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INGROUP FAVORITISM AND SOCIAL SELF-ESTEEM IN MINIMAL GROUPS: CHANGING A SOCIAL CATEGORIZATION INTO A SOCIAL IDENTITY

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ABSTRACT

One corollary of social identity theory's self-esteem hypothesis proposes that intergroup bias enhances social identity, which in turn leads to enhanced self-esteem (the enhanced esteem hypothesis). There is mixed evidence for this corollary, due in part to methodological and measurement issues (Rubin & Hewstone, 1998). The present study carefully addressed these issues to test whether intergroup bias elevates social esteem. Participants were placed into minimal groups of high or low status, rated the ingroup and the outgroup, and completed measures of social esteem and social identity. Results indicated that intergroup bias overall (ingroup evaluation minus outgroup evaluation) did not elevate social esteem, only ingroup favoritism did. Further, ingroup favoritism did not lead directly to an enhanced social identity. The effects of favoritism on social identity were mediated by increased social esteem. These results in general support the enhanced esteem hypothesis, but suggest some caveats. The results also suggest that a social identity may emerge from a social categorization due to elevated social esteem following ingroup favoritism.

INTRODUCTION

In a significant theoretical contribution to understanding intergroup bias, Tajfel (1978) proposed that part of our self-worth comes from our social identity. Social identity is that part of an individual's self-concept resulting from the knowledge of a group membership together with the emotional significance attached to that membership (Tajfel, 1978). According to Tajfel and Turner (1986), individuals strive to maintain or enhance positive social identity through differential evaluations between one's ingroup and a relevant comparison outgroup. Ample research supports the idea that intergroup bias can occur even when the groups are created artificially in the laboratory (Mullen, Brown, & Smith, 1992). What is less clear is whether intergroup bias effects self-esteem.

Social identity theory includes both cognitive and motivational explanations of intergroup bias. Cognitively, social categories help to organize and simplify our world. Motivationally, due to a basic human need for positive self-esteem we place value on those categories to which we belong (Hogg & Abrams, 1988; Turner, 1982). Hogg and Abrams (1990) derived two self-esteem corollaries from social identity theory. The first corollary states that intergroup bias will lead to enhanced social identity, which in turn elevates self-esteem. In this paper I refer to this hypothesis as the *enhanced esteem hypothesis*. The second corollary states that depressed or threatened self-esteem will lead to intergroup bias. In this paper I refer to this hypothesis as the *diminished esteem hypothesis*. The enhanced esteem hypothesis is derived more directly from social identity theory, and is the hypothesis of interest in the present study.

Enhanced Esteem Hypothesis

Several studies have examined the enhanced esteem hypothesis, but the results have been inconsistent. In an early study, Lemyre and Smith (1985) arbitrarily categorized participants into groups, gave them the opportunity to engage in intergroup bias, and then measured their self-esteem. Results showed that the amount of participants' intergroup bias predicted self-esteem. However, Hogg and Sunderland (1991), also using an artificial categorization technique, found no effects of intergroup bias on self-esteem. More recent studies have shown more consistent support for the enhanced esteem hypothesis. For example, Hunter and colleagues have shown that self-esteem is predicted by intergroup bias between genders (Hunter, O'Brien, & Grocott, 1999) and different nationalities (Hunter, 2003). Both of these studies used real social groups, as have the majority of studies in the last ten years (Foels, 2006). The increased use of real groups follows Crocker and Luhtanen's (1990) suggestion that self-esteem may be related to intergroup bias only when the groups are meaningful. However, there are problems associated with the use of real groups, and this is only one of several methodological issues that researchers encounter when testing the enhanced esteem hypothesis.

According to Rubin and Hewstone (1998), inconsistent results for both self-esteem corollaries in part are due to variations in the measurement of self-esteem. Self-esteem can be measured as either global (e.g., Lemyre & Smith, 1985) or specific (e.g., Hunter et al., 2005). Global esteem is an individual's overall sense of self-worth, whereas specific esteem is an individual's self-worth based on one particular aspect of the self such as math self-esteem (e.g., Marsh & O'Neill, 1984) or gender self-esteem (e.g., Smith, 1999). In social identity research self-esteem also can

be measured as personal (e.g., Oakes & Turner, 1980) or social (e.g., Houston & Andreopoulou, 2003). Personal esteem is an individual's feelings of self-worth based on traits and abilities, whereas social esteem is an individual's feelings of self-worth based on group membership (Luhtanen & Crocker, 1992).

One reason why early social identity researchers did not assess social esteem is that no validated measure of this construct existed. Luhtanen and Crocker (1992) addressed the need for a measure of social esteem by creating the Collective Self-Esteem Scale (CSES). The CSES is composed of four subscales: membership, private, public, and identity. Membership esteem involves viewing oneself as a worthy member of one's group. Private esteem involves pride in one's group. Public esteem involves the belief that others view one's group as valuable. Identity esteem involves the importance of the group to the self. The overall scale and subscales demonstrated good reliability and validity. Research using Luhtanen and Crocker's measure of social esteem more consistently has provided support for the enhanced esteem hypothesis than research using measures of personal esteem (Rubin & Hewstone, 1998).

In addition to the issue of the measurement of self-esteem, a further issue is the measurement of intergroup bias. To assess intergroup bias researchers typically ask participants to rate both the ingroup and the outgroup on a series of personality traits (e.g., Crocker & Luhtanen, 1990; De Vries, 2003; Hunter, 1998). Although Abrams and Hogg (1988) have suggested that a trait rating approach is problematic, a more serious concern is the calculation of intergroup bias when using trait ratings. In most studies intergroup bias is calculated as a difference score, ingroup rating minus outgroup rating, which makes it impossible to know whether participants are favoring the ingroup, derogating the outgroup, or both (Brewer, 1979). Therefore, by using a difference score researchers may be unable to detect changes in social esteem if it is related to only one aspect of intergroup bias. For example, Lindeman (1997) found that self-evaluations were positively related to ingroup favoritism, but unrelated to outgroup derogation. In a test of the diminished esteem hypothesis, Andreopoulou and Houston (2002) found that social esteem in high status groups was positively related to ingroup favoritism, but negatively related to outgroup derogation. Therefore researchers need to separately test ingroup favoritism and outgroup derogation in order to adequately assess the enhanced esteem hypothesis (De Vries, 2003).

Despite calls for reporting both forms of intergroup bias in minimal group studies, relatively few researchers have followed this advice. Of those studies that have reported both forms, an interesting picture has emerged. Ingroup favoritism consistently occurs, as reflected in ratings above the midpoint of the scale. Surprisingly, however, outgroup derogation does not occur. Instead, the outgroup also consistently is rated above the midpoint of the scale, which indicates a positive evaluation of the outgroup. For example, Andreopoulou and Houston (2002) report means of 86.47 for the ingroup, and 76.58 for the outgroup. These means are based on a summation of responses to sixteen items, rated on a seven-point scale. When these means are averaged across the sixteen items (converting back to the seven point scale), the resulting means are 5.40 for the ingroup and 4.79 for the outgroup. These means indicate that the ingroup is evaluated more positively than the outgroup. These means do not indicate, however, that the outgroup is evaluated negatively in absolute terms. Instead, the outgroup is evaluated negatively only in relation to the ingroup, a pattern that is consistent in those studies reporting ingroup and outgroup ratings separately (e.g., Crocker &

Luhtanen, 1990; Seta & Seta, 1992). Thus the use of the term "outgroup derogation" should be considered as an indication of derogation relative to the ingroup, rather than derogation relative to a neutral point on rating scales. With this caveat in mind, in this paper I use the terms ingroup favoritism and outgroup derogation to refer to the specific forms of group evaluations, whereas I use the term intergroup bias to refer to differential evaluations in general.

The Role of Social Identity

Given the amount of attention that the enhanced esteem hypothesis has received, it is surprising that relatively little attention has been paid to the full hypothesis as set forth by Hogg and Abrams (1990). According to Hogg and Abrams, successful intergroup bias enhances social identity, which in turn increases self-esteem. Social identity is therefore a key aspect of the enhanced esteem hypothesis. However, most tests of the hypothesis have examined only bias and esteem without measuring social identity. Separate of the methodological and measurement issues discussed above, the enhanced esteem hypothesis may be receiving mixed support because of the ironic twist that social identity is not being tested in a hypothesis derived from social identity theory.

Ignoring social identity when examining the enhanced esteem hypothesis is problematic for two reasons: 1) there may be ceiling effects related to social identity; and 2) the strength of a social identity may vary due to non-experimental factors. Regarding the first problem, intergroup bias may not be able to further enhance social identity in groups that are already important to the individual. Instead, a strong social identity (i.e., an emotionally significant group) may predict social esteem regardless of intergroup bias. There is evidence for a strong link between a specific social identity and specific social esteem (e.g., Foels & Tomcho, 2005). Thus in tests where groups are meaningful to participants, intergroup bias may not influence social esteem due to a ceiling effect in which social identity cannot increase beyond its high pre-bias level. However, in tests where the groups are relatively meaningless to the participants, there may be room to enhance social identity, leading to increased social esteem. There is some evidence for this scenario from enhanced esteem hypothesis research. For example, Hunter (2001) found that religious social identity (as measured by the CSE Identity subscale) predicted religious self-esteem, whereas intergroup bias did not. Given that religion is likely to be a meaningful social identity, this result supports the possibility that ceiling effects may occur when using meaningful groups.

The second problem when ignoring social identity is that researchers may be allowing the strength of a social identity to vary due to non-experimental factors. Tajfel and his colleagues (Tajfel, Billig, Bundy, & Flament, 1971) originally employed meaningless social categorizations to study the effects of categorization *per se* on intergroup bias. Tajfel et al. (1971) referred to these categorizations as minimal groups, and provided strict criteria for their use. Minimal groups, by definition, involve an arbitrary categorization into relatively meaningless groups with no interaction among or between group members (Tajfel et al., 1971). The intent underlying minimal group studies is to ensure equivalent cognitive and emotional significance, allowing for an examination of intergroup bias in its simplest and purest form (Brown & Turner, 1979). Reynolds, Turner, and Haslam (2000) suggested that interaction with either the ingroup or the outgroup, or even the knowledge of other's group membership, should be considered "quasi-minimal" groups.

The use of either real groups or quasi-minimal groups in tests of the enhanced esteem hypothesis allows unintended sources of emotional affect to influence the results. Bodenhausen (1993) distinguished between integral affect and incidental affect in intergroup phenomena. Integral affect is the emotion elicited by the social group itself, and would be analogous to the emotional significance of a group that in part defines a social identity. Incidental affect is the emotion elicited by situations unrelated to the group, such as interaction or competition between the groups. Bodenhausen (1993, p.14) suggested that incidental affect may influence the views of group members "... for reasons having nothing to do with the group or its members." Rubin and Hewstone (1998) similarly discussed how real groups may have a normative expectation for intergroup bias due to a history of conflict between the groups, as opposed to any genuine feelings about the groups. Thus studies using quasi-minimal groups or real groups may appear to support intergroup bias as a causal mechanism of enhanced esteem, when enhancement is instead due to incidental affect or normative influence.

Resolving the Discrepancies

It is important to address the issues involved in testing the enhanced esteem hypothesis because social identity theory relies heavily on the motivational component of self-esteem as an explanation of intergroup bias. If self-esteem does not vary in a consistent pattern with intergroup bias, then a purely cognitive explanation such as self-categorization theory (Turner, Hogg, Oakes, Reicher, Wetherell, 1987) would provide a more parsimonious explanation.

In their review of both of the self-esteem corollaries, Rubin and Hewstone (1998) found more support from specific esteem than from global esteem tests. In a more recent review (Foels, 2006) I did not find a difference in support between specific and global tests: the enhanced esteem hypothesis has been supported in seventy percent of tests using specific esteem, and in seventy percent of tests using global esteem. However, the reality of the groups and the type of measurement varied between specific and global tests. Studies measuring specific esteem were more likely to use real groups and a difference score measure of intergroup bias, whereas studies measuring global esteem were more likely to use minimal groups and separate measures of ingroup favoritism and outgroup derogation. If the use of minimal groups and separate measures constitutes better methodology, then the success of studies using global esteem may be due to these other variables more so than to global esteem itself.

Rubin and Hewstone (1998) found more support from tests using social esteem than from tests using personal esteem. I also discovered this difference (Foels, 2006): eighty percent of tests that used social esteem supported the enhanced esteem hypothesis, whereas fewer than forty percent of tests that used personal esteem supported the hypothesis. Notably, social esteem more often was measured as specific than as global, also confounding the distinction between specific and global esteem as an outcome of intergroup bias. Thus a summary of the enhanced esteem literature shows that researchers are still finding mixed evidence for this hypothesis, due to the following factors: 1) measurement of personal rather than social esteem; 2) measurement of global rather than specific esteem; 3) measurement of intergroup bias as a difference score; and 4) the use of real or quasi-minimal groups.

In an attempt to clarify some of these issues the present study examined the enhanced esteem hypothesis by measuring specific, social esteem as a function of both ingroup favoritism and outgroup derogation in the minimal group paradigm. Three basic hypotheses were tested: 1) social esteem is a function of intergroup bias overall; 2) social esteem is a function of ingroup favoritism only; and 3) social esteem is a function of outgroup derogation only. The effects of group status in each of these hypotheses was also examined. Additionally, the full enhanced esteem hypothesis, that intergroup bias enhances social identity which in turn enhances self-esteem, was tested using path analyses.

METHOD

Participants

Participants were 65 volunteers (39 women, 24 men) recruited from various locations on a college campus (e.g., library, dining hall). Participants were asked to participate in a study on perceptual differences, and informed that the study would take approximately 15 minutes. Participants received no compensation for their participation.

Materials

Dot Estimation Task

Eight slides, each containing a random number of dots, were generated for use in creating the minimal groups.

Status Manipulation

To manipulate status differences, participants read a manipulation sheet that explained people's perceptual tendency to either overestimate or underestimate the number of dots on a slide. Additionally, overestimators were described as being more accurate than underestimators at the dot estimation task. The manipulation sheet further stated that these perceptual differences appear to be related to other tasks. Thus the sheet informed participants that overestimators were superior at this and other tasks, providing a status manipulation. This type of status manipulation is common in minimal group studies (e.g., Brewer, Manzi, & Shaw, 1993).

Specific Social Esteem

Three subscales of the Collective Self-Esteem Scale (CSES; Luhtanen & Crocker, 1992) were used to measure social esteem. The CSES is a widely used measure of social esteem with high internal consistency (alphas > .83) and strong validity indices (see Luhtanen & Crocker, 1992). The original instructions for the CSES ask participants to consider their group memberships such as gender, ethnicity, nationality, and religion while responding to each item, and as such is a measure of global social esteem. To assess specific social esteem in the present study, items on the scale were reworded to refer specifically to estimator groups rather than groups in general. Instructions asked participants to consider their membership in their estimator group while responding to the items: Membership (e.g., "I am a worthy member of the estimator group I

belong to."); Private (e.g., "I feel good about the estimator group I belong to."); and Public (e.g., "Overall, my estimator group is considered good by others."). Each subscale consists of four items; participants responded to the items on a scale from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). On each of the subscales, negatively worded items were reverse scored, and the responses were then averaged across items to form a composite measure of that form of CSE.

Social Identity

In Luhtanen and Crocker's (1992) validation studies of the CSES, they discovered that the three esteem subscales (Membership, Private, and Public) of the CSES consistently correlated with personal esteem, whereas the Identity subscale consistently did not. Additionally, the three esteem subscales of the CSES did not correlate with an established social identity measure, whereas the Identity subscale did. These results prompted Luhtanen and Crocker to state that the Identity subscale measures importance of a group to the self, whereas the other subscales measure the worth or value of the group. For this reason researchers often use the Identity subscale of the CSES as a measure of social identity (e.g., Ethier & Deaux, 1994; Hunter, 2001). In this study the Identity subscale was reworded to refer specifically to estimator groups and used to measure social identity (e.g., "The estimator group I belong to is an important reflection of who I am."). Participants responded to the four items on a scale from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Negatively worded items were reverse scored, and the responses were then averaged across items to form a composite measure of social identity.

Intergroup bias

I measured evaluations of the ingroup and outgroup using 24 traits such as "smart," "helpful," and "warm." Previous research on intergroup bias has found that bias occurs on positive traits but not on negative traits (the positive-negative asymmetry effect; see Blanz, Mummendey, & Otten, 1995). Therefore only positive traits were used to maximize the assessment of intergroup bias and subsequent changes in social esteem. Participants rated both groups using the same set of 24 traits. For ingroup evaluations participants indicated how well each trait described their group on a scale from 1 (*Not at All*) to 7 (*Very Much*). Responses were averaged across items to form a composite measure of ingroup evaluation. For outgroup evaluations participants indicated how well each trait described the other group on a scale from 1 (*Not at All*) to 7 (*Very Much*). Responses were averaged across items to form a composite measure of outgroup evaluation. The 24 traits from the intergroup bias measures can be seen in Appendix A.

Procedure

Participants were approached at various locations on campus and asked to complete a short study on perceptual differences. After completing the dot estimation task participants were handed the status manipulation sheet and asked to read it while the experimenter ostensibly scored their dot estimation responses. When participants had finished reading the manipulation sheet, they were given bogus feedback that they were either an overestimator or an underestimator. Following this categorization participants rated their own estimator group on the 24 traits, rated the other estimator group on the 24 traits, and completed the social esteem and social identity measures. After completing the measures participants were fully debriefed about the study.

RESULTS

In order to compare results of this study to previous minimal group studies, intergroup bias was calculated as ingroup evaluation minus outgroup evaluation. Therefore, higher scores indicate higher ratings of the ingroup relative to the outgroup. Consistent with previous studies, participants evaluated the ingroup more positively than the outgroup, $t(65) = 4.00$, $p < .001$, $r = .45$. An inspection of the means shows that this intergroup bias was not driven by a combination of ingroup favoritism and outgroup derogation. Instead, both groups were evaluated positively, with the ingroup ($M = 5.03$, $SD = 0.91$) being evaluated more positively relative to the outgroup ($M = 4.60$, $SD = 0.92$). These results contradict the assumption that intergroup bias involves negative evaluations of the outgroup. Additionally, the ingroup rating was approximately 1 point above the neutral point on the 7 point scale, indicating that ingroup favoritism is a mild phenomenon. Means and standard deviations for all variables can be seen in Appendix B.

Status Manipulation

Before testing the hypotheses of interest, the effectiveness of the status manipulation was assessed. Participants in the high status group ($M = 0.67$, $SD = 0.81$) engaged in more intergroup bias than participants in the low status group ($M = 0.17$, $SD = 0.84$), $t(63) = 2.46$, $p = .008$, $r = .30$. This result replicates previous research showing that high status groups engage in more intergroup bias than low status groups (Mullen et al., 1992). Thus the manipulation of group status appears to have been successful in the present study.

Intergroup Bias and Social Esteem

To examine whether social esteem was a function of intergroup bias, three separate multiple regression analyses were conducted, one for each form of social esteem. In each analysis one form of social esteem simultaneously was regressed on intergroup bias and group status (dummy coded). As seen in Table 1, engaging in intergroup bias did not affect any of the three forms of social esteem, but higher group status was related to higher public esteem. Removing group status from the intergroup bias regressions did not change any of the social esteem results.

Table 1: Social esteem as a function of intergroup bias and group status.

Predictor		Membership CSE	Private CSE	Public CSE
Intergroup Bias	*b*	0.16	0.20	0.20
	r	.13	.18	.19
Group Status	*b*	-0.01	0.13	0.57*
	r	.01	.07	.31

b = regression coefficient *r* = Pearson's correlation as indication of effect size *$p < .02$

Ingroup Favoritism and Social Esteem

To test the possibility that social esteem is influenced by either ingroup ratings or outgroup ratings but not both, three separate multiple regression analyses were conducted. In each analysis one form of social esteem was regressed on ingroup evaluation, outgroup evaluation, and group status (dummy coded). As seen in Table 2, ratings of the ingroup were related to social esteem whereas ratings of the

outgroup were not. Higher levels of ingroup evaluation predicted higher levels of all three forms of social esteem. Levels of outgroup evaluation were unrelated to the three forms of social esteem. Higher Public esteem was again predicted by higher group status. Thus higher social esteem is a function of higher ingroup evaluation, but not a function of outgroup evaluation. Removing group status from the intergroup bias regressions did not change any of the social esteem results.

Table 2: Social esteem as a function of ingroup favoritism and outgroup derogation.

Predictor		Membership CSE	Private CSE	Public CSE
Ingroup Evaluation	*b*	0.40*	0.34*	0.36*
	r	.30	.27	.32
Outgroup Evaluation	*b*	0.12	-0.04	-0.01
	r	.09	.03	.01
Group Status	*b*	0.14	0.22	0.67*
	r	.07	.12	.37

b = regression coefficient *r* = Pearson's correlation as indication of effect size *$p < .03$

Social Identity as a Mediator of Social Esteem

The enhanced esteem hypothesis predicts that intergroup bias enhances social identity, which in turn leads to enhanced social esteem. In this enhanced esteem model, social identity is proposed as a mediator of social esteem. Therefore, the next set of analyses examined whether or not enhanced social identity mediates increased social esteem. Mediation occurs when the outcome variable is related to both the predictor variable and to the mediator in simple regressions, but when the outcome variable is not related to the predictor variable in a multiple regression that includes the mediator (Baron & Kenny, 1986).

Because all three forms of social esteem were related to ingroup evaluation but not related to outgroup evaluation, social esteem was computed as the average of the three forms of social esteem, and only ingroup favoritism was analyzed in the following regression analyses. These analyses indicated that social identity is not a mediator of social esteem. Higher levels of ingroup favoritism predicted higher levels of social esteem, $t(63) = 3.75$, $p < .01$. However, higher levels of ingroup favoritism did not predict social identity, $t(63) = 1.49$, $p = .14$. Social identity was, however, positively related to social esteem, $t(63) = 3.26$, $p < .01$.

Given that social identity was related to social esteem but not ingroup favoritism, an alternative model was tested in which ingroup favoritism leads to enhanced social esteem, which then increases social identity. As reported above social identity was not related to ingroup favoritism, $t(63) = 1.49$, $p = .14$. However, higher levels of ingroup favoritism predicted higher levels of social esteem, $t(63) = 3.75$, $p < .01$. Further, higher levels of social esteem predicted higher levels of social identity, $t(63) = 3.26$, $p < .01$. Finally, when controlling for the effects of ingroup favoritism, higher levels of social esteem still predicted higher levels of social identity, $t(62) = 2.84$, $p < .01$. In this multiple regression ingroup favoritism still did not predict social identity, $t(62) = 0.21$, $p = .83$. These analyses support social identity as an outcome of increased social esteem, not ingroup favoritism. In fact, there was no direct link between ingroup favoritism and social identity. Instead, ingroup favoritism was only related to social identity through the increase in social esteem. Correlations for all the variables can be seen in Appendix C.

DISCUSSION

The enhanced esteem hypothesis derived from social identity theory predicts that engaging in intergroup bias enhances social identity which leads to enhanced self-esteem. There is mixed evidence for this hypothesis due to multiple methodological issues. In an attempt to clarify some of these issues the present study measured specific social esteem, ingroup evaluation, and outgroup evaluation, within the minimal group paradigm. The results provided support for the motivational component of social identity theory, with some qualifications. Social esteem was not enhanced by intergroup bias in general, it was enhanced only by ingroup favoritism. Additionally, the effect of favoritism on esteem was not mediated by increased social identity as the enhanced esteem hypothesis predicts. Instead, social identity was an outcome of enhanced social esteem. I discuss the results in terms of methodological suggestions before turning to a discussion of social identity.

First, it is important to note that ingroup favoritism affected social esteem whereas outgroup derogation did not. This finding is similar to other recent social identity self-esteem research that has measured both aspects of intergroup bias. For example, in a test of the enhanced esteem hypothesis Houston and Andreopoulou (2003) found that ingroup favoritism led to higher social esteem whereas outgroup derogation led to lower social esteem. In a test of the diminished esteem hypothesis, Aberson (1999) found that social esteem predicted ingroup favoritism but did not predict outgroup derogation. Thus Brewer's (1979) concerns about intergroup bias measured as a difference variable, and De Vries (2003) recent suggestion that favoritism and derogation always should be measured separately, is warranted. In fact, the present study provides evidence that both the ingroup and the outgroup are favored relative to a neutral point (although only the ingroup was rated significantly above the neutral point of the scale). It is possible that some tests of the enhanced esteem hypothesis would find support from ingroup favoritism, but this evidence is masked by the null effects of outgroup evaluation when a difference score is calculated. Separately of the enhanced esteem hypothesis, these results suggest a closer scrutiny of evaluations of ingroups and outgroups. Intergroup bias occurs because the ingroup is evaluated more positively relative to the outgroup, not because the outgroup is evaluated negatively. An inspection of the literature shows that this is a common finding (e.g., Andreopoulou & Houston, 2002; Crocker & Luhtanen, 1990; Seta & Seta, 1992), but one that is not discussed.

Second, it is noteworthy that the results were consistent regardless of group status. Minimal group research shows that high status group members engage in more intergroup bias than low status group members (Mullen et al., 1992). The present study replicated this basic finding in regards to bias. However, status was not a predictor of all forms of social esteem, which adds to a growing body of literature on the relationship between group status and self-esteem. Tajfel and Turner (1979) suggested that acceptance of differential status will lead to low self-esteem in low status groups. In the present study low status group members accepted the status differential, as evidenced by their lower Public social esteem. This acceptance was likely due to the objective differences in perceptual accuracy between the groups as portrayed in the status manipulation that followed the dot estimation task. However, specific social esteem is based on subjective processes (Rubin & Hewstone, 1988), and low status group members showed no difference in Membership or Private social esteem. Therefore low status group members may be able to subjectively value their group even while recognizing that their group objectively is of lower social status (see Crocker & Major, 1989).

Third, support for the enhanced esteem hypothesis was found using minimal groups created in the laboratory. The use of minimal groups avoids normative discrimination (Rubin & Hewstone, 1998) or incidental affect (Bodenhausen, 1993) as potential confounds. The fact that the enhanced esteem hypothesis has been supported with both minimal groups (e.g., Lemyre & Smith, 1985) and real groups (e.g., Hunter, 2003) may appear to make the type of group unimportant in tests of the hypothesis. However, most of the real group studies used specific personal esteem or social esteem measures, which are more appropriate measures of the enhanced esteem hypothesis, whereas most of the minimal group studies used global personal esteem measures. Thus minimal group studies have tended to use less appropriate measurement, yet confirm the hypothesis at a rate equivalent with real group studies. These previous results suggest that minimal group studies have more power to detect enhanced esteem because they detect it with less appropriate measurement. The current study further demonstrates that enhanced esteem can be detected in minimal groups, with the added benefit of negating normative influence or incidental affect as confounds.

Social Identity as Consequence Not Cause

Surprisingly little attention has been paid to assessing all three aspects of the enhanced esteem hypothesis: intergroup bias, social identity, and self-esteem. In the present study social esteem was related to social identity, but not as predicted by the enhanced esteem hypothesis. Social esteem was a product of ingroup favoritism, not a product of enhanced social identity. In fact, social identity was only related to ingroup favoritism due to the effects of social esteem. There is a long history of research demonstrating that group identification is not directly related to intergroup bias (e.g., Brown & Williams, 1984), and more recent research continues to find no direct relationship (e.g., Gagnon & Bourhis, 1996; Verkuyten & Neukee, 2002).

In one of the first studies of the enhanced esteem hypothesis, Lemyre and Smith (1985) found that ingroup favoritism led to higher self-esteem following social categorization only if the intergroup discrimination task preceded the measure of self-esteem. Based on this and other results Lemyre and Smith suggested that categorization may be a threat to self-esteem, and that ingroup favoritism restores self-esteem to pre-threat levels. In a similar vein, Grieve and Hogg (1999) found that categorization in an uncertainty condition led to more ingroup favoritism and enhanced self-esteem than categorization in a certainty condition. These results support the hypothesis that uncertainty reduction is a motivation that drives intergroup bias (for a review see Hogg & Mullin, 1999).

In both the perspectives of Lemyre and Smith (1985) and Hogg and Mullin (1999), an aversive state (threat or uncertainty) is reduced through intergroup bias. It is beyond the scope of this paper to sort out the specific issues involved. However, if one endorses the general idea that categorization involves an aversive state, then ingroup favoritism is related to a reduction of that aversive state, and higher feelings of self-worth result from this process. This perspective may provide an explanation of why a social identity is not directly related to intergroup bias. If intergroup bias is a reaction to an aversive state, then intergroup bias should not relate to the strength of a social identity, but rather to the amount of aversion reduction. The rewarding feelings that occur when the aversive state is reduced should, in turn, enhance self-esteem. Thus if intergroup bias does not enhance self-esteem, social identity will not be affected.

An aversion reduction model also could provide an explanation for the emergence of a social identity from a social categorization. A social identity involves not just cognitive categorization but also emotional significance (Tajfel, 1978). In a minimal group categorization, the model outlined above suggests that a group will not automatically take on emotional significance following intergroup bias. Instead, only if intergroup bias is a rewarding experience will self-esteem increase, and a subsequent social identity develop. That is, only if self-esteem is enhanced are there rewarding good feelings associated with the ingroup, and only then will a social categorization take on the emotional significance it needs to become a social identity. This model may help to explain why some cognitive groupings of which individuals are a member are not important to those individuals. For example, despite the clear category boundaries of gender groups, the emotional meaning of one's gender group varies across individuals (Smith, 1999).

Although this aversion reduction explanation of social identity importance is speculative, there are several studies in the literature that help to support this model. First, Hogg and Sunderland (1991) found that the more participants engaged in ingroup favoritism, the more they reported being self-assured. In other words, ingroup favoritism reduced uncertainty. Second, Jetten, Spears, and Manstead (1997) found that the relationship between threat to the group and social esteem was mediated by intergroup bias. In other words, intergroup bias reduced threat (aversion) which then led to increased self-esteem Third, there is evidence that intergroup bias may fail to reduce aversion and therefore not increase self-esteem. Houston and Andreopoulou (2003) and Verkuyten and Hagendoorn (2002) found that positive evaluation of the ingroup led to increased self-esteem, whereas negative evaluation of the outgroup led to decreased self-esteem. Thus ingroup favoritism may be an effective means of aversion reduction whereas outgroup derogation may not.

In summary, this study provides some support for the enhanced esteem hypothesis, but provides some caveats. Social identity may be more a consequence of self-esteem than of intergroup bias, and only ingroup favoritism appears to be an important form of intergroup evaluation in this process. Careful attention to the methodology involved in enhanced esteem research will be needed to further an understanding of these issues. If researchers use specific social esteem and measure both ingroup favoritism and outgroup derogation, there are promising directions for future research in this area. These directions include a better understanding of the interplay between social esteem and social identity, a better understanding of the relative contributions of ingroup evaluations and outgroup evaluations, and a better understanding of the motivations that drive the creation of our social identities.

REFERENCES

Abrams, D., and Hogg, M. A. (1988). "Comments on the motivational status of self-esteem in social identity and intergroup discrimination." *European Journal of Social Psychology,* 18: 317-334.

Andreopoulou, A., and Houston, D. M. (2002). "The impact of collective self-esteem on intergroup evaluation: Self-protection and self-enhancement." *Current Research in Social Psychology,* 7: 1-4.

Blanz, M., Mummendey, A., and Otten, S. (1995). Positive-negative asymmetry in social discrimination: The impact of stimulus valence and status differentials on intergroup evaluations. *British Journal of Social Psychology,* 34: 409-419.

Brewer, M. B. (1979). Ingroup bias in the minimal intergroup situation: A cognitive motivational analysis. *Psychological Bulletin,* 86: 307-324.

Brewer, M. B., Manzi, J. M., & Shaw, J. S. (1993). In-group identification as a function of depersonalization, distinctiveness, and status. *Psychological Science, 4,* 88-92.

Crocker, J., and Luhtanen, R. (1990). Collective self-esteem and ingroup bias. *Journal of Personality and Social Psychology,* 58: 60-67.

Crocker, J., and Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review,* 96: 608-630.

De Vries, R. E. (2003). Self, in-group, and out-group evaluation: Bond or breach? *European Journal of Social Psychology,* 33: 609-621.

Foels, R. (2006). *Methods and measurements in intergroup bias studies: A review of social identity's enhanced esteem hypothesis.* Manuscript in preparation.

Foels, R., and Tomcho, T. J. (2005). Gender, interdependent self-construals, and collective self-esteem: Women and men are mostly the same. *Self and Identity,* 4: 213-225.

Gagnon, A., and Bourhis, R. Y. (1996). Discrimination in the minimal group paradigm: Social identity or self-interest? *Personality and Social Psychology Bulletin,* 22: 1289-1301.

Grieve, P. G., and Hogg, M. A. (1999). Subjective uncertainty and intergroup discrimination in the minimal group situation. *Personality and Social Psychology Bulletin,* 25: 926-940.

Hogg, M. A., and Abrams, D. (1988). *Social Identifications: A Social Psychology Of Intergroup Relations And Group Processes.* London: Routledge.

Hogg, M. A., and Abrams, D. (1990). Social identity and social cognition: Historical background and current trends. In D. Abrams and M. A. Hogg (Eds.), *Social Identity and Social Cognition.* Malden, MA: Blackwell.

Hogg, M. A., and Mullin, B. (1999). Joining groups to reduce uncertainty: Subjective uncertainty reduction and group identification. In D. Abrams and M. A. Hogg (Eds.), *Social Identity and Social Cognition.* Malden, MA: Blackwell.

Houston, D. M., and Andreopoulou, A. (2003). Tests of both corollaries of social identity theory's self-esteem hypothesis in real group settings. *British Journal of Social Psychology,* 42: 357-370.

Hunter, J. A. (1998). Inter-group evaluative bias and self-esteem among Christians. *Current Research in Social Psychology,* 3: 74-87.

Hunter, J. A. (2001). Self-esteem and in-group bias among members of a religious social category. *Journal of Social Psychology,* 141: 401-411.

Hunter, J. A. (2003). Stats, category specific collective self esteem and intergroup discrimination. *Current Research in Social Psychology,* 8: 139-148.

Hunter, J. A., Cox, S. L., O'Brien, K., Stringer, M., Boyes, M., Banks, M., Hayhurst, J. G., and Crawford, M. (2005). Threats to group value, domain-specific self-esteem and intergroup discrimination amongst minimal and national groups. *British Journal of Social Psychology,* 44: 329-353.

Hunter, J. A., O'Brien, K. S., and Grocott, A. C. (1999). Social identity, domain specific self-esteem and intergroup evaluation. *Current Research in Social Psychology,* 4: 160-177.

Jetten, J., Spears, R., and Manstead, A. S. R. (1997). Distinctiveness threat and prototypicality: Combined effects on intergroup discrimination and collective self-esteem. *European Journal of Social Psychology,* 27: 635-657.

Lemyre, L., and Smith, P. M. (1985). Intergroup discrimination and self-esteem in the minimal group paradigm. *Journal of Personality and Social Psychology,* 49: 660-670.

Luhtanen, R. and Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin,* 18: 302-318.

Marsh, and O'Neill, (1984). Self Description Questionnaire III: The construct validity of multidimensional self-concept ratings by late adolescents. *Journal of Educational Measurement,* 21: 153-174.

Mullen, B., Brown, R., and Smith, C. (1992). Ingroup bias as a function of salience, relevance, and status: An integration. *European Journal of Social Psychology,* 22: 103-122.

Rubin, M., and Hewstone, M. (1998). Social identity theory's self-esteem hypothesis: A review and some suggestions for clarification. *Personality and Social Psychology Review,* 2: 40-62.

Seta, C. E. & Seta, J. J. (1992). Observers and participants in an intergroup setting. *Journal of Personality and Social Psychology,* 63: 629-643.

Smith, C. A. (1999). I enjoy being a girl: Collective self-esteem, feminism, and attitudes toward women. *Sex Roles,* 40: 281-293.

Tajfel, H. (1978). *Differentiation between social groups: Studies in the social psychology of intergroup relations.* London: Academic Press.

Tajfel, H., Billig, M. G., Bundy, R. F., and Flament, C. (1971). Social categorization and intergroup behavior. *European Journal of Social Psychology,* 1: 149-177.

Tajfel, H., and Turner, J. C. (1986). The social identity theory of intergroup behaviour. In Worchel, S., and Austin, W. G. (Eds.), *Psychology of Intergroup Relations.* Chicago: Nelson-Hall.

Turner, J. C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Social Identity And Intergroup Relations* (pp. 15-40). Cambridge, England: Cambridge University Press.

Verkuyten, M., and Hagendoorn, L. (2002). In-group favoritism and self-esteem: The role of identity level and trait valence. *Group Processes and Intergroup Relations,* 5: 285-297.

APPENDIX A: INTERGROUP BIAS MEASURES

Below is a list of traits. For each trait circle a number to indicate how well that trait describes the OVER-ESTIMATOR group (*describes the UNDER-ESTIMATOR group*).

	Not at All						Very Much
1. smart	1	2	3	4	5	6	7
2. self-reliant	1	2	3	4	5	6	7
3. sympathetic	1	2	3	4	5	6	7
4. helpful	1	2	3	4	5	6	7
5. bright	1	2	3	4	5	6	7
6. independent	1	2	3	4	5	6	7
7. understanding	1	2	3	4	5	6	7
8. happy	1	2	3	4	5	6	7
9. intelligent	1	2	3	4	5	6	7
10. powerful	1	2	3	4	5	6	7
11. compassionate	1	2	3	4	5	6	7
12. truthful	1	2	3	4	5	6	7
13. logical	1	2	3	4	5	6	7
14. dominant	1	2	3	4	5	6	7
15. warm	1	2	3	4	5	6	7
16. sincere	1	2	3	4	5	6	7
17. educated	1	2	3	4	5	6	7
18. strong	1	2	3	4	5	6	7
19. tender	1	2	3	4	5	6	7
20. likable	1	2	3	4	5	6	7
21. well-informed	1	2	3	4	5	6	7
22. ambitious	1	2	3	4	5	6	7
23. gentle	1	2	3	4	5	6	7
24. friendly	1	2	3	4	5	6	7

APPENDIX B: MEANS AND STANDARD DEVIATIONS BY CONDITION

	High Status			Low Status			Overall		
Variable	n	Mean	SD	n	Mean	SD	n	Mean	SD
Intergroup Bias	33	0.67	0.81	32	0.17	0.83	65	0.43	0.86
Ingroup Evaluation	33	5.02	1.00	32	5.03	0.84	65	5.03	0.91
Outgroup Evaluation	33	4.34	0.92	32	4.86	0.87	65	4.60	0.92
CSE Membership	33	4.57	1.14	32	4.50	0.99	65	4.53	1.06
CSE Private	33	4.74	0.91	32	4.51	0.98	65	4.63	0.95
CSE Public	33	4.53	0.82	32	3.86	0.88	65	4.20	0.91
Social Identity	33	3.35	1.67	32	2.89	1.27	65	3.12	1.50

APPENDIX C: CORRELATIONS AMONG VARIABLES IN THE STUDY

		1	2	3	4	5	6	7	8
1	Intergroup Bias	--							
2	Ingroup Favoritism	.46*	--						
3	Outgroup Derogation	-.47*	.57*	--					
4	Group Status	.30*	-.01	-.28*	--				
5	CSE Member	.13	.41*	.29*	.03	--			
6	CSE Private	.20	.31*	.12	.12	.70*	--		
7	CSE Public	.28*	.35*	.09	.37*	.40*	.59*	--	
8	Social Identity	.10	.18	.09	.15	.34*	.35*	.26*	--

*$p < .05$

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