Social Identity in Daily Social Interaction

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In a study of social identity in everyday social interaction, 133 undergraduates described their social interactions for two weeks using a variant of the Rochester Interaction Record. Some participants were members of campus social organizations and some were not, and descriptions of interactions included the social affiliation (identity) of the others who were present. Participants also completed measures of social dominance and self-construal. A series of multilevel random coefficient modeling analyses found that for members of social organizations, on average, the presence of members was not associated with a change in reactions to interactions; however, for members high in social dominance, interactions with members were more positive than interactions with non-members. In contrast, for non-members, the presence of a member was associated with less-positive interactions on average; however, there were no such differences for non-members who were high in independent self-construal.

In their daily lives, many people are faced with a large and varied social world, and to help make sense of this heterogeneity people often view themselves and others in terms of group membership. To some extent, the world can be seen through the lens of in-groups and out-groups, or groups to which we do or do not belong. To the extent that group memberships become internalized and part of our self-concepts they have implications for our sense of self, what Tajfel and Turner (1986) termed "social identity." Despite the theoretical centrality of social identity to understanding social interaction, there has been very little research on social identity as it unfolds in naturally occurring social interaction. The present study was designed to complement existing research by examining the roles played by social identity in naturally occurring social interaction.

Participants in the present study, some of whom were members of social groups (Greek organizations, i.e., fraternities and sororities, on a college campus) and some of whom were not, described the social interactions that they had for two weeks using a variant of the Rochester interaction record (Wheeler & Nezlek, 1977). These descriptions included how participants felt about their interactions (including their views of the others present) and the social identities of the people with whom they had interacted. Participants also completed two measures of individual differences that we thought would be related to social identity, the social dominance scale (Pratto, Sidanius, Stallworth, & Malle 1994) and the social construal scale (Singelis, 1994). These data allowed us to examine the association between group identity and

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reactions to social interaction (e.g., are interactions with in-group members more positive than interactions with non-members?), and whether this relationship varied as a function of individual differences, such as group membership and social orientation (e.g., is the group effect stronger for people who are higher in social dominance than it is for people lower in social dominance?).

Although Allport (1954) was among the first to propose that people see the world in terms of "us" and "them" (in-groups and out-groups), perhaps the most comprehensive treatment of the subject was provided by Tajfel's social identity theory (SIT). Tajfel (1978) stated that social identity "is a part of an individual's self concept which derives from his knowledge of his membership of a social group (or groups) together with the emotional significance attached to that membership" (p. 63). This membership may be ascribed, such that people are born into membership (e.g., race, gender), or it may be attained, such that people actively seek it (e.g., clubs, political organizations).

According to the theory, people hope to maintain a positive social identity, which in turn leads to positive evaluations of the self. Group membership allows a person to reap all of the advantages and positive aspects that are associated with a particular group, such as status. In addition, SIT posits that people enhance their social identities by comparing their in-groups with relevant out-groups. In order to boost their positive sense of self, people often highlight the differences between their group and other groups, focusing on their group's superiority and distinctiveness (Deschamps & Devos, 1998). There is also evidence that suggests people engage in this in-group enhancement somewhat automatically. For example, research by Gilbert, Giesler, and Morris (1995) suggest that when people are involved in interpersonal situations, they often make group comparisons automatically. Further, people tend to hold on to these impressions unless, at some later time, they find them to be inappropriate or incorrect.

Not only does social identity lead to in-group favoritism, but it may also lead to out-group derogation (which may also be self-esteem enhancing). For example, when people were asked to talk about relevant in- and out-groups, Harasty (1997) found that people spoke more negatively of out-group members than of in-group members. In addition, when making attributions, people were more likely to attribute out-group members' behavior to more stable, dispositional factors than to unstable situational factors. Pettigrew (1979) termed this tendency to explain the negative aspects of out-groups in terms of stable, dispositional factors the "ultimate attribution error." It should be noted that social identity formation and adoption does not always lead to in-group bias and/or out-group derogation. As pointed out by Hewstone, Rubin, and Wills (2002), intergroup bias is moderated by a variety of individual (e.g., identification with the group, mood, education), group (e.g., size, status, and power of the group) and intergroup (e.g., stability of and threat to the intergroup hierarchy) factors (for a more comprehensive discussion of intergroup factors, see Doojse, Spears, & Ellemers, 2002).

The effects of social identity are not limited to increasing the self-esteem of group members. Considerable research suggests that people's social identities can have behavioral implications. This was originally demonstrated by Tajfel, Billig, Bundy, and Flament (1971) who found that a simple, unimportant categorization into two groups (what is called the minimal group paradigm) led English schoolboys to treat the opposing group less favorably in a resource allocation task. More recently, Insko and Schopler (1998) found that when people are placed in groups and are asked to engage in the "prisoner's dilemma" task against another group, they behave more

competitively and less cooperatively than when they are not grouped and are told they are playing against an individual.

Regardless of the specific topic that has been examined, for a construct that explicitly concerns people's social positions and relationships, to our knowledge, there has been relatively little research on social identity as it unfolds in *everyday* social interaction. The bulk of the research on SIT is laboratory based, and much of this research relies on the minimal group paradigm. Although such controlled laboratory studies have their advantages (Rubin & Hewstone, 1998), studying artificially created identities may not be comparable to studying real identities, no matter how compelling or involving the artificially created situation is. In fact, Rubin and Hewstone (1998) noted that in most minimal groups studies, participants do not interact with members of their own group or with members of the other group. Often, participants do not even see the people to whom they are making reward allocations or about whom they are making judgments. Further, Ellemers, Spears, & Doosje (1999) have criticized studies using the minimal group paradigm for being arbitrary and have suggested that the findings of such studies may reflect participants' inability to make sense of the situation in any other way. Although desirable in terms of internal validity, such artificial procedures can seriously undermine the ecological validity of studies.

Thus, although laboratory studies of social identity have been informative and valuable and have advanced our understanding, that research needs to be complemented by research on social identity as it occurs in real life, in the mix of motives, feelings and ideas that constitute the ebb and flow of the social reality within which social identity is meant to operate (Mullen, Brown, & Smith, 1992). The present study was intended to examine how social identity operates in the mix Mullen et al. described, in the ebb and flow of naturally occurring social interaction, using the results of laboratory-based studies as a springboard.

This is not to say, however, that no research has been conducted using naturally occurring groups and behavior. Considerable research has examined social identity processes by examining actual groups, including religious groups (Catholics and Protestants) (e.g., Hunter, Platow, Howard, & Stringer, 1996), political candidate supporters (e.g., Kelly, 1990), employees of two different companies (e.g., Terry, Carey, & Callan, 2001), and people from different regions of the same country (e.g., Simon, Kulla, & Zobel, 1995). Nevertheless, many studies that use naturally occurring groups to study social identity continue to examine them in isolation from the actual interpersonal and intergroup dynamics of everyday life. For example, Lalonde (2002) examined how identifying with a group affects one's views of relevant out-groups. Although they used real-life identities (national identities of Canadian and American), participants merely filled out forms, evaluating the out-groups on various traits and social positions. No interaction with members of the relevant out-groups ever occurred.

In addition to these considerations, as noted by Hewstone, Rubin, and Willis (2002), *individual* studies of social identity have tended to focus on a narrow range of outcomes or effects, and Hewstone et al. recommend that *individual* studies focus on a broader range of outcomes. Although a collection of studies that have focused on different, single, outcomes can provide a basis for making judgments about the effects of social identification (e.g., Haslam, 2001), it would be better if individual studies focused more broadly than they have. Otherwise, it may be difficult to distinguish how much the effects of social identity found in one study reflect the effects of social identity per se or how much they reflect the unique characteristics of

the study (e.g., sample, methods, etc.) or some combination of these. Accordingly, the present study examined various outcomes that were selected on the basis of previous research on social identity and on social interaction per se.

Another important consideration in the study of group processes is the fact that groups can differ from one another in various ways, including their status, cohesiveness, and the nature of their membership. In addition, group members may differ from one another on various dimensions, some group-related (e.g., identification with the group) and others that may not be explicitly group-related (e.g., differences on personality traits). Brown (2000) suggests that researchers need to be cognizant of the fact that such group and individual differences may influence social identity processes. In keeping with Brown's recommendation, the present study focused on two individual differences that previous research and theory suggested would be related to social identity: social dominance and self-construal.

Social dominance orientation (SDO; Sidanius, 1993), is defined as the desire to have one's own in-group be considered better or superior to out-groups, and some research suggests that SDO is related to social identity processes. For example, Sidanius, Pratto, and Mitchell (2001) found that within a minimal-group setting, people high in SDO were less likely to want to cooperate with an out-group member than those low in SDO. In addition, people high in SDO desired more social distance from out-groups and were more willing to use this minimal group distinction for other evaluations (e.g., suitability for a job). Sidanius et al. (2001) also found an interaction of social dominance and group identification. Those who were high in social dominance and who felt highly identified with their group were the most likely to display in-group bias. A similar interaction was also found by Levin, Federico, Sidanius, and Rabinowitz (2002).

Another construct that has received attention from social identity researchers is self-construal, usually defined in terms of two dimensions, independent and interdependent. People with an independent self-construal define themselves in terms of personal attributes, abilities, and accomplishments. By contrast, people with an interdependent self-construal define themselves in terms of group membership, group achievements, and social responsibilities. Those who have an interdependent style may be more sensitive to the presence of out-group members and may make larger distinctions between in-groups and out-groups as compared to people with an independent background (Leung & Bond, 1984). For example, research suggests that people with an independent background are more likely to help an in-group member than people with an independent background (Triandis, 1994). In contrast, when it comes to helping an out-group member, this trend is reversed (greater helping from the independent person). These findings, in conjunction with those of Sato and Cameron (1999) suggest that individual differences in self-construals can affect group evaluation and intergroup behavior.

The present study was designed to complement previous research by examining how social identity unfolds in daily social interaction. By interacting with members of the in-group, people may have the opportunity to solidify their group identity and benefit from the positive aspects that group membership entails. Alternatively, people may be faced with the negative aspects that group membership entails (e.g., reputation, assumption of conformity). By interacting with the out-group, people may be able to reflect on their in-group's (perceived) superiority but they may also face an attractive, alternative out-group that they may not be able to join or choose not to join. Research suggests that although people enjoy the positive aspects of belonging to their groups, they are nonetheless aware of the negative components of such membership (Biernat, Vescio, & Green, 1996). In other words, social interaction can help or hinder people's pursuit of a positive social identity.

To this end, the current study examined the daily social interactions of college students, some of whom were members of social organizations (fraternities and sororities) and some of whom were not. The study focused on the social identity associated with membership in these social organizations for various reasons. First, joining a fraternity or sorority is an active decision that often requires extensive application procedures, including hazing. In addition, students must be invited to join and must pay for the privilege. Second, fraternities and sororities often have functions that do not include non-members. Third, members of Greek organizations distinguish themselves from other students (including members of other Greek organizations) through the use of insignias, badges/pins, rituals, and special clothing (e.g., shirts with Greek letters on them). Exclusive functions and public insignias make group membership salient to both members and non-members.

Within the present context, social identity of members was defined in terms of membership in a fraternity or sorority. This meant that the social identity of nonmembers was defined in terms of a negation (not being a member of a sorority or fraternity) rather than an assertion (being a member of a non-Greek social organization). Given the emphasis of social identity theory and research on group memberships that are able to be defined positively (e.g., membership in one group or another within the minimal group paradigm), this definition by negation made formulating hypotheses for participants who were not members. Nevertheless, observation of student social life on campus suggested that non-Greek status was a meaningful social identity, and we proceeded under this assumption, albeit cautiously.

The following hypotheses guided the study.

- 1. Interactions with in-group members will be more positive than interactions with out-group members.
- 2. As suggested by Sidanius et al. (2001), we expected that the difference between interactions with in- and out-group members would be positively related to SDO. Moreover, consistent with the interaction between group SDO and group identification found by Sidanius et al. (2001) and Levin et al. (2002), we expected that this relationship would be stronger for members of Greek organizations than for non-members. This difference was predicated on the assumption that the group identification of members of Greek organizations was stronger than the group identification of non-members.
- 3. Our expectations for relationships between reactions to interaction and self-construal varied somewhat for members and non-members and for different types of self-construal. For members, we expected that differences in reactions to in- and out-group interactions would be stronger for those higher in *interdependent* self-construal, whereas interdependent self-construal would not be important for non-members. Recall that interdependent self-construal is related to how much people distinguish in- and out-group members (e.g., Leung & Bond, 1984). For non-members, despite the existence of a form of social identity, the lack of a clear and coherent social identity would render irrelevant the types of processes inherent in interdependent self-construal. In contrast, we expected that differences between in- and out-group interactions would be lower for those higher in *independent* self-construal for both

members and non-members. Recall that independent self-construal refers to how much people define themselves in terms of personal attributes, abilities, and accomplishments, an independence that would be relevant for both members and non-members.

Method

Participants

Participants were 74 female and 59 male undergraduate students who were recruited from introductory psychology classes. Mean age was 18.4 years (SD = .90). Twenty were members of a sorority and fifteen were members of a fraternity. All had joined their respective organizations in the two months prior to the beginning of the study.

Questionnaires

Social dominance (Pratto et al., 1994). The social dominance scale is a 16-item scale designed to measure the strength of an individual's in-group positivity and out-group negativity. Those high in social dominance tend to endorse items that focus on ingroup superiority (e.g., "Superior groups should dominate inferior groups"). Those low in social dominance tend to focus on between-group equality (e.g., "No one group should dominate in society"). Participants responded to each item using a 7-point scale (1 = strongly disagree/disapprove, 7 = strongly agree/approve).

Self-construal scale (Singelis, 1994). The self-construal scale is a 24-item scale designed to measure the strength of individuals' interdependent and independent self-construals. The independent self-construal subscale refers to an emphasis on feeling separate and unique, whereas the interdependent self-construal subscale refers to an emphasis on feelings of connectedness and relations to others.¹ Participants responded to each item using a 7-point scale (1 = strongly disagree, 7 = strongly agree).

Scores on the three measures were normally distributed, and the measures were reliable. The mean for the SDO was 33.3 (SD = 10.0, $\alpha = .90$), the mean for the independent subscale was 56.7 (SD = 8.7, $\alpha = .70$), and the mean for the interdependent subscale was 58.5 (SD = 7.6, $\alpha = .69$). There were no significant differences (all ps > .15) between members and non-members of Greek organizations on any of these measures.

Procedure

Social interactions were measured using a modified version of the Rochester interaction record (RIR; Wheeler & Nezlek, 1977). Using a standard form, participants recorded the time, duration, place, and nature of the interaction, and they described the other people who were present. These descriptions included a unique set of initials, the gender, the relationship to the participant, and the social affiliation of up to three co-interactants. Participants described the social affiliation of co-interactants as either: independent (not a member of a Greek organization), a member of the participant's Greek organization, a member of a same-sex Greek organization, or a member of an opposite-sex Greek organization. If more than

three others were present, only the number of men and women present were recorded.

Participants also provided various ratings of the interaction. Participants described their interactions on eight dimensions: enjoyable; intimacy; how influential they felt; how important the interaction was; how much the other people present respected them; how much the other people present liked them; how freely they exchanged ideas with the other people; and how much they felt like an outsider. They made these rating using 9-point scales with labels of: 1 = not at all, 3 = slightly, 5 = somewhat, 7 = quite, and 9 = very. The enjoyment, intimacy, and influence ratings were chosen because they represented basic dimensions of interaction (e.g., Nezlek & Pilkington, 1994). The other ratings were chosen because they represented different aspects of social integration.

Participants attended a 30-minute orientation session in groups of 6-12. They were told that the purpose of the study was to investigate daily social interactions and people's responses to them. They were also told that they would be using a secure Internet site to describe the social interactions that they had for two weeks. A social interaction was defined as "an encounter with one or more other people in which the participants attended to one another and adjusted their behavior in response to one another" (Wheeler & Nezlek, 1977). Similar to previous research, participants were told to record only interactions that lasted ten minutes or more. In addition, participants were told to record only those interactions that were face to face. Telephone and computer conversations were excluded. Participants were told how to use the website, and they were encouraged to logon to the website at least twice a day, although they could visit the site as many times a day as they felt necessary to maintain accuracy. At this introductory session participants also completed a series of questionnaires, and they were given a printed set of instructions.

One of the advantages of online data collection is the ability to monitor participant compliance on a continuous basis. The server recorded the date and time all data were provided, and this allowed us to send reminder emails to participants who were not logging in consistently. We were also able to email participants with answers to the frequently asked questions that we received during the study. At the end of the two weeks, participants came in for a brief follow-up session during which they were thanked for their participation and any questions that they had were answered.

On the basis of when and how regularly participants provided data, the data of three participants were excluded because they did not comply with instructions. The data of one other participant were excluded because the participant did not complete the personality questionnaires properly. This left 130 participants who described a total of 8402 interactions (M = 65.1, SD = 31.0) over an average of 15.9 days (SD = 4.4).

Results

Overview of Analyses

The data collected in this study comprised what is commonly referred to as a multilevel or hierarchically nested data structure. Within the terminology of multilevel analysis, interactions were nested within individuals. There is an emerging

consensus (e.g., Bryk & Raudenbush, 1992; Kreft & de Leeuw, 1998) that hierarchically nested data should be analyzed with techniques specifically designed for such data structures, techniques that are generally referred to as MRCM (multilevel random coefficient models). MRCM provides more accurate estimates of relationships than comparable ordinary least squares (OLS) techniques such as analyses relying on within-person aggregates (e.g., average enjoyment of interaction). Moreover, the advantages of MRCM over OLS techniques are pronounced for data structures in which units of analysis have different numbers of observations, for example, different numbers of interactions for individuals.

Accordingly, the present data were analyzed with a series of multilevel random coefficient models using the program HLM (Bryk, Raudenbush, & Congdon, 1998). The basic models were two-level models, interactions nested within participants. Introductions to using MRCM to analyze social interaction diary data can be found in Nezlek (2001) and Nezlek (2003). These analyses examined the same types of relationships as the OLS analyses used in the past, but they provided more accurate descriptions of relationships than such OLS analyses would have provided.

The logic of these analyses is fairly straightforward. Within-person coefficients representing differences between types of interactions were estimated for each person, and individual differences in these coefficients were then analyzed. One set of analyses concerned how the presence of another member of an individual's social group affected reactions to interactions. A second set of analyses concerned how the presence of members of a social group affected the reactions of non-members of that group. In both sets of analyses, individual differences in the effects of group membership were examined.

Impact of the Presence of Members of One's Own Social Group

For present purposes, social membership was defined in terms of membership in a fraternity or sorority. This meant that analyses examining the impact of group membership needed to be limited to participants who were members of a fraternity or sorority who had interacted with other members of their own organization at least once during the study. Fraternities and sororities are same-sex organizations, and so members of one's own organization could appear only in same- or mixed-sex interactions (i.e., interactions involving a same-sex and an opposite-sex person). Therefore, these analyses were limited to same- and mixed-sex interactions. Including opposite-sex interactions would have lead to a confound between the absence or presence of a member and gender composition (i.e., members could not be present in an opposite-sex interaction). Of the original sample, 1786 interactions described by 32 participants (19 women and 13 men) met these criteria. Of these 1786 interactions, a member of one's own organization was present in 863 (46%).

Differences in reactions to interactions as a function of the presence of a member of one's own social group were modeled at what is called level 1 in multilevel terminology, and interactions were the units of analysis at level 1. This difference was represented with a contrast coded variable (MyGreek), coded 1 when a member of one's own group was present and -1 when a member was not present. In turn, individual differences in these differences were analyzed at what is called level 2, and the individual participant was the unit of analysis at level 2.

Coefficients were estimated for each participant representing the difference between reactions to interactions in which a member of one's group was present and reactions to interactions in which a member was not present (referred to as the MyGreek effect). The basic level 1 (interaction level or within-person) model was:

$$y_{ij} = \beta_{0i} + \beta_{1i}(MyGreek) + r_{ij}.$$

In these analyses, β_{0j} was a random coefficient representing the mean of y_{ij} across all interactions (subscripted i) for each participant (subscripted j), and r_{ij} represented error. The coefficient β_{1j} (sometimes referred to as a slope) represented the difference between member and non-member interactions. The predictor *MyGreek* was entered uncentered.

These coefficients were then analyzed at level 2 (person level or between person). The basic level 2 model was:

$$eta_{0j} = \gamma_{00} + u_{0j}.$$

 $eta_{1j} = \gamma_{10} + u_{ij}.$

Mean differences in reactions to interactions when a member was present and when one was not present were represented by the γ_{10} coefficient in the second equation. Contrary to expectations (Hypothesis 1), tests of these coefficients did not find any significant differences (all ps > .10) in reactions to interactions as a function of the presence of a member of one's own social group. Mean coefficients and predicted values representing these differences are presented in Table 1.

The fact that these mean coefficients (the mean MyGreek effect—the mean difference between interactions involving a member of one's own organization and those not involving a member) were not significantly different from 0 does not mean that there was no between-person variability in these coefficients. For example, if for half sample the mean difference was positive and for the other half it was negative, the mean might be 0, but there would still be meaningful variation in the coefficient. Accordingly, individual differences in the MyGreek effect were examined as a function of social dominance orientation (SDO), independent self-construal, and interdependent self-construal using the following level 2 model:

$$\beta_{0j} = \gamma_{00} + \gamma_{01} (Var) + \gamma_{02} (Sex) + u_{0j}.$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11} (Var) + \gamma_{12} (Sex) + u_{ij}.$$

TABLE 1 Reactions to Interactions as a Function of Presence of a Member ofOwn Social Group (MyGreek Effect)

	Coefficient	Present	Absent
Enjoy	.02	7.08	7.04
Intimacy	.10	5.55	5.35
Influence	.04	5.78	5.70
Important	.00	6.03	6.03
Respected	.00	6.84	6.84
Outsider	.00	1.90	1.90
Liked	.00	7.05	7.05
Exchange opinions	04	6.48	6.56

In these models, relationships between these three individual differences (represented as Var) and the *MyGreek* effect were tested by the significance of the γ_{11} coefficient in the second equation. Such analyses are sometimes referred to as "slopes as outcomes" analyses (because a slope from level 1 becomes a dependent variable at level 2) or as "cross-level interactions" (because a level 1 effect is being modeled as a function of a level 2 variable). Due to the prominence of sex differences in reactions to social interaction (e.g., Nezlek, Wheeler, & Reis, 1983), these analyses also controlled for participant sex (the γ_{02} and γ_{12} coefficients).² Relationships between these variables and mean reactions (the γ_{01} coefficient) and gender effects (the γ_{02} and γ_{12} coefficients) were not of interest and are not reported.

Consistent with expectations (Hypotheses 2), these analyses found significant relationships between SDO and the *MyGreek* effect (i.e., the difference between interactions involving a member of one's own organization and those not involving a member) for the following variables: enjoyment ($\gamma_{11} = .10$, t = 2.14, p < .05), intimacy ($\gamma_{11} = .13$, t = 2.09, p < .05), importance ($\gamma_{11} = .19$, t = 4.88, p < .01), respect ($\gamma_{11} = .13$, t = 2.63, p < .05), and liked ($\gamma_{11} = .12$, t = 3.04, p < .01). Relationships between SDO and the *MyGreek* effect approached conventional levels of significance in the analyses of influence ($\gamma_{11} = .11$, t = 1.75, p < .10) and exchange opinions ($\gamma_{11} = .09$, t = 1.74, p < .10).

The nature of these relationships can be understood by generating predicted values for the difference between interactions involving a member of one's own organization and those not involving a member (the *MyGreek* effect). *MyGreek* effects for participants ± 1 SD on SDO (standardized within the Greek member sample) are presented in Table 2. Recall that interactions involving a member were coded + 1 and those that did not involve a member were coded -1. With such codes, a positive coefficient means that member interactions were rated more highly than non-member interaction, and a negative coefficient means that non-member interactions.

The pattern in these relationships was quite consistent. For participants high in SDO, predicted *MyGreek* effects were all positive. Interactions that involved a member of their own social organization were more positive than interactions that did not involve a member. In contrast, for participants low in SDO, predicted *MyGreek* effects were all negative. Interactions that involved a member of their own

	Social Dominance	
	Low	High
Enjoy	10	.10
Intimacy	07	.19
Influence	07	.15
Important	19	.19
Respected	14	.12
Liked	15	.09
Exchange opinions	08	.14

TABLE 2 Social Dominance Orientation and the Effects of the Presence of aMember of Own Social Group (*MyGreek* Effect)

Note: The mean coefficients used to generate these predicted values differed slightly from the means presented in Table 1 because these mean coefficients were adjusted for sex differences.

social organization were less positive than interactions that did not involve a member. It is important to note that this pattern occurred for measures of how participants felt about themselves and for measures of how they felt about the others present.

Similar sets of analyses done for independent and interdependent self-construal found no significant relationships between independent self-construal and the effect of the presence of a member of one's own organization (the *MyGreek* effect). In contrast, there were significant relationships between interdependent self-construal and the *MyGreek* effect in the analyses of: influence ($\gamma_{11} = -.11$, t = 2.52, p < .05), importance ($\gamma_{11} = -.13$, t = 2.11, p < .05), respect ($\gamma_{11} = -.09$, t = 2.00, p = .05), and exchange of opinions ($\gamma_{11} = -.15$, t = 3.23, p < .01). The relationship between interdependent self-construal and the *MyGreek* effect approached conventional levels of significance in the analyses of outsider ($\gamma_{11} = .04$, t = 1.73, p < .10).

Predicted values describing the *MyGreek* effect for participants ± 1 *SD* on interdependent self-construal are presented in Table 3. The pattern of these relationships was consistent. Contrary to expectations (Hypothesis 3), participants who had higher interdependent self-construal scores felt less influential and respected and felt less free to exchange opinions in interactions with group members than in interactions with non-members. They also found member interactions to be less important, and they felt more like an outsider. In contrast, participants who had lower interdependent self-construal scores felt more influential and respected and felt freer to exchange opinions in interactions with group members than in interactions with non-members. Finally, those low in interdependent self-construal also found member interactions to be more important, and they felt less like an outsider.

There was some overlap in the variables for which relationships between the effect of the presence of a member of one's own organization (the *MyGreek* effect) and SDO and interdependent self-construal scores were significant, leaving open the possibility that relationships between *MyGreek* effects and SDO and interdependent self-construal scores did not represent unique variance. Moreover, although SDO and interdependent self-construal scores were only weakly correlated in the full sample (r = -.20), they were more meaningfully correlated among Greek members (r = -.52). To determine which construct was the more reliable predictor of the effect of the presence of a member of one's own organization (the *MyGreek* effect), analyses that included both SDO and interdependent self-construal as predictors of the *MyGreek* effect were conducted with the variables for which there was overlap (influence, importance, respect, and exchange opinions).

	Dependent Self-construal	
-	Low	High
Influence	.14	08
Important	.12	14
Respected	.07	10
Outsider	04	.04
Exchange opinions	.11	19

TABLE 3 Interdependent Self-construal and the Effects of the Presence of a Member of Own Social Group (*MyGreek* Effect)

In the analyses of the importance and respect variables, SDO scores remained significant predictors, whereas interdependent self-construal scores did not. Moreover, the coefficients for SDO scores were very similar to those from the original analyses (respect: .12 vs. .13; importance: .17 vs. .19). In contrast, in the analysis of exchange opinions, interdependent self-construal remained a significant predictor, whereas SDO did not. Moreover, the coefficient for interdependent self-construal was very similar to the coefficient from the original analysis (-.14 vs. -.15). The results of the analyses of the *MyGreek* effect for influence were not clear however. When both SDO and interdependent self-construal were included, neither remained a significant predictor of the *MyGreek* effect.

Impact of the Presence of Members of Social Groups for Non-Members

Analyses examining the impact of group membership on non-members needed to be limited to participants who were not members of a fraternity or sorority and had interacted with a same-sex member of a Greek organization at least once during the study. As was the case for the analyses about members, these analyses were limited to same- and mixed-sex interactions. Including opposite-sex interactions would have lead to a confound between the absence or presence of a member and gender composition (i.e., same-sex members of an organization could not be present in an opposite-sex interaction). Of the original sample, 4433 interactions described by 84 participants (51 women and 33 men) met these criteria. Of these 4433 interactions, a member of a same-sex Greek organization was present in 931 (21%).

These analyses were structurally similar to the analyses of members. At the interaction level (level 1) differences between interactions in which a member of a same-sex organization was present and interactions in which a member was not present (referred to as the *SameGreek* effect) were represented with a contrast coded variable. This variable was coded 1 when a same-sex member of a Greek organization was present and -1 when a member was not present. Coefficients were estimated for each participant representing the difference between these two types of interactions. The predictor *SameGreek* was entered uncentered.

The level 2 equations were structurally similar to those used in the previous analyses, and mean differences in reactions to interactions when a member was present and when one was not present were represented by the γ_{10} coefficient in the second equation. Consistent with expectations (Hypothesis 1), significant mean differences were found in the analyses of intimacy (t = 2.32, p < .05), importance (t = 1.99, p < .05), respected (t = 2.16, p < .05), liked (t = 2.06, p < .05), and feeling like an outsider (t = 3.99, p < .01). For all these measures, the presence of a same-sex member of a Greek organization was associated with less positive reactions on the part of non-members. Mean coefficients and predicted values representing these differences are presented in Table 4.

Individual differences in the effect of the presence of a member of a same-sex Greek organization (the *SameGreek* effect) were examined with a set of analyses structurally similar to those used to examine individual differences in the *MyGreek* effect. These analyses found significant relationships between independent self-construal and the *SameGreek* effect for intimacy ($\gamma_{11} = .15$, t = 2.33, p < .05), influence ($\gamma_{11} = .15$, t = 2.69, p < .01), importance ($\gamma_{11} = .11$, t = 2.34, p < .02), respect ($\gamma_{11} = .12$, t = 2.54, p = .01), liked ($\gamma_{11} = .12$, t = 2.37, p < .05), feeling like an outsider ($\gamma_{11} = .10$, t = 2.12, p < .05), and freedom to exchange opinions

	Coefficient	Present	Absent
Enjoy	.00	6.95	6.95
Intimacy	13*	4.66	4.92
Influence	09	5.58	5.76
Important	10*	5.81	6.01
Respected	10*	6.68	6.88
Outsider	.17*	2.27	1.93
Liked	10*	6.78	6.98
Exchange opinions	07	6.21	6.35

TABLE 4 Reactions to Interactions as a Function of the Presence of Members ofSocial Groups for Non-members (SameGreek Effect)

Note: Coefficients marked with * were significant at p < .05.

TABLE 5 Independent Self-construal and the Effects of the Presence of Members of Social Groups for Non-members (*SameGreek* Effect)

	Independent Self-construal	
-	Low	High
Intimacy	27	.02
Influence	25	.05
Importance	22	.00
Respect	21	.03
Liked	23	.01
Outsider	.28	.08
Exchange opinion	25	.10

 $(\gamma_{11} = .18, t = 2.82, p < .01)$. In contrast, there were no significant relationships between the *SameGreek* effect and SDO and interdependent self-construal.

Relationships between independent self-construal and the effect of the presence of a member of a same-sex Greek organization (the *SameGreek* effect) are summarized in Table 5. Predicted values are given for participants ± 1 SD (standardized within the sample of 84) on independent self-construal. The pattern of these results was fairly consistent and is consistent with expectations (Hypothesis 3). For non-members high on independent self-construal, *SameGreek* effects were small, if not negligible. For non-members high in independent self-construal, the presence of a member of a same-sex Greek organization was not associated with much of a change in reactions to interactions. In contrast, for non-member participants low in independent self-construal, the presence of a same-sex member of Greek organization was associated with less-positive reactions to interactions.

Discussion

The present study was conducted to examine the effects of a salient, naturally occurring group affiliation on people's reactions to their daily social interactions, and the results confirmed most, but not all of the hypotheses. Hypothesis 1, that

interactions with in-group members would be more positive than interactions with out-group members, was supported, but only for participants who were not members of fraternities or sororities. More specifically, when a member of a same-sex social organization (fraternity or sorority) was present, participants who were not members reported less positive interactions (e.g., less intimate, felt less respected) than when a member was not present. In contrast, and contrary to expectation, members of Greek social organizations did not react differently to interactions with and without members.

Hypothesis 2, that differences between interactions with in- and out-group members would be positively related to social dominance, was supported. As expected, for members of fraternities and sororities, participants who had high social dominance orientation (SDO) scores had more positive (more enjoyable, intimate, liked, respected, and important) interactions when a member of their organization was present than when a member was not present. This finding agrees with other research showing that people high in SDO desire more social distance from outgroups (Sidanius et al., 2001). For members of Greek social organizations who were low in SDO, interactions with an in-group member were less positive than interactions without a member. In contrast, social dominance orientation had no moderating effects on the reactions of participants who were not members of fraternities or sororities.

Hypothesis 3, which concerned relationships between reactions to interactions and self-construal, was partially supported. As expected, for participants who were not members of a fraternity or sorority, higher independent self-construal was associated with smaller differences between reactions to interactions with and without a member of a Greek social organization. Social membership (social identity) was unimportant for participants who strongly defined themselves in terms of personal attributes or accomplishments. In contrast, for participants who were not members of a fraternity or sorority, lower independent self-construal was associated with negative differences between reactions to interactions with and without a member of a Greek social organization. For participants who did not define themselves in terms of personal attributes or accomplishments, the social identities of those present in an interaction was important. For members of social organizations, independent self-construal was unrelated to differences in reactions to interactions to interactions to interactions involving or not involving another member.

Most surprising, and contrary to expectation, for participants who were members of fraternities and sororities, those high in interdependence felt less influential, less important, less free to exchange opinions, and felt more like an outsider in interactions with another member than in interactions that did not involve another member. Those low in interdependence found interactions that did not involve a member of their organization to be more positive on these same dimensions than interactions that did involve another member. In contrast, and as expected, for participants who were not members of social organizations, interdependent selfconstrual was unrelated to reactions to interactions as a function of social identity.

At first glance, some of these findings may appear to be inconsistent with one another and with existing theory and research. Nevertheless, a closer examination of the results and the context within which they occurred may be able to reconcile some of these apparent inconsistencies. For members of organizations, higher interdependence was associated with feeling less influential, free to exchange opinions, and so forth with members than with non-members, whereas the reverse held for members low in interdependence. Although such a finding suggests a less-positive evaluation of the in-group, Oetzel (1998) found that greater interdependence was related to a greater preference for compromising, obliging, and integrating conflict styles. In addition, as Derlega, Cukur, Kuang, and Forsyth (2002) point out, interdependence affects not only one's willingness to engage in out-group conflict but also to avoid conflict with the in-group. Perhaps the differences between interactions with and without members for those members high in interdependence reflected this tendency.

This pattern may have also reflected participants' status in the organization. Participants were new members, and for those high in interdependence, feeling less influential may have reflected their acknowledgment of the hierarchy of the organization—they were "junior" members in relation to established members (i.e., the other members of their organizations with whom they were interacting). For participants low in interdependence, their relative status was unimportant, and so they felt like full-fledged members of the group and consequently felt more influential, free to exchange opinions, and so forth, with group members than with non-members.

When considering these results involving interdependent self-construal, it may be useful to consider the possible relationships between one's membership in a group and that individual's evaluative processes. The present results suggest that for interdependent self-construal, different processes (and different outcomes) may be initiated as a function of a person's status in the group that serves as the basis for that person's social identity. In contrast to this, the present results suggest that membership per se was sufficient to initiate the evaluative processes associated with SDO. SDO was positively related to differences between interactions with and without members across virtually all the characteristics measured. Examining such possibilities more thoroughly will require future research comparing the roles played by self-construal for members with different status within their groups.

On average, group members did not react to interactions with another group member more positively than to interactions without a member. It is possible that if participants had been members longer, on average, they would have exhibited the in-group bias. These findings are consistent with the suggestion of Lalonde (2002) that social identity does not automatically occur, but rather, develops over time, as one's individual characteristics (e.g., identification) interacts with group characteristics and behaviors (e.g., competition with other groups). A group bias was found for non-members. On average, non-members found interactions involving a member of a social organization to be less positive than interactions without a member.

The reactions of non-members may be understood in terms of social categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). This theory suggests that social identity formation can occur in any situation in which people perceive that they are different from members of some group and perceive that there are other people who are similarly different from members of that group. Non-members had an established social identity: they had been non-members since they arrived on campus, and they knew there were others like them. For example, Schmitt, Spears, and Branscombe (2003) found that international students, in response to perceived discrimination from native students, formed strong "international student" identities and they, in turn, reaped the self-esteem benefits hypothesized by social identity theory. The findings of this study extend this previous research by finding that these non-member social identities function like member social identities in that they may be associated with in-group bias and/or out-group derogation. Regardless of the exact circumstances under which difference between types of interactions occurred, it is not clear to what extent such differences reflected in-group favoritism or out-group derogation. In some respects, it may not be possible to answer such a question. In-group and out-group status is a relative term. In life, there is typically no control for group membership—one either is or is not a member. Much of the research on social identity is informed by such a dialectical perspective. Nevertheless, Brewer (1979) suggested that laboratory research tends to find ingroup favoritism/positivism as opposed to out-group discrimination/negativity. Perhaps future research can determine how people react to interactions in which the social identities of one's interaction partners is not known, something that allows some conclusion about the relative strength of these two tendencies.

Despite its strengths, the present study suffers from some important limitations. The study concerned the operation of only one specific type of social identity. It is quite possible that other types of social identity may operate in different fashions. For example, social dominance may not be a relevant concern for individuals who are members of groups that are not organized around or within a social hierarchy, such as philanthropic or humanitarian organizations. It may also be the case that a chosen social identity may function differently than a social identity that is not chosen, such as race or gender. Moreover, some have expressed concerns about the extent to which social dominance can be considered a trait in the classic sense of having similar effects across different situations (e.g., Schmitt, Branscombe, & Kappen, 2003), although these objections have not gone unanswered (e.g., Sidanius & Pratto, 2003).

Also, it cannot be assumed that social identity operates among other groups of people in the same way that it operates among college students. Although much (perhaps the overwhelming majority) of research on social identity has studied collegians, other types of social identity may have different influences and correlates in other populations whose members are not in the throes of the "identity crisis" that often characterizes people's college years. For example, younger people (e.g., school children) may not have as many self and/or social identity concerns as collegians, and older adults may have moved beyond these concerns.

Nonetheless, it seems unlikely that social identity needs and issues exist only at a certain point in the lifespan. Although the issues surrounding identity may be more salient and pressing during the college years (e.g., Erikson, 1959), it seems unlikely that college students alone are affected by the need to belong. Group membership alone, independent of concerns regarding one's identity, may be sufficient to initiate the types of reactions found in this study. Research in organizational contexts has found that intergroup processes, such as in-group bias, occur quite frequently in the workplace (e.g., Lewis & Sherman, 2003).

Finally, there is the issue of the salience of the social identities examined in this study. That is, how can we be certain that participants viewed themselves through the lens of their social affiliations on campus? First, as noted in the introduction, in the community in which the study was conducted, such social affiliations are a salient part of the environment. Second, many (if not most) members of Greek social organizations wear identifying clothing and accessories (e.g., pins) on a frequent, if not regular basis. Such displays are sufficiently common so that the people with whom participants interacted on a regular basis would certainly have been aware of participants' social affiliations. This assumption is predicated on research demonstrating that the majority of a person's interactions occur with a relatively small number of people (e.g., Wheeler & Nezlek, 1977).

Nevertheless, it is possible that the salience of the social identities associated with participants' social affiliations may have varied across interactions. Because much of the work on social identity has made group memberships salient (e.g., in minimal group studies there is intentionally no other salient stimulus), and little research has concerned identity in naturally occurring social interaction, it is difficult to know when social identities are salient in naturally occurring interaction. Clearly, this topic requires further study.

Despite its limitations, the present study is the first (to our knowledge) to investigate the role of social identity in everyday social interaction, and the present results suggest that social identity is a salient part of people's everyday social interactions. Unfortunately, the present results do not suggest a simple relationship between social identity and reactions to social interaction. Participants' responses to in- and out-group interactions varied as a joint function of the group to which they belonged (members of a social organization or not), individual differences in social dominance and self-construal, and the specific aspect of social interaction being considered.

We believe that this study provides an informative and necessary complement to the growing body of research on social identity. Moreover, the present results suggest that theories about social identity (including what is formally known as SIT) may need to evolve to consider a broad array of factors, including, but not limited to: the nature of the identity being studied; individual differences in psychological traits such as social dominance and self-construal; individuals' status within a group (e.g., length of membership); and the dimensions on which judgments are being made. Moreover, we think that the present study strongly suggests that studying naturally occurring groups and their interactions will provide valuable insights into the dynamics and effects of social identity.

Note

- 1 Each subscale originally consisted of twelve items, but one item from the interdependent subscale, "I would offer my seat in a bus to my professor (or my boss)," was not used because it was not applicable to this sample—on the William & Mary campus, there are no buses that faculty members use regularly. Subscale means were adjusted for the deletion of this item.
- 2 Terms representing the interaction of participant sex and each of the three individual difference measures were also included in all analyses. None was significant, however, and so these terms were not included in the final analyses.

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