evaluate level of nativist nationalism (Li & Brewer, 2004). These were included in order to examine the relationship between social identity complexity and level of restrictiveness versus inclusiveness of American national identity. As noted in Chapter 1, there is reason to believe that the representation of a superordinate group (such as “American”) may be related to tolerance (Mummendey & Wenzel, 1999). For this reason, the nativist nationalism scale was created to evaluate the extent to which participants were more or less restrictive about defining the category “American” in an exclusive fashion. Each item asked how important a given criterion was to be considered a “true American.” The criteria were having been born and raised in the United States, enjoying American culture, being patriotic, having traditional American values, and speaking fluent English. Participants responded to
the five items on a 5-point Likert scale with a range of 1 (Not at all important) to 5 (Very important), with each item presented on a separate screen.

The last section of the tolerance questionnaire consisted of the frequently-used feeling thermometer measure of affect toward outgroups. Participants were asked to arte their felt closeness toward a total of eight groups – their family, white Americans, African-Americans, Asian-Americans, Mexican immigrants to the United States, Jewish Americans, gay and lesbian Americans, and Muslim Americans – on a scale of 0 to 100, with 0 defined as “very cold or unfavorable,” 50 defined as “neither warm nor cold,” and 100 defined as “very warm or favorable.”

![Histogram of overlap scores](image.png)

Figure 2.1 – Distribution of overlap scores

**Results**

Ratings from the 12 items in the social identity complexity Overlap Task were averaged to form an overlap score ranging from 0 to 10 for each participant (M =}
4.93, SD = .95). Figure 2.1 shows the distribution of overlap scores. The distribution seems to visually approximate a normal distribution, with the mode of 4.8 very near the mean of 4.93 and a range of obtained scores between 2.8 and 6.8. As in previous studies (Brewer & Pierce, 2005), this averaged overlap score is used as an estimate of an individual’s social identity complexity, where a larger value indicates a less complex identity, and less overlap indicates higher identity complexity. In order to determine whether or not the observed variability in participant overlap scores was meaningfully related to tolerance as expected, correlations between these overlap scores and the tolerance measures were obtained.

*Social issue attitudes.* Only one diversity issue item showed a significant Pearson correlation with the overlap scores—"The University should only fund activities that benefit the majority of students, not activities that only appeal to a small segment of the population" (r = .39, p < .01)—such that individuals with a higher overlap score (and theorized lower identity complexity) were more likely to endorse the statement. This result was in the expected direction. Other issue statements failed to show a significant correlation with overlap score, though one other item—"Increasing the number of racial and ethnic minorities at the University benefits our community educationally and socially."—showed a marginal correlation, also in the expected direction (r = -.22, p = .14) (see Table 2.1).

*Affect toward outgroups.* Several feeling thermometer items showed significant correlations with the overlap score variable. Overlap score was significantly correlated with affect toward African-Americans (r = -.35, p < .05) and Asian-Americans (r = -.30, p < .05), and marginally with affect toward gay and
lesbian Americans ($r = -0.26, p < 0.10$). In all cases, individuals with a higher overlap (less complexity) had less positive affect toward these outgroups. The correlation with affect toward Jewish Americans and Mexican immigrants trended in the same direction (see Table 2.2 for all correlation values.)

<table>
<thead>
<tr>
<th>Item</th>
<th>SIC</th>
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<tbody>
<tr>
<td>Better if ethnic groups maintain distinct traditions</td>
<td>$r = 0.02$</td>
</tr>
<tr>
<td>Better if ethnic groups blend in</td>
<td>$r = 0.13$</td>
</tr>
<tr>
<td>More ethnic minorities at University is good</td>
<td>$r = -0.22$</td>
</tr>
<tr>
<td>Affirmative action = bad</td>
<td>$r = 0.03$</td>
</tr>
<tr>
<td>Welfare lets people live off government money</td>
<td>$r = -0.02$</td>
</tr>
<tr>
<td>University should provide for special needs of minorities</td>
<td>$r = -0.08$</td>
</tr>
<tr>
<td>University should only fund activities that cater to the majority</td>
<td>$r = 0.39 *$</td>
</tr>
<tr>
<td>University should provide same-sex domestic partner benefits</td>
<td>$r = -0.08$</td>
</tr>
<tr>
<td>Nativist Nationalism scale</td>
<td>$r = 0.06$</td>
</tr>
</tbody>
</table>

* = significant at $p < .05$

Table 2.1 – Correlations between SIC and tolerance issue items

American Inclusiveness. The nativist nationalism (NN) scale proved reliable (Cronbach’s alpha = .84) but showed no relationship with social identity complexity ($r = 0.06$, ns). This nationalism scale did show significant correlations with several of the feeling thermometer items, however (see Table 2.2). In particular, nativist nationalism was correlated significantly with feelings toward Mexican immigrants ($r = -0.32, p < 0.05$) and Muslim Americans ($r = -0.36, p < 0.05$), and marginally with feelings toward gay and lesbian Americans ($r = -0.28, p < 0.10$), indicating that individuals who more strongly endorsed nativist nationalism items were more likely to feel disfavorably toward Mexican immigrants, Muslim Americans, and gay and
lesbian Americans. However, since the scale did not show any correlation with social identity complexity, no test of a mediational hypothesis was warranted.

<table>
<thead>
<tr>
<th>Group</th>
<th>SIC</th>
<th>NN</th>
</tr>
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<tbody>
<tr>
<td>Whites</td>
<td>(r = -.12)</td>
<td>(r = .19)</td>
</tr>
<tr>
<td>African-Americans</td>
<td>(r = -.35^*)</td>
<td>(r = -.13)</td>
</tr>
<tr>
<td>Asian-Americans</td>
<td>(r = -.30^*)</td>
<td>(r = -.09)</td>
</tr>
<tr>
<td>Mexican immigrants</td>
<td>(r = -.19)</td>
<td>(r = -.32^*)</td>
</tr>
<tr>
<td>Jewish Americans</td>
<td>(r = -.24)</td>
<td>(r = -.02)</td>
</tr>
<tr>
<td>Muslim Americans</td>
<td>(r = -.04)</td>
<td>(r = -.36^*)</td>
</tr>
<tr>
<td>Gay and lesbian A’s</td>
<td>(r = -.26)</td>
<td>(r = -.28)</td>
</tr>
</tbody>
</table>

* = significant at \(p < .05\)

Table 2.2 – Correlations between SIC and NN and feeling thermometer scores

Discussion

Results from this study replicated to some extent the results obtained by Brewer and Pierce (2005) with regards to the correlation between social identity complexity and outgroup affect. Lower overlap scores, assumed to indicate higher identity complexity, were associated with greater warmth towards minority groups on the part of the white college students in this sample. This suggests that the relationship between social identity complexity and tolerance of outgroups does generalize to college populations. The evidence is made more striking when it is noted that racial identity was not a group listed frequently by participants (and hence not used in the overlap task). Thus it seems that individuals’ subjective representation of non-racial ingroups is related to their tolerance of racial outgroups.
The absence of many significant correlations between overlap score and issue statements may be interpreted several ways. One potential problem is that the attitude statements concerned issues that were not directly relevant to the university student sample in this study. It may be that certain diversity issues or types of diversity issues are more likely to be pressing for college students than those presented in this study, a possibility suggested by the fact that the one significantly correlated item was directly relevant to student activities. Another possibility is that tolerance attitudes and policy preferences related to social identity complexity are specific to certain domains or topics, and that these questions did not tap those domains for some reason. Also, the tolerance-related topics of the questions were no doubt apparent to participants, possibly creating a social desirability effect for some items and constraining variability of responses. However, there is no reason to believe that social desirability would be a factor in responses to the overlap task items.

The lack of support for the connection between the nativist nationalism scale and social identity complexity is also open to interpretation. Our nationalism scale measured only one facet of superordinate exclusivity – the extent to which individuals perceive certain nativist nationalist qualities as necessary for “true American” status. It may be that social identity complexity is related to superordinate complexity and inclusiveness in a way that our limited measure did not readily capture.

The systematic findings of this study indicate that the methodology used here to measure social identity complexity in a university laboratory setting is viable and may be used successfully to replicate previous work (e.g., Brewer and Pierce, 2005). The present study utilized both a different sample – University students, rather than
non-University adults — and different methodology — a standardized computer-based, laboratory paradigm rather than an open-ended mail surveys and phone interviews. This suggests the feasibility of further research using this methodology to investigate other correlates, antecedents, and consequences of social identity complexity.
CHAPTER 3

STUDY 2: DISTINCTIVENESS NEEDS AS POTENTIAL ANTECEDENTS OF SOCIAL IDENTITY COMPLEXITY

As noted in Chapter 1, social identity complexity is theorized to be subject to both individual differences as well as situational and motivational determinants. The precise nature of those situational and motivation determinants is as yet unknown. Brewer and Roccas (2002) hypothesized that they might include factors such as availability of cognitive resources, motivation to contemplate multiple ingroup identities, and features increasing salience of a specific ingroup.

One category of motivation that may be connected to social identity complexity is that of distinctiveness motivations (Brewer, 1991). Individuals are motivated to maintain social identifications that provide them with an optimal balance between being assimilated within a meaningful group and being differentiated from most other individuals and groups (Pickett, Silver, & Brewer, 2002). Since social identity complexity is connected to the subjective representations of an individual’s multiple ingroups, a shift in an individual’s distinctiveness motivations might inspire a change in their situational social identity complexity, which may in turn have other effects.
Significant previous research has shown that assimilation or differentiation goals may be activated in a number of ways with a host of psychological consequences. One of the more common paradigms involves providing participants with erroneous feedback to make them believe that they are either very unusual (activating an assimilation motivation) or extremely common (activating a differentiation motivation) and examining the effect this has on identification with or definition of ingroups (e.g. Pickett, Bonner, & Coleman, 2002). For instance, the activation of an assimilation motivation has resulted in greater preference for inclusive ingroups and increased estimates of group size, while the activation of a differentiation motivation had the opposite effects (Pickett, Silver, & Brewer, 2002).

Distinctiveness needs may also impact social identity complexity. Activating an assimilation motivation should result in individuals seeking to expand their set of ingroups and thus perceive them as being less overlapping. In contrast, activating a differentiation motivation should result in individuals seeking to contract their set of ingroups, resulting in a smaller combined set of ingroups with greater perceived overlap. If a situational change in social identity complexity could be induced as a function of arousal of these identity needs, one would also expect a corresponding change in variables associated with social identity complexity, such as tolerance.

In Study 2, the goal was to examine the impact of situationally activated distinctiveness motivations on social identity complexity and the tolerance variables from Study 1. Accordingly, the experiment was similar to Study 1 with the exception of the inclusion of a manipulation of distinctiveness motivation before collection of data on social identity complexity and tolerance.
Method

Participants. Participants were 122 students (27 men, 95 women) from The Ohio State University who participated in exchange for partial completion of an introductory psychology course requirement.

Procedure. All participants completed the same materials in the order the materials are described below, all on a personal computer using MediaLab. The manipulation of distinctiveness need took the form of erroneous feedback on a supposed personality test, provided before the administration of the rest of the items. Participants were randomly assigned to one of three possible conditions: differentiation need, assimilation need, or optimal distinctiveness. After completing all materials, the participants were debriefed, thanked, and dismissed.

Materials. After an initial welcome screen informing the students that the experiment would involve questions about group memberships, the participants received the Group Elicitation Questionnaire (GEQ). The GEQ used in this study did not vary from that used in Study 1.

Following the GEQ, participants received a distinctiveness need manipulation in the form of a ‘personality test’ on which they received immediate (but false) feedback. The test consisted of 5 arbitrarily constructed scenarios and 5 possible personal responses to each scenario, from which the participant was to select one. Following the last scenario item, participants briefly saw a screen indicating that their answers were being analyzed, and were then presented with one of three feedbacks, all referring to the same graph (Figure 3.1).
In the differentiation need arousal condition, participants were informed, "Your personality type is DP1. This personality type is quite common among students at Ohio State, and is also common among students at other universities throughout the country."

In the assimilation need arousal condition, participants were informed, "Your personality type is MG2. This personality type is quite rare among students at Ohio State, as well as at other universities throughout the country."

In the optimal distinctiveness condition (no need arousal), participants were informed, "Your personality type is DP1. This personality type is quite common among students at Ohio State, but is less common among students from other colleges throughout the country."

Following the personality feedback, participants completed the social identity complexity overlap task, which did not differ from that used in Study 1, followed by
the tolerance questionnaire which varied from that used in Study 1 only in that the nativist nationalism scale was not included.

Results

As in Study 1, ratings from the 12-item social identity complexity overlap task were averaged to form an overlap score for each participant (M = 5.01, SD = 1.07), with larger values indicating higher overlap and presumed lower social identity complexity. One-way analyses of variance were conducted with the distinctiveness motivation condition the only factor and overlap score, social issue items, and feeling thermometer ratings of outgroups as dependent variables.

No significant effect of distinctiveness motivation condition was obtained on overlap scores (F = 1.017, p = .365). Though this was the primary dependent variable of interest, it is worth noting that there were also few significant condition effects on other variables. No feeling thermometer items showed any significant effects (all ps > .16), while only one social issue item ("Hiring, promotion, and college admissions should NOT give any preference to racial and ethnic minorities.") showed a significant effect, F(2,119) = 3.26, p = .042, with individuals in the assimilation need condition showing greatest endorsement of the statement and individuals in the differentiation need condition the least. Another social issue item ("The University should provide benefits (such as ability to buy insurance, family housing) for unmarried or same-sex couples similar to those it provides for married couples.") showed a marginally significant effect, F(2,119) = 2.75, p = .068; in this case however, it was individuals in the optimal distinctiveness condition who showed the highest endorsement of the statement and individuals in the differentiation need
condition the least. In effect, these two items showed opposite patterns of the effect of the differentiation need arousal manipulation since agreement with the first item indicated intolerance whereas agreement with the second item indicated tolerance.

Discussion

The failure to obtain an effect of the manipulation of distinctiveness motivation on social identity complexity may be explained several ways. The simplest explanation is that the manipulation of distinctiveness motivation was ineffective. The precise manipulation used in the present study was not an exact replication of previous work, and it may be that the failure to replicate the exact methodology of previous work resulted in the manipulation proving ineffective.

Another possibility is that the hypothesis that social identity complexity might be influenced by distinctiveness motivations is incorrect. It may be that there are other more direct ways to satisfy distinctiveness motivations, such as those studied in previous work (e.g. perceived ingroup homogeneity; Pickett & Brewer, 2001) and consequently individuals were unmotivated to change their subjective representations of multiple overlapping ingroups. The personality feedback manipulation was specific to a single social identity (Ohio State University students), so it may not have led participants to think about their other social identities in more or less inclusive ways.

The null results obtained in this study indicate that social identity complexity and its associated variables may be difficult to manipulate without first improving our understanding of how individuals come to possess idiosyncratic levels of social identity complexity. It thus seems appropriate to return to individual differences as
sources of variability in social identity complexity and its correlates. In particular, it may be instructive to look at the features of the groups included among the individuals' most important social identities as a factor influencing social identity complexity. In particular, the size and distinctiveness of specific ingroups may affect whether individuals think about their multiple ingroups in a more or less inclusive way. The final study in this program was designed to assess the relationship between ingroup distinctiveness and social identity complexity by comparing social identity complexity between members of large majority and minority groups.
CHAPTER 4

STUDY 3: MINORITY IDENTITY, IDENTITY IMPORTANCE, AND SOCIAL IDENTITY COMPLEXITY

Following the unsuccessful attempt to manipulate a potential antecedent of social identity complexity (distinctiveness motives; see previous chapter), it was decided that a return to the investigation of natural antecedents influencing identity complexity might prove more successful. A better understanding of the way in which existing individual and cultural variables influence complexity may make the manipulation of social identity complexity more feasible in the future. Research that more closely examines the existing factors that make up individuals' social identity complexity will also expand the applicability of social identity complexity theory. Social identity complexity has thus far been studied in the United States using White participants only (e.g. Brewer & Pierce, 2005).¹

Research has suggested that individuals with particularly salient group memberships may tend to represent their other ingroup identities with regard to their most salient group membership. Other social identities may become in some way "secondary" to the primary or dominant identity, in that they are thought of as differentiations within that particular group (Brewer & Roccas, 2002). In other words, rather than conceiving the salient identity as one among multiple social

¹ Preliminary studies (Brewer & Roccas, 2002) were conducted in Israel, but, again, only among the White Jewish majority population.
identities of equal importance, one particularly salient identity may become superordinate to the other identities. Alternately, if the identity is sufficiently distinctive, individuals may come to see that identity as so highly distinct that the identity barely overlaps with the individuals’ other social identities.

Minority social identities are often particularly salient because of cultural reinforcement and distinctiveness (Brewer, 1991), suggesting that examining minority group members may prove to be the most effective way of identifying individuals with highly salient social group memberships. In the United States, race/ethnicity is among the most fundamental dimensions along which individuals are categorized. Beliefs about the immutability and importance of race and ethnicity result in individuals being categorized readily by race or ethnicity, and stereotypes about racial and ethnic groups are widespread and pervasive. Additionally, members of racial and ethnic minorities are frequently culturally and physically segregated from members of the white majority. As a result, racial or ethnic group membership is among the most salient sources of social identity in the United States.

An African-American individual in the United States, for instance, has the identity of African-American reinforced on a nearly constant basis owing to the cultural norms and biases of the dominant culture, as well as having membership within a group in which the members frequently interact as members of that group. In contrast, White individuals in the United States rarely interact with one another as Whites per se, nor is their membership in the category White a salient feature of their daily lives. As a result, African-American individuals may come to see their other group memberships (e.g. religious identities, professional identities) as extensions or
subgroups of the category African-American (e.g., Black Southern Baptists, Black lawyers, Black women).

The implications of dominant social identities for social identity complexity are potentially important. Individuals with a dominant social identity may maintain different subjective representations of their ingroups than do individuals with no single dominant social identity. More precisely, they may tend to represent their dominant group as less overlapping with other groups as a result of its perceived distinctiveness, or alternately may tend to represent their dominant groups as more overlapping owing to a tendency to consider the dominant group as the superordinate group in which other groups are embedded. This yields two divergent predictions for how membership in a highly salient or dominant social identity may affect social identity complexity:

(H1) Individuals with a highly salient identity could consider this identity to be highly distinct or separate from their other social group memberships. As a result, individuals with a dominant (e.g. minority) social identity may mentally represent their other social identities as being highly distinct and non-overlapping with their dominant identity. As a result, their total overlap score would decrease, corresponding to a higher social identity complexity.

(H2) For some individuals with a highly salient or dominant identity, the dominant identity might begin to represent the whole of the individual’s social world, such that the individual’s other identities are perceived as subordinate to the dominant identity. This representation of their other social identities as subsets of the dominant social identity would result in the perception of these
groups as being highly overlapping with the dominant group. As a result total overlap would increase, reflecting a decrease in social identity complexity.

The purpose of Study 3 is to collect relevant social identity data from racial and ethnic minorities in order to compare them to Whites on variables related to social identity complexity and relative importance of their ingroups, and to determine which of these divergent predictions best explains the data. The study focuses on overlap measures of social identity complexity in relation to measures of identity importance, dominance, and distinctiveness.

Method

Participants. Participants were 143 students (60 male, 83 female) from Ohio State University who participated in exchange for partial completion of an introductory psychology course requirement. Students identified as racial and ethnic minorities on prescreening questionnaires were invited to participate in order to increase enrollment in the experiment by racial and ethnic minorities. White participants (as well as racial and ethnic minorities not detected by the prescreening questionnaires) were recruited as in previous experiments. Seven participants were removed from analyses for failure to provide a usable race/ethnicity category; 5 participants who were neither U.S. citizens nor permanent residents were removed; 13 participants were removed for failure to provide 3 additional usable group memberships; one individual who identified as American Indian / Native American
and two Middle Easterners were also removed. This left a total of 115 participants (72 White and 43 self-identified as African-American, Asian, or Latino/Hispanic).

**Procedure.** All participants completed the same materials in the order the materials are described below, all on a personal computer using MediaLab. After completing all materials, the participants were debriefed, thanked, and dismissed.

**Materials.** After an initial welcome screen informing the students that the experiment would involve questions about group memberships, the participants received the group elicitation questionnaire (GEQ). The version of the GEQ used in this experiment varied slightly from that used in Studies 1 and 2. As race/ethnicity was being included in all analyses for all participants, it was not presented as an option when the participants were asked to select important ingroups from the previously generated list. In addition, since race/ethnicity was already included, participants selected only 3 additional groups, rather than 4 as in previous studies. This yielded a set of 4 membership groups for each participant, one of which was always race/ethnicity while the other 3 were participant-selected.

Participants next completed the *subjective importance questionnaire* in which they were provided with a set of 7 statements for each of the 4 elicited social group memberships. These items were designed to assess, for each group membership, identity importance (e.g. “This social group is an important reflection of who I am.”), identity dominance (e.g. “I tend to think of myself much more as a member of this group than my other groups.”), and identity distinctiveness (e.g. “Being part of this

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2 The lack of an ingroup thermometer measure for Native Americans or Middle Easterners later in the experiment and small numbers of individuals identifying with these categories resulted in their removal.
group makes me different from members of other groups.”); for a complete listing of questions, see Appendix D. This yielded a total of 28 such statements, which participants rated on a 7-point Likert scale with endpoints labeled “1 Disagree Strongly” and “7 Agree Strongly.”

Participants then completed the social identity complexity overlap task, which varied from that used in Studies 1 and 2 only in that the four groups utilized always included the participants’ race/ethnicity responses. Following the overlap task, participants completed a tolerance questionnaire that differed from that used in Studies 1 and 2 only in the replacement or addition of several tolerance issue items designed to be more equivalent for Whites and racial/ethnic minorities (see Appendix C for a list of items).

Results

Identity complexity and racial identity ratings: Group means. The three items measuring identity importance, two items measuring identity dominance, and two items measuring identity distinctiveness were used to create importance, dominance, and distinctiveness scores for racial identities. In addition, an social identity complexity total overlap score was computed as in previous studies; the inclusion of racial ingroup for every participant also allowed the creation of “race overlap” and “nonrace overlap” scores, each from 6 unique overlap estimates.

Several significant differences were found between Whites and minorities on overlap and racial identification variables (see Table 4.1). Minorities showed greater social identity complexity than Whites, as demonstrated by lower overlap scores (F(1,113) = 17.99, p < .001). Comparisons between Whites and minorities on race
overlap and nonrace overlap show that this effect is driven primarily by differences in racial/ethnic overlap estimates. Race overlap scores were significantly different between minorities and Whites ($F(1,113) = 36.62, p < .001$) while nonrace overlap scores were not significantly different ($F(1,113) = 0.87, ns$). This lends some support to the first hypothesis above (H1), suggesting that minorities with dominant social identities perceive less overlap between their dominant identity and other identities.

<table>
<thead>
<tr>
<th></th>
<th>Whites</th>
<th>Minorities</th>
<th>(p value of difference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overlap score, total</td>
<td>5.53 (0.86)</td>
<td>4.75 (1.08)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Overlap score, race only</td>
<td>5.87 (0.95)</td>
<td>4.53 (1.41)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Overlap score, nonrace</td>
<td>5.19 (1.17)</td>
<td>4.98 (1.16)</td>
<td>0.353</td>
</tr>
<tr>
<td>Racial importance</td>
<td>4.15 (1.46)</td>
<td>6.20 (0.95)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Racial dominance</td>
<td>3.38 (1.35)</td>
<td>5.08 (1.70)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Racial distinctiveness</td>
<td>3.83 (1.49)</td>
<td>6.11 (1.02)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Table 4.1 – Overlap and Racial ID means (and standard deviations)

As expected, minorities also rated their racial/ethnic group identity as more important ($F(1,113) = 67.5, p < .001$), more dominant ($F(1,113) = 35.3, p < .001$), and more distinctive ($F(1,113) = 78.5, p < .001$) than Whites rated their racial/ethnic group. Results support the intuitive theory that racial minorities are more likely to view their racial identity as much more salient, generally, than are Whites, and also perceive their racial groups as overlapping with their other groups less than do Whites.

Identity complexity and racial identity ratings: Intercorrelations. Correlations among identity complexity overlap scores (both total and using race overlaps only), racial identity importance, racial identity dominance, and racial identity
distinctiveness were computed separately for Whites and minorities. Identity importance, dominance, and distinctiveness were all highly correlated for both Whites and minorities (see Table 4.2; all r’s > .46, all p’s < .002). For Whites, no significant correlations between either of the two overlap scores and identity importance, dominance, and distinctiveness were found (all r’s < .19, all p’s > .11). However, for minorities a significant correlation between racial identity dominance and racial overlap score (r = .409, p < .01) and a marginally significant correlation between racial identity dominance and total overlap (r = .238, p = .12) appeared, indicating that minorities who assigned greater dominance to their racial identity were also likely to perceive greater overlap among their racial/ethnic group membership and their other memberships. Moreover, this effect of racial identity dominance disappeared when looking at nonrace overlap ratings (r = -.058, ns).

The significant correlation between racial identity dominance and race overlap scores for minorities (r = .409, p < .01) but not for Whites (r = .085, ns) is highly interesting. This correlation indicates that minorities who tended to see their racial/ethnic minority identity as more dominant were more likely to see it as highly overlapping with their other groups, seemingly providing evidence of the hypothesis (H2) that identity dominance is associated with greater overlap within minorities, suggesting the possibility of a superordinate dominant identity. This may produce a paradox, given evidence supporting the opposite hypothesis when comparing whites and minorities at the group level.
### Table 4.2 – Overlap and Racial ID intercorrelations; Whites above diagonal, Minorities below. * p < .01

<table>
<thead>
<tr>
<th></th>
<th>(I)</th>
<th>(II)</th>
<th>(III)</th>
<th>(IV)</th>
<th>(V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overlap, total (I)</td>
<td>1</td>
<td>0.760*</td>
<td>0.152</td>
<td>0.113</td>
<td>0.159</td>
</tr>
<tr>
<td>Overlap, race (II)</td>
<td>0.870*</td>
<td>1</td>
<td>0.185</td>
<td>0.085</td>
<td>0.123</td>
</tr>
<tr>
<td>Race importance (III)</td>
<td>0.166</td>
<td>0.177</td>
<td>1</td>
<td>0.704*</td>
<td>0.695*</td>
</tr>
<tr>
<td>Race dominance (IV)</td>
<td>0.238</td>
<td>0.409*</td>
<td>0.506*</td>
<td>1</td>
<td>0.700*</td>
</tr>
<tr>
<td>Race distinctiveness (V)</td>
<td>0.072</td>
<td>0.102</td>
<td>0.718*</td>
<td>0.548*</td>
<td>1</td>
</tr>
</tbody>
</table>

**Tolerance measures: Mean differences.** In order to make the variables comparable across different ethnicities, feeling thermometer ratings of the respondent’s own racial/ethnic group was designated as the “ingroup” thermometer rating for all participants\(^3\) with ratings of all other ethnic groups designated as outgroups. An average of ratings of ethnic outgroups (within the set of Whites, African-Americans, Asians, and Latinos/Hispanics) was created such that every individual had both an ingroup thermometer score and a single ethnic outgroup thermometer score. Ratings of two groups presumed to be outgroups for all participants (Muslims-American and Gay and Lesbian Americans) were examined separately.

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\(^3\) The actual feeling thermometer measures included “Mexican-Americans,” rather than a broader category of Latino/Hispanic. The Mexican-American feeling thermometer scores were used as the ingroup thermometer measure for individuals self-identified as Latino/Hispanic; this imprecision is unfortunate but allows us to utilize data from these participants despite the lack of a more appropriate feeling thermometer item.
<table>
<thead>
<tr>
<th></th>
<th>Whites</th>
<th>Minorities</th>
<th>(p-value of difference)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingroup score</strong></td>
<td>70.86 (20.2)</td>
<td>76.63 (20.3)</td>
<td>0.142</td>
</tr>
<tr>
<td><strong>Ethnic outgroups average</strong></td>
<td>65.03 (18.6)</td>
<td>62.97 (17.6)</td>
<td>0.558</td>
</tr>
<tr>
<td><strong>Ingroup – outgroups</strong></td>
<td>5.83 (19.3)</td>
<td>13.66 (20.4)</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td><strong>Muslim-Americans</strong></td>
<td>58.86 (20.9)</td>
<td>60.91 (17.6)</td>
<td>0.592</td>
</tr>
<tr>
<td><strong>Gay and Lesbian Amer.</strong></td>
<td>57.28 (26.8)</td>
<td>57.09 (27.3)</td>
<td>0.972</td>
</tr>
</tbody>
</table>

Table 4.3 – Mean feeling thermometer scores (and standard deviations)

Racial/ethnic minorities tended to rate their own ingroup more highly than did Whites and to rate racial/ethnic outgroups less positively than did Whites (see Table 4.3), resulting in a significant difference between minorities and Whites when ingroup ratings were subtracted from average ratings of racial/ethnic outgroups to form a measure of ethnocentrism (an *ingroup bias score*) \(F(1,113) = 4.26, p < .05\).

No significant differences in ratings of Muslim-Americans and gay and lesbian Americans were found between minorities and Whites, and these groups tended to be rated lower than ethnic outgroups in general.

Five diversity issue statements also provided a measure of tolerance-related beliefs and policy preferences applicable to both Whites and minorities, and several differences appeared between whites and minorities on these items. The issue statement regarding University provision of domestic partner benefits to same-sex partners – “The University should provide benefits (such as ability to buy insurance, family housing) for long-term same-sex couples similar to those it provides for married couples.” – proved to be more agreeable to White participants than to racial/ethnic minority participants (see Table 4.4; \(F(1,113) = 5.2, p < .05\)). No other single issue statement generated a significant difference between minorities and Whites, though minorities were slightly more likely to support the statements, “I think
that marriage between two people from different religious backgrounds should be discouraged," and "In general I would prefer to be roommates with people of the same racial background." These two race-related issue statements, along with "I would be happy if I found out that a member of my family were dating someone of a different racial group," were used to create a composite indicating an individual’s tolerance for racial/religious integration or contact (Cronbach’s alpha = .60). White and minority participants did not show a significant difference on this composite measure of tolerance issues (see Table 4.4; F(1,113) = 1.5, p = .29). The item “The University should provide for the needs of minority populations (e.g. gays and lesbians, religious and racial minorities) when designing and funding University services,” was judged as likely to have different meaning to White and minority participants, and hence was not included in the composite (though no group difference appeared for this item; F(1,113) = 0.075, ns).

<table>
<thead>
<tr>
<th></th>
<th>Whites</th>
<th>Minorities</th>
<th>(p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family member dating other race</td>
<td>3.33 (1.09)</td>
<td>3.35 (1.11)</td>
<td>0.942</td>
</tr>
<tr>
<td>Univ. should provide for needs of minority groups</td>
<td>3.46 (1.17)</td>
<td>3.40 (1.22)</td>
<td>0.784</td>
</tr>
<tr>
<td>Inter-religious marriage (rev)</td>
<td>3.33 (1.02)</td>
<td>3.05 (1.07)</td>
<td>0.155</td>
</tr>
<tr>
<td>Univ. domestic partner benefits</td>
<td>3.40 (1.34)</td>
<td>2.77 (1.36)</td>
<td>&lt;0.02</td>
</tr>
<tr>
<td>Same race roommate (rev)</td>
<td>2.07 (1.21)</td>
<td>1.84 (1.23)</td>
<td>0.326</td>
</tr>
<tr>
<td>Integration composite</td>
<td>2.91 (0.85)</td>
<td>2.74 (0.80)</td>
<td>0.299</td>
</tr>
</tbody>
</table>

Table 4.4 – Diversity issue item scores (and standard deviations)

Overall, differences between Whites and minorities on tolerance measures seem to indicate a slight tendency for Whites to endorse more tolerant beliefs and to show less ingroup bias than do minorities. This result is somewhat counterintuitive,
though it may simply be that Whites are more motivated to correct for their biases in order to avoid appearing prejudiced. It is also quite possible that the greater salience of minority racial identity for those individuals is responsible for the tendency for minorities to show more ingroup bias.

*Tolerance measures: Correlations and regressions.* Correlations between overlap scores and tolerance measures failed to show significance, for either White or minority participants. There was no significant correlation between total overlap score and the integration composite score for either Whites \((r = -.067, \text{ns})\) or minorities \((r = -.086, \text{ns})\), though both results were at least in the expected direction. These results suggest that, in this sample, overlap scores were not very predictive of most tolerance measures, failing to replicate previous findings indicating a systematic relationship between social identity complexity and some measures of tolerance (Brewer & Pierce, 2005; Study 1).

There was an unsurprising tendency for Whites who rated their racial identity as more important, dominant, or distinctive to show higher feeling thermometer ratings of Whites \((\text{all } rs > .23, \text{all } ps < .05)\) and to show greater ingroup bias \((\text{all } rs > .28, \text{all } ps < .05)\). However, this pattern of correlations between ratings of racial importance and ingroup preference was not present for minorities; only racial dominance scores showed a marginal correlation with ingroup ratings on a feeling thermometer \((r = .279, p = .07)\). This may have occurred because ratings by Whites of their racial identity importance, dominance, and distinctiveness generally vary around the midpoint of the scale, leaving only a small and perhaps distinct group of participants at the high end of the distribution, whereas racial minorities’ scores are
skewed such that most racial minority participants rate their racial identities at the high end of the scales.

Since the study aimed to examine the potential impact of both social identity complexity and social identity dominance (in minority group members), a series of regression analyses were carried out to examine whether dominance would act as a moderator of the relationship between social identity complexity and tolerance, particularly for minority group members. Given the direct relationship between identity dominance and identity complexity as measured by overlap scores (at least for minorities), the statistical interaction between complexity and dominance may be a significant predictor of tolerance, even though the direct effect of social identity complexity alone was not.

Following the centering of social identity complexity and dominance scores (Aikin & West, 1991), within-race regression analyses were conducted with overlap score as a measure of social identity complexity, dominance scores, and their interaction regressed on the integration composite score, support for same-sex domestic partner benefits, and ingroup bias score as dependent variables in a total of six regression equations. Across all of these, only one significant predictor emerged. For whites, racial dominance significantly predicted ingroup bias score ($F(1,68) = 5.87, p = .02$), which is in line with the reported correlation between the two variables above. This suggests that most of the variance in tolerance measures observed in these samples cannot be accounted for by social identity complexity or identity dominance (all models’ R-squared values less than 0.1).
Discussion

The result most directly relevant to the purpose of the current study was the finding of a positive correlation between racial identity dominance and overlap estimates for racial and ethnic minorities. Although minorities demonstrated higher dominance and lower overlap scores in general, compared with whites, this correlation suggests that within minorities, those with more dominant racial identities actually perceived their racial groups as more overlapping with other ingroups. Given the possibility of a superordinate dominant social identity, we were able to explore this further, since estimates of the overlap between an individual’s racial/ethnic ingroup membership and the individual’s other ingroup memberships are obtained in both directions.

If, as hypothesized, minorities with highly dominant social identities perceive their other ingroups as being subgroups within their dominant identity group, the estimates of the proportion of the racial/ethnic ingroup members that are members of other ingroups and the estimates of the proportion of other ingroup members that are members of the racial/ethnic ingroup should be different. Specifically, estimates of the proportions of members of an individual’s non-dominant groups that are also members of the dominant group ("other-race" estimates) should be high, and these proportions should correlate positively with identity dominance such that the more dominant an individual’s identity is, the more likely they are to perceive their other groups as encompassed by their racial/ethnic ingroup. Estimates in the other direction (proportions of members of the dominant group that are members of other ingroups; "race-other" estimates) should not be as strongly related to dominance.

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An analysis of the relationships among identity dominance, race-other estimates and other-race estimates was conducted for minorities. A related-samples t-test showed that other-race estimates ($M = 5.23, sd = 1.57$) were, on average, lower than race-other estimates ($M = 5.84, sd = 1.47; t(42) = 3.6, p < .01$), consistent with the minority status of the racial ingroup, but not with superordinate status. However, as expected, other-race estimates were more strongly correlated with identity dominance ($r = .43, p < .01$) than were race-other estimates ($r = .33, p < .05$). However, other-race and race-other estimates were so highly correlated ($r = .74, p < .001$) that the "stronger" relationship between other-race estimates and identity dominance cannot be said to be statistically significant. Nonetheless, the relationship between race overlap and racial/ethnic identity dominance is still suggestive of a superordinate pattern for those highest in race dominance.

These results pose an importance conceptual question: if racial/ethnic minorities’ estimates of identity group overlaps are positively associated with the level of dominance of their racial/ethnic identity, and minorities tend to have more dominant racial identities, why is it that racial/ethnic minorities actually show lower overlap scores in general? The obvious answer is that the overlap between minority groups and other identity groups is objectively smaller than the overlap between a majority group and other identity groups, and this influences overlap scores. Given the positive relationship between identity dominance and overlap scores and the fact that racial/ethnic minorities show greater racial identity dominance, this would seem to indicate that, in fact, differences in overlap scores between minorities and Whites in this sample were largely driven by objective differences in group characteristics.
The possibility that differences in measured group overlap scores between Whites and racial/ethnic minorities is driven mostly by objective differences in groups is vital to informing future research on social identity complexity in minorities. It suggests that comparing members of minority groups with members of majority groups on a simple overlap measure may not be useful, since it will tend to create a large between-groups difference in overlap score that is driven not by social identity complexity as such but by mere group characteristics. This suggests that, as in the current study, it may be necessary to consider members of majority groups and minority groups separately if an overlap measure of identity complexity is to be used. It also suggests that a direct comparison of majority and minority group members will require the creation of a new measure of social identity complexity, so as to avoid the problem of objective differences in group size or characteristics.

While no strong relationship appeared linking all the variables of interest—minority racial/ethnic status, social identity complexity as operationalized by overlap score, racial identity dominance, and tolerance variables—there were nonetheless several interesting findings in the present work that may prove informative for future work. The finding that members of racial and ethnic minorities were no more tolerant than Whites is notable because it suggests that the lay theory that minorities are more tolerant may not be correct. The apparent fragility of social identity complexity effects on tolerance also serves as a reminder of the importance of measuring other factors (e.g. religiosity, political affiliation or positions, individual differences) that may be controlled for statistically when conducting analyses.
CHAPTER 5

GENERAL DISCUSSION

The program of research reported here has spanned a variety of new topics related to social identity complexity. Study 1 replicated previous research demonstrating a relationship between social identity complexity and tolerance-related variables using a computerized methodology. Study 2 sought to manipulate social identity complexity indirectly using distinctiveness motivations as a potential antecedent of social identity complexity. Social identity complexity was studied for the first time in racial/ethnic minorities in Study 3, with the intent of demonstrating a relationship between the dominance of an ingroup identity and social identity complexity.

Replication of Tolerance Relationship

The current research has shown uneven support in its replication of previous work on social identity complexity’s relationship with tolerance. Study 1 successfully replicated some of the results of previous work demonstrating a correlation between social identity complexity as measured by intergroup membership overlap and some measures of tolerance (Brewer & Pierce, 2005). In this study, the attempt to replicate work conducted on older adults outside of the laboratory setting in a University setting accomplished its goal of showing that
meaningful results could be obtained from a college student population utilizing a computerized method for generating SIC scores.

Studies 2 and 3, however, failed to replicate these results convincingly, possibly as a result of variability introduced to the studies by additional manipulations and measures not contained in Study 1 or the research it was designed to replicate (Brewer & Pierce, 2005). This suggests that the relationship between social identity complexity and measures of tolerance may be difficult to isolate in the presence of additional experimental influences or in certain samples, particularly from populations (such as college students) that might show greater social desirability effects.

The inconsistency of the current results with respect to the SIC-tolerance relationship suggests that methodological changes in future research be considered. One possibility is the temporal separation of social identity complexity measures from the measurement of other variables of interest, such as measures of tolerance. This might not only reduce the contextual influences on both measures, but would allow for additional tests of the validity of the overlap measure of social identity complexity. In addition, future methodology should consider utilizing measures that reduce social desirability effects on measures of tolerant (e.g. implicit measures). On a slightly different note, measuring overlap within individuals over time would allow the establishment of the overlap measure’s test-retest reliability, which could greatly enhance confidence in the measure as an assessment of stable individual differences.
Minorities, Identity Dominance, and Social Identity Complexity

Study 3, the first study to compare social identity complexity in both Whites and racial/ethnic minorities, has significant implications for future research on social identity complexity. At the most basic level, Study 3 suggests that, given current methods of measuring SIC, it may not be meaningful to directly compare members of majority groups to members of minority groups. The large differences that appeared between Whites and minorities on the overlap measure of SIC may be attributable primarily to objective differences in group attributes, rather than individuals’ subjective representations of those groups. This may result in erroneous conclusions if majority group members and minority group members are considered in a combined sample; because majority group members and minority group members differ on the overlap measure of social identity complexity, any other differences between majority-group membership minority-group members may be seen to correlate with social identity complexity, when the true relationship within those sets may be different (an example of Simpson’s Paradox). This occurred in Study 3, when minorities showed both greater dominance of their racial identity and higher overlap scores when compared to Whites, but the opposite relationship appeared when minorities were considered separately.

In addition to suggesting the necessity of carefully considering data from majority-group members and minority-group members, Study 3 also provides potential insight into future work that might aim to more firmly establish the actual structure of multiple social identities. The significant correlation between identity dominance and group overlap suggests that individuals’ representation of multiple
ingroups may differ by type rather than merely by degree. As suggested in the originating work on social identity complexity (Brewer & Roccas, 2002), there are several distinct ways in which individuals may represent their multiple group memberships. The overlap measure of social identity complexity that has been used thus far does not serve as a direct measure of individuals’ actual structure; instead, it serves as an estimate that does not actually allow researchers to distinguish whether some identities are superordinate or subordinate to others. Expanding our measurement and knowledge of variables such as dominance and their relationship to social identity complexity is necessary before research on identity structure in individuals with dominant identities can be conducted effectively.

*Future Directions of Research*

Some of the results of the present program of research – the lack of a reliably established relationship between tolerance and social identity complexity overlap measure, the difference in the SIC overlap measure between Whites and minorities, and the inability of the overlap measure to directly address the issue of superordinate and other identity structures – suggest that future research on social identity complexity must include attempts to establish new methods of measuring social identity complexity. New measurement methods might bypass the existing problems with the overlap measure, and provide convergent evidence for the existence of a social identity construct in memory.

New measures of social identity complexity, as well as the application of other identity-related measures, might assist in the more thorough study of social identity complexity in minority and other populations in which novel social identity
configurations might be expected, such as bicultural individuals or individuals with multiple highly salient individuals (e.g. racial minorities who are also gay or lesbian). Expanding the set of methodologies available for the study of multiple social identities will hasten and validate work in this area.

The burgeoning work on social identity complexity has great potential for enriching work in the broader social identity domain. Social identity research has typically examined ingroup identifications one at a time. More recently, some research has examined social identity in a multiple-group context, but social identity complexity theory is the first attempt to explain the way in which individuals idiosyncratically represent the relationships among their multiple ingroups. Given the importance of social identity theory in pursuing both theoretical questions and real-world concerns, social identity complexity research seems likely to provide a valuable contribution in an increasingly multifaceted social environment.
REFERENCES


APPENDIX A

CATEGORIES AND POSSIBLE RESPONSES FOR THE GEQ

Question 1:
Do you belong to any of the following religious groups, and if so, which one?

Baptist
Catholic
Methodist
Lutheran
Greek Orthodox
Protestant
Mormon
Hindu
Muslim
Jewish
Atheist / Agnostic
none

Question 2:
Are you a fan of any of the following sports, and if so, which most describes you?

basketball fans
baseball fans
hockey fans
football fans
soccer fans
volleyball fans
wrestling fans
swimming fans
gymnastics fans
rugby fans
lacrosse fans
none
Question 3:
Do you feel you belong to any of the following racial/ethnic groups, and if so, which one?

African-American / Black
Native American / American Indian
Asian
Latino / Hispanic
White / European
Middle Eastern
Indian / South Asian
None

Question 4:
Which of these best describes your family background?

working class
lower-middle class
middle class
upper-middle class
upper class
none

Question 5:
Do you affiliate with any of the following political parties?

Republicans
Democrats
Greens
Libertarians
None

Question 6:
Are you originally from the Midwest, or from outside the Midwest?

from the Midwest
from outside the Midwest
none
Question 7:
Which of these best describes the city in which you grew up?

- from a rural area
- from a small town
- from a suburb
- from a medium-sized city
- from a large city
- none
APPENDIX B

FULL EXAMPLE OF OVERLAP TASK QUESTION

Among Americans, how many people who are \(<group1>\) are \(<group2>\)?

0   None are.
1
2   Few are.
3
4
5   Half are.
6
7
8   Most are.
9
10  All are.

[This was repeated for all possible combinations of the four groups provided by the participant, yielding twelve questions. There are twelve items and not six because each item is directional. In other words, the question, “How many college students are Republicans?” is not the same as “How many Republicans are college students?”]
APPENDIX C

COMPLETE LIST OF TOLERANCE ISSUE STATEMENTS

(all items used the same five-point response scale)
1  Disagree strongly
2  Disagree somewhat
3  Neither agree nor disagree
4  Agree somewhat
5  Strongly agree

Items used in Studies 1 and 2:

Item 1:
It is better for a country if different racial and ethnic groups maintain their distinct customs and traditions.

Item 2:
It is better for a country if different racial and ethnic groups adapt and blend into the larger society.

Item 3:
Increasing the number of racial and ethnic minorities at the University benefits our community educationally and socially.

Item 4:
Hiring, promotion, and college admissions should NOT give any preference to racial and ethnic minorities.

Item 5:
Welfare support lets some individuals live off government money and is a waste of taxpayer support.

Item 6:
The University should provide for the special needs of minority populations (e.g. gays and lesbians, religious minorities, racial and ethnic minorities) when designing and funding University services.
Item 7: The University should only fund activities that benefit the majority of students, not activities that only appeal to a small segment of the population.

Item 8: The University should provide benefits (such as ability to buy insurance, family housing) for unmarried or same-sex couples similar to those it provides for married couples.

Items used in Study 3 that differ from items used in Studies 1 and 2 (if not specified, the item was unchanged):

Item 2: Free speech is a right that most people don't take advantage of enough.

Item 4: The war on terrorism may require that some civil liberties be restricted.

Item 5: I would be happy if I found out that a member of my family were dating someone of a different racial group.

Item 7: I think that marriage between two people from different religious backgrounds should be discouraged.

Item 9: If Student Government didn't include anyone from a background similar to mine, I would feel excluded.

Item 10: In general I would prefer to be roommates with people of the same racial background.
APPENDIX D

IDENTITY IMPORTANCE, DOMINANCE, AND DISTINCTIVENESS ITEMS

All items were rated on a 7-point Likert scale from “Strongly Agree” to “Strongly Disagree.”; all items were repeated for each ingroup.

Importance Items

“My membership in this group is important to me.”
“This social group is an important reflection of who I am.”
“Belonging to this group is important to my self-image.”

Dominance Items

“My other group memberships don't matter as much as my membership in this group.”
“I tend to think of myself much more as a member of this group than my other groups.”

Distinctiveness Items

“Being part of this group makes me different from members of other groups.”
“Being in this group helps me realize how I'm distinct or unique.”