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SOCIAL ATTRIBUTION, SELF-ESTEEM, AND SOCIAL IDENTITY

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ABSTRACT

The research presented in the current investigation was conducted in order to assess the relationship between group serving attributional biases and self-evaluation. Two separate experiments were conducted. Experiment one found that category members (i.e. women) who displayed group serving attributional biases manifested higher levels of social identity based self-esteem. Experiment two, conducted in order to determine whether these findings were a consequence of identity salience, produced similar results. Thus, in experiment two, when category members (i.e. women) were assigned to experimental and control conditions equivalent in social identity salience, those who displayed group serving attributional biases experienced enhanced levels of social identity based self-esteem. Personal self-esteem was unaffected in each experiment. Overall, these results indicate that when category members display group serving attributional biases it is social identity based and not personal self-esteem that is likely to be affected.

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INTRODUCTION

Intergroup attribution is concerned with the causal explanations offered by people acting as social category members. Like other forms of intergroup behavior (see Oakes, Haslam & Turner, 1994) research has shown that this phenomena may be affected by a variety of contextual factors (e.g. Hewstone & Ward, 1985; Islam & Hewstone, 1993). Often, however, the attributions made by social category members are group serving in so far as they tend to favor members of the ingroup over the outgroup (see Hewstone, 1990; Hunter, Stringer, Miller & Watson, 1994 for

reviews). Thus, for example, research carried out by Hunter, Stringer & Watson, (1991) has revealed that Northern Irish Catholics and Protestants attribute ingroup and outgroup violence in a group serving manner. For the members of both categories, outgroup violence was judged to be caused by internal characteristics (i.e. madness, bloodlust). This pattern of responding was reversed when ingroup behavior was explained. Ingroup violence was judged to be caused by external factors (i.e. retaliation, fear of attack). Similar findings were reported by Whitehead, Smith & Eichhorn, (1982). These authors examined the attributions made for athletic and academic success and failure amongst White and Black Americans in the U.S. Amongst other things, the results of this research revealed a tendency for Black participants to attribute White (as opposed to Black) athletic success to the ease of the task. More pronounced effects were found for failure. Both Black and White category members attributed outgroup (as opposed to ingroup) failure on both academic and athletic tasks to a lack of ability.

From the perspective of social identity theory (SIT, Tajfel & Turner, 1979, 1986) intergroup attributional biases may be interpreted as a reflection of the attempt to achieve and maintain a positive social identity. The link between group serving attributional bias and self-conception originally noted by Tajfel (1969) has recently been explicated in a comprehensive review by Hewstone (1989). Drawing on the SIT framework, which posits that category members seek distinctiveness through positively discrepant intergroup comparisons, Hewstone's review outlines two main ways in which group based attributions may be related to social identity (see also Hewstone, 1990). The first suggests that by attributing certain kinds of events (e.g. ingroup success

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and/or outgroup failure) to certain kinds of causes (i.e. those that are judged to be internal, stable, global and/or personally controllable) a positive social identity may be achieved. The second suggests that by attributing certain kinds of events (e.g. ingroup failure and/or outgroup success) to certain kinds of causes (i.e. those that are external, unstable, specific and/or uncontrollable) a positive social identity may be maintained. Unfortunately, however, the only two studies so far conducted in order to empirically assess the relationship between group serving attributional biases and self-evaluation have produced contradictory results. Thus, although Islam & Hewstone (1993) reported strong associations between intergroup attributions and self-esteem, other research conducted by Hunter, Stringer & Coleman (1993) found only weak and inconsistent relations between these two variables.

Similar results are apparent in research concerned with delineating the role of self-esteem in other forms of intergroup discrimination. One series of studies show higher levels of self-esteem amongst those who display intergroup discrimination (e.g. Lemyre & Smith, 1985; Oakes & Turner, 1980). Another series of experiments reveal that such effects do not always occur (e.g. Chin & McClintock, 1993, experiment 1; Hogg & Sunderland, 1991), whilst further studies indicate that self-esteem may sometimes decrease as a function of discrimination (e.g. Hogg, Turner, Nascimento-Schulze & Spriggs, 1986, experiment 2; see also the review by Hogg & Abrams, 1990). As a consequence, of the findings discerned in this broad area (see also Hinkle & Brown, 1990; Hunter, Platow, Bell, Kypri & Lewis, 1997), a number of influential theorists have now begun to challenge the pivotal motivational role accorded to self-esteem within the SIT

framework (Brown, 1995; Hogg & Abrams, 1993). Such challenges do of course have crucial ramifications in so far as they function to draw attention to (a) the relevance of the other important variables which are undoubtedly involved in intergroup conflict (e.g. Hogg & Abrams, 1988; Oakes et al., 1994) and (b) the broader theoretical predictions of SIT (e.g. Tajfel & Turner, 1979, 1986). It would be a mistake to ignore the input of research and theory concerned with either of these issues, as attention to such issues can only enhance our understanding of the many factors involved in intergroup conflict. Nevertheless, it is important to note that, much of the work concerned with assessing the link between self-esteem and various forms of intergroup discrimination is acknowledged to be fraught with a number of methodological shortcomings (for reviews see Abrams & Hogg, 1988; Hunter, Platow, Howard & Stringer, 1996). As such, we would contend, that before the role of self-esteem in intergroup discrimination can be properly evaluated, it is necessary that these shortcomings be adequately addressed.

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One of the major shortcomings associated with research in this area relates to the fact that many researchers have utilized instruments designed to assess personal self-esteem. The use of such measures to examine predictions derived from SIT is, as several commentators have recently argued, conceptually inappropriate (Bourhis, Turner & Gagnon, 1996; Long, Spears & Manstead, 1994). According to SIT the self may be experienced at either the individual or group levels (Hogg & Abrams, 1988; Turner, Oakes, Haslam & McGarty, 1994). The self as defined and evaluated at the individual level (e.g. 'I am generally successful') relates to personal identity. The self as defined and evaluated at the group level (e.g. 'women are generally successful') relates to social identity. With its emphasis on the group based nature of the self, SIT accordingly posits that, in the appropriate conditions, there is a shift in self perception so that any given individual defines and evaluates him or herself not with respect to their personal identity but in terms of their social identity. From the perspective of SIT, the obvious consequence is that self-esteem instruments, especially designed in order to measure personal self-worth (for a review see Blascovich & Tomaka, 1990), provide assessments of the self at the wrong level of abstraction. In this regard, it follows that the failure to find consistent links between various forms of intergroup discrimination and self-esteem may be a consequence of the fact that measures of personal self-esteem fail to adequately assess those components of the self associated with social identity.

The view that instruments tapping personal self-worth do not accurately gauge those components of the self related to social category membership is now advocated by several of those who have reviewed the literature in this area (Abrams & Hogg, 1988; Long & Spears, 1997). As such, researchers have now begun to examine a variety of alternative methods by which to more accurately delineate group based self-evaluation (e.g. Hunter et al., 1996; Platow, Harley, Hunter, Hanning, Shave & O'Connell, 1997). One method with the potential of circumventing the shortcomings inherent in this field has been provided by Luhtanen & Crocker (1992). These theorists, in an attempt to assess the esteem associated with social category membership, have recently developed a collective self-esteem scale. Research incorporating this measure (or one of its four sub-scales) is, in some ways, encouraging with respect to the assumptions of SIT. Thus, Branscombe & Wann (1994), in a study comprised of U.S. college students, found that (although derogation against threat irrelevant outgroups, i.e. French, South Africans and Chinese, led to a

decrease in collective self-esteem) derogation against a threat relevant outgroup (i.e. Russian) led to an increase in collective self-esteem. Similar results were reported by Chin & McClintock (1993, experiment 2). Chin & McClintock found higher levels of collective self-esteem amongst the members of minimal groups which had been forced to engage in intergroup discrimination.

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Despite the apparent nature of these findings, the two studies mentioned above contain features which, in vital respects, are problematic for SIT. In large part, this is due to the way in which both Branscombe & Wann and Chin & McClintock have attempted to measure collective self-esteem. Following Luhtanen & Crocker (see also Crocker & Luhtanen, 1990), who use the scale to assess "a general cross-group tendency to have a positive social identity" (Luhtanen & Crocker, 1992, p.304), the researchers in each of these studies have elected to examine the collective self-esteem associated with all the social groups people belong to (i.e. global collective self-esteem). With regard to predictions derived from SIT, there is, however, no logical reason why discrimination against one specific outgroup (i.e. Klees in the Chin & McClintock study and Russians in the Branscombe & Wann study) should cause the collective self-esteem associated with a host of completely unrelated categories (i.e. those based on gender, race, religion and class) to be enhanced. Rather as has been argued by Long and her colleagues (e.g. Long et al., 1994, 1997), from the perspective of SIT, we would expect, that when the members of a 'particular' social category (e.g. women) engage in the successful display of intergroup discrimination against a relevant outgroup (e.g. men) it is only the esteem associated with that 'particular' social category (and not others) which should be affected.

In line with this view, the research presented in the current study represents an attempt to provide a more accurate investigation of the predictions which may be derived from SIT. Thus, in assessing the relationship between group serving attributional biases and self-evaluation, a measure of collective self-esteem modified to tap the esteem associated with one specific social category (i.e. women) will therefore be incorporated. In this respect, we will test one hypothesis. This states that category members who display group serving attributional biases will experience enhanced levels of social identity based self-esteem.

EXPERIMENT ONE

Participants

One hundred and forty women participated in this study. All were undergraduates attending the University of Otago. Seventy-eight were assigned to an experimental condition. Sixty-two were assigned to a control condition. Assignment to each condition was random. Conditions were run in groups of six or more.

Design

Participants assigned to the experimental condition were given the opportunity to attribute cause to ingroup (women) and outgroup (men) target actors who either succeeded or failed in intellectual tasks. This formed a 2 (group membership of target actor: ingroup/outgroup) x 2 (task outcome: success or failure) repeated measures design. Participants assigned to the control

condition completed the same tasks as those in the experimental condition with the exception that cause was attributed to target actors who were not identified as ingroup and outgroup members. Following the presentation of the attributional tasks, scales assessing personal and social identity based self-esteem were presented. These scales were the dependent measures.

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Materials and Procedure

The study was introduced as being concerned with self-perception, social judgement and behavior. Participants were told that during the course of the study they would complete a response booklet (containing a number of questionnaire based tasks) and then engage in a short behavioral exercise. In an attempt to facilitate social identity salience (and thus rule out this factor as a possible cause of self-esteem change cf. Hogg & Turner, 1987) participants were informed that the study was specifically concerned with groups comprised of women and men. To further promote this effect, and also control anticipated interaction time amongst ingroup and outgroup members, attention was drawn to the behavioral exercise that was to be carried out at the end of the study. This (bogus) exercise was said to involve a 5 minute interaction with women (ingroup members) and a 5 minute interaction with men (outgroup members). Men were said to be involved in an identical experiment being carried out simultaneously in an adjacent laboratory. To ensure anonymity of responding, participants chose a code number from a box that was passed round the laboratory. Participants were required to record this code number and the gender group to which they belonged on their response booklet. Participants were asked not to communicate amongst one another whilst completing the response booklets.

The first section in each response booklet required participants to complete 12 attributional tasks. Eight of these were distracter tasks, and were included only in an attempt to make the real purpose of the study less obvious.¹ For those assigned to the experimental condition, 4 of the attributional tasks comprised a series of one paragraph vignettes depicting a scenario where an ingroup or outgroup target actor succeeded or failed on an academic task.² Target actors were identified through sex typed names and specific reference to gender (e.g. 'Michelle a female' 'David a male').³ The scenarios, in question, comprised one instance each of a female and male student who had (a) succeeded and been awarded 80% on an academic test and (b) failed and been awarded 20% on an academic test. The vignettes were presented in a single random order interspersed throughout the response booklet. Directly after the presentation of each vignette, participants were asked to write down what they perceived as the single most important cause of the target's success or failure. Following recent developments in this area (e.g. Islam & Hewstone, 1993; McAuley, Duncan & Russell, 1992) the cause was then rated along five causal dimensions pertaining to whether it was judged to be (a) internal or external (b) stable or unstable (c) global or specific (d) under personal control and (e) under external control. Cause on the internal-external dimension

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was assessed on the basis of whether the cause was something inside as opposed to outside the actor. Cause on the stable-unstable dimension was assessed on the basis of whether the cause

was constant or variable over time. Cause on the global-specific dimension was assessed on the basis of whether the cause affected the actor across a variety as opposed to specific circumstances. Cause on the personal control dimension was assessed on the basis of whether the cause was controllable by the actor. Cause on the external control dimension was assessed on the basis of whether the cause was controllable by other people (see McAuley et al., 1992). All ratings were made on 9-point Likert scales (1=yes, 9=no).

In an attempt to facilitate the opportunity to engage in meaningful behavior related to their categorization, participants in the control condition were presented with the same attributional tasks as those in the experimental condition. The only difference was that all information relating to the gender of target actors was omitted from the vignettes. Thus, in the control condition gender neutral names (i.e. Robin, Chris) were substituted for sex typed names (e.g. Michelle, David). The names utilized in the present study were included on the basis of previous research (see Hunter et al., 1997; Ng, 1990). Nevertheless, in a bid to ensure that participants in the present study would be less sure of the gender identity of those with such names, a separate pilot test was conducted (N=74). Here the names of actors depicted in experimental (e.g. Michelle, David) and control vignettes (i.e. Robin, Chris) were contrasted. Ratings were assessed using 7-point Likert scales (7=certain, 1=uncertain). The results showed that participants were much less sure of the gender identity of those targets depicted in the control than in the experimental vignettes ($M=3.01$ v $M=6.30$, $t(73)=16.14$, $p<.0005$). These findings also suggest that gender neutral names, of the sort incorporated here, are not classified generically as male (see also Ng, 1990).

Immediately following the attribution tasks, all participants completed Luhtanen and Crocker's (1992) private collective self-esteem sub-scale and the general self-evaluation sub-scale of the SDQ III (Marsh & O'Neill, 1984). In keeping with the general tenets of other research (e.g. Crocker & Luhtanen, 1990; Luhtanen & Crocker, 1992) these two scales were only moderately correlated amongst the current sample ($r=.25$, $N=140$). The private collective self-esteem

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sub-scale is designed to assess the extent to which people evaluate the social groups to which they belong. The questions comprising this particular sub-scale, are thus, deemed to be a close approximation of Tajfel's (1982) conception of social identity (Crocker & Luhtanen, 1990, p. 63, see also the review by Long & Spears, 1997). As such, this sub-scale would appear to be an effective measure of social identity based self-esteem. Given that the scale is 'easily adapted' to assess the esteem associated with a specific social identity (Crocker, Luhtanen, Blaine & Broadnax, 1994, p. 511), and in line with the rationale of the current investigation, the four items comprising this questionnaire were modified to refer to one particular social identity (e.g. 'I feel good about being a woman' and 'I often regret that I am a woman'). Half of the items were scored in the reverse order. Higher scores reflect more positive levels of private collective self-esteem. Responses were recorded on a 7-point Likert scale (1=agree strongly, 7=disagree strongly). The general self-esteem sub-scale of the SDQ III is based on the Rosenberg (1965) self-esteem scale. An excellent gauge of personal identity (see Blascovich & Tomaka, 1990), this 12 item measure is identical to that used in other studies which have sought to investigate the association between various forms of intergroup discrimination and personal self-esteem (e.g.

Hunter et al., 1996; Oakes & Turner, 1980). This scale contains items such as ‘Overall, I have a lot of respect for myself’ and ‘Overall, nothing that I do is very important’. Responses were scored on an 8-point Likert scale (1-definitely false, 8-definitely true). Higher scores reflect more positive levels of self-esteem. Half of the items were scored in the reverse order. Separate pilot analyses carried out on data collected prior to the instigation of the present investigation reveal that both the modified version of the private collective self-esteem sub-scale (Cronbach’s alpha .84, N=171) and the general self-esteem sub-scale of the SDQ III (Cronbach’s alpha .85, N=178) retain high levels of reliability (see also Crocker et al., 1994; Marsh, 1992). Also included were a number of manipulation check items. Participants were asked what they thought the study was really about, if there was anything odd or unusual about the study and whether there was anything about the study on which they wished to comment. Participants were then debriefed and thanked for taking part.

RESULTS OF EXPERIMENT 1

Intergroup Attributional Bias

Ratings on each of the five causal dimensions were analyzed independently using separate 2 (group membership of target actor: ingroup/outgroup) x 2 (task outcome: success or failure) repeated measures analysis of variance (ANOVA’s). All cell means can be seen in Table 1. Higher scores indicate that cause is judged to be more internal, stable, global, under personal control and external control.

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Table 1. Mean attributional ratings for the successes and failures of ingroup and outgroup targets as a function of causal dimension.

Causal Dimension	Ingroup Success (SD)	Outgroup Success (SD)	Ingroup Failure (SD)	Outgroup Failure (SD)
Internality	7.46 (1.68)#	6.95 (2.19)	4.86 (2.54)**	6.38 (2.15)
Stability	7.09 (1.77)	6.71 (2.01)	3.05 (1.85)**	4.36 (2.14)
Globality	7.73 (1.43)	7.62 (1.64)	5.71 (2.29)**	6.55 (2.03)
Personal Control	7.78 (1.38)#	7.21 (2.24)	6.56 (2.31)	7.00 (2.19)
External Control	3.40 (2.37)	3.76 (2.51)	4.78 (2.57)	4.53 (2.51)

**p<.01, group serving differences in the attributions made for ingroup and outgroup failure by Dunn’s test (N=78).
#p<.01, group serving differences in the attributions made for the success and failure of ingroup members by Dunn’s test (N=78).

Note: Higher scores denote that cause is judged to be more internal, stable, global, under personal control and external control.

Internality

A main effect was found for task outcome ($F(1, 77)=43.30, p<.001$). More internal attributions were made for success than failure ($M=7.21$ v $M=5.63$). A main effect was also found for group membership of target actor ($F(1, 77)=4.24, p<.05$). More internal attributions were made for outgroup behavior ($M=6.67$ v $M=6.16$). Both of these effects were mediated by an interaction between group membership of target actor and task outcome ($F(1, 77)=27.22, p<.001$). To

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assess this effect further a series of planned pairwise comparisons were carried out.⁴ A strong group serving effect was found in the attributions women made for ingroup and outgroup failure. Less internal attributions were made for ingroup failure than outgroup failure ($t(77)=4.35, p<.0005$). A non-significant tendency also emerged for women to make more internal attributions for ingroup success than outgroup success ($t(77)=1.88, p<.07$). In an attempt to control the family error rate, Dunn's correction (Bonferroni t) was incorporated. Using this relatively conservative test (see Howell, 1987) the former, group serving, effect was significant (critical alpha value 2.89, $p<.01$). Following Hewstone (1990) two further planned comparisons were implemented. This analysis, conducted in order to investigate what Hewstone refers to as outcome effects, compares the attributions made for successes as opposed to failures separately for ingroup and outgroup targets. Attributions of this type may be group serving to the extent that participants make (a) more internal, stable, global and personally controllable attributions for ingroup success than ingroup failure and/or (b) more internal, stable, global and personally controllable attributions for outgroup failure than outgroup success. A strong group serving effect was found for ingroup behavior ($t(77)=5.99, p<.0005$, critical alpha value 2.89, $p<.01$), whilst only a non-significant trend emerged for outgroup behavior ($t(77)=1.97, p<.06$). In both cases, more internal attributions were made for ingroup success than ingroup failure. There were no other significant effects.

Stability

A main effect was found for task outcome ($F(1, 77)=222.07, p<.001$). Success was judged to be more stable than failure ($M=6.90$ v $M=3.71$). A main effect approaching significance was found for group membership of target actor ($F(1, 77)=3.88, p<.06$). There was a tendency to judge outgroup behavior as being affected by more stable causes than ingroup behavior ($M=5.54$ v $M=5.07$). This effect was mediated by the interaction found between group membership of target actor and task outcome ($F(1, 77)=20.91, p<.001$). Planned pairwise comparisons revealed a strong group serving effect in the attributions made for ingroup and outgroup failure. Outgroup failure was attributed to more stable causes than ingroup failure ($t(77)=4.14, p<.0005$, critical alpha value 2.89, $p<.01$). Analysis conducted to assess outcome effects did not reveal any group serving effects. There were no other significant effects.

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Globality

A main effect was found for task outcome ($F(1, 77)=49.33, p<.001$). Success was perceived as being more global than failure ($M=7.68$ v $M=6.13$). A second main effect was found for group

membership of target actor ($F(1, 77)=4.60, p<.04$). Outgroup behavior was seen as being more global than ingroup behavior ($M=7.08$ v $M=6.72$). This effect was qualified by the interaction found between group membership of target actor and task outcome ($F(1, 77)=8.43, p<.006$). Planned comparisons revealed a group serving effect in the attributions made for failure. Outgroup failure was judged to be a consequence of more global causes than ingroup failure ($t(77)=3.04, p<.005$, critical alpha value 2.89, $p<.01$). Analysis examining outcome effects did not reveal any group serving effects. There were no other significant effects.

Personal Control

A main effect was found for task outcome ($F(1, 77)=9.00, p<.001$). Success was judged as being more under personal control than failure ($M=7.50$ v $M=6.78$). An interaction was found between group membership of target actor and task outcome ($F(1, 77)=5.52, p<.03$). Planned comparisons showed that positive ingroup behavior was attributed to be more under personal control than positive outgroup behavior ($t(77)=2.11, p<.05$). This effect did, however, fail to reach significance when using Dunn’s correction (critical alpha value 2.29, $p<.05$). Analysis of outcome effects revealed a strong group serving effect with respect to ingroup behavior ($t(77)=4.36, p<.0005$, critical alpha value 2.89, $p<.01$). Positive ingroup behavior was perceived to be more under personal control than negative ingroup behavior. There were no other significant effects.

External Control

A main effect was found for task outcome ($F(1, 77)=23.33, p<.001$). Failure was judged as being more under external control than success ($M=4.66$ v $M=3.58$). Planned comparisons contrasting the attributions made for (a) positive ingroup and positive outgroup behavior and (b) negative ingroup and negative outgroup behavior did not find significant effects. Analysis of outcome effects also failed to reveal any significant group serving biases. There were no other significant effects.

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Self-Esteem

To examine differences in social identity based (i.e. private collective self-esteem) and personal self-esteem amongst those assigned to experimental and control conditions separate one way ANOVA's were conducted. Cell means can be seen in Table 2. A significant effect was found for private collective self-esteem ($F(1, 139)=44.41, p<.001$). Participants in the experimental condition (following the display of group serving attributional biases) manifested higher levels of private collective self-esteem. No differences were found with respect to personal self-esteem ($F(1, 139)=0.80, p>.77$).

Table 2. Experimental and control participants personal and private collective self-esteem

Self-Esteem	Experimental (SD)	Control (SD)
Private collective self-esteem	24.09 (3.76) **	20.15 (3.09)

Personal self-esteem	75.26 (16.81)	74.52 (16.82)
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**p<.001, differences in experimental and control group participants self-esteem by ANOVA (experimental, N=78; control, N=62).

Note: More positive scores denote higher levels of self-esteem.

DISCUSSION OF EXPERIMENT 1

One hypothesis was tested in this experiment. This predicted that category members who displayed group serving attributional biases would experience enhanced levels of social identity based self-esteem. Support for this hypothesis was found. Category members, in the experimental condition, judged outgroup (i.e. male) failure to be the result of more internal, stable and global causes than ingroup (i.e. female) failure. A number of group serving outcome effects were also evident. Ingroup success was attributed to more internal and personally controllable causes than

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ingroup failure. Following the display of these biases, women in the experimental condition were found to have higher levels of social identity based self-esteem, when compared with those in the control condition. No differences were found with respect to personal self-esteem. These findings are consistent with predictions derived from SIT which suggest, that group serving attributional biases are, in part, affected by the attempt to achieve and maintain a positive social identity. Although such findings are encouraging, a potential shortcoming inherent in this study pertains to the issue of salience (e.g. Oakes & Turner, 1980). Prior to the assessment of self-esteem, women assigned to the experimental condition attributed cause to targets identified as ingroup and outgroup members. Women assigned to the control condition attributed cause to targets not so identified. One possible problem with this methodology is that the vignettes used in the experimental condition may have made group membership more salient. Previous research has shown that when a person's membership in 'real' social categories becomes salient self-esteem may increase or decrease (Hogg & Turner, 1987). As a result, it may be argued therefore that the enhanced salience of social category membership in the experimental condition could have elevated participants self-esteem, irrespective of the display of group serving attributional biases. In order to investigate this possibility a second study was conducted. In this experiment, one hypothesis was tested. This predicted that when category members were assigned to experimental and control conditions equivalent in terms of social identity salience, those in the experimental condition would experience enhanced levels of social identity based self-esteem, following the display of group serving attributional biases.

EXPERIMENT 2

Participants

Eighty-five undergraduate women participated in this study. All were attending the University of Otago. Thirty-nine were assigned to an experimental condition. Forty-six were assigned to 1 of 2

control conditions. Assignment to each condition was random. Conditions were run in groups of six or more.

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Design

Participants assigned to the experimental condition were given the opportunity to attribute cause to ingroup (women) and outgroup (men) target actors who either succeeded or failed in intellectual tasks. This formed a 2 (group membership of target actor: ingroup/outgroup) x 2 (task outcome: success or failure) repeated measures design. Participants assigned to the first control condition completed the same tasks as those in the experimental condition with the exception that cause was attributed to target actors who were not identified as ingroup and outgroup members. The dependent measures (administered following the attributional tasks) were scales assessing personal and social identity based (i.e. private collective) self-esteem. In order to provide an assessment of pre-test levels of self-esteem, participants assigned to the second baseline control condition completed the measures of personal and social identity based self-esteem without then taking the attributional tasks.

Materials and Procedure

The materials and procedure used in experiment 1 were identical to those used in experiment 2 with two exceptions. The first exception was the inclusion of a second control condition. This additional condition was incorporated in an attempt to gauge baseline (or pre-test) levels of self-esteem. Thus, participants assigned to the second control condition completed the measures of personal and social identity based self-esteem without then undertaking the attributional tasks. The second exception was included in an attempt to demonstrate equivalent social identity salience across experimental and control conditions. In order to do this the group membership sub-scale, from Luhtanen & Crocker's (1992) collective self-esteem scale, was incorporated. This four item sub-scale was developed in order to examine the extent to which category members judge themselves as group members.⁵ In keeping with the nature of the present study, questions were modified to refer to one specific identity (e.g. 'I cooperate with other women' and 'I feel that I don't have much to offer other women'). Two of the questions were scored in the reverse order. Positive scores reflect higher levels of group membership self-esteem. Answers were scored on a 7-point Likert scale (1-agree strongly, 7-disagree strongly). To ensure comparable identity salience amongst experimental and control group participants at the outset of the study, half the items were administered prior to the presentation of the attribution tasks. To ensure comparable identity salience, amongst experimental and control group participants after the completion of the attribution tasks, half the items were administered following the presentation of the scales assessing both private collective self-esteem and personal self-esteem.

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RESULTS OF EXPERIMENT 2

Manipulation Check

In order to examine potential differences in social identity salience across experimental and

control conditions prior to (experimental M=10.67 v control M=10.85) and following (experimental M=11.15 v control M=11.35) the completion of the attributional tasks, separate one way analysis of variance (ANOVA's) were conducted. No significant differences were found in either case (both p's >.76). This indicates that social identity was similarly salient amongst experimental and control participants throughout the course of the study. Presumably, therefore any differences in social identity based (or indeed personal) self-esteem which emerge in the present study can not be explained away on the basis of differential identity salience.

Intergroup Attributional Bias

As in experiment 1, ratings on each of the five causal dimensions were analyzed independently using separate 2 (group membership of target actor: ingroup/outgroup) x 2 (task outcome: success or failure) repeated measures analysis of variance (ANOVA's). All cell means can be seen in Table 3. Higher scores indicate that cause is judged to be more internal, stable, global, under personal control and external control.

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Table 3. Mean attributional ratings for the successes and failures of ingroup and outgroup targets as a function of causal dimension.

Causal Dimension	Ingroup Success (SD)	Outgroup Success (SD)	Ingroup Failure (SD)	Outgroup Failure (SD)
Internality	7.90 (1.43)#	7.31 (1.94)	6.03 (2.32)	7.00 (2.01)
Stability	6.97 (1.80)	6.36 (1.80)	2.97 (1.58)**	4.56 (2.06)
Globality	7.64 (1.53)#	7.08 (2.02)	5.13 (2.51)**	6.46 (1.88)
Personal Control	7.69 (1.89)#	7.23 (1.98)	5.95 (2.34)**	7.62 (1.33)
External Control	3.95 (2.04)*#	4.90 (2.44)	5.36 (2.12)	4.92 (2.30)

* p<.05, **p<.01, group serving differences in the attributions made for ingroup and outgroup failure by Dunn's test (N=39).

#p<.01, group serving differences in the attributions made for the success and failure of ingroup members by Dunn's test (N=39).

Note: Higher scores denote that cause is judged to be more internal, stable, global, under personal control and external control.

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Internality

A main effect was found for task outcome (F(1, 38)=14.99, p<.001). More internal attributions were made for success than failure (M=7.61 v M=6.52). An interaction effect was also found

between group membership of target actor and task outcome ($F(1, 38)=8.25, p<.008$). To assess this effect further a series of planned pairwise comparisons were carried out. Women manifested a tendency to make more internal attributions for ingroup success than outgroup success ($t(38)=2.32, p<.03$) and less internal attributions for ingroup than outgroup failure ($t(38)=2.22, p<.04$). However, neither of these effects were significant using Dunn's correction (critical alpha value 2.36, $p<.05$). Following Hewstone (1990), and the procedure adopted in experiment 1, two further planned comparisons were implemented. This analysis, conducted in order to examine outcome effects, contrasts separately for ingroup and outgroup members the attributions made for successes as compared to failures. A strong group serving effect was found for ingroup targets ($t(38)=4.92, p<.0005$, critical alpha value 3.03, $p<.01$). More internal attributions were made for ingroup success than ingroup failure. There were no other significant effects.

Stability

A main effect was found for task outcome ($F(1, 38)=100.26, p<.001$). Success was judged to be more stable than failure ($M=6.67$ v $M=3.77$). An interaction between group membership of target actor and task outcome ($F(1, 38)=23.68, p<.001$) was also found. Planned pairwise comparisons revealed a non-significant tendency for women to attribute ingroup success to more stable causes than outgroup success ($t(38)=1.91, p<.07$). A strong group serving effect was, however, found with respect to failure. Ingroup failure was attributed to less stable causes than outgroup failure ($t(38)=4.11, p<.0005$, critical alpha value 3.03, $p<.01$). There were no other significant effects.

Globality

A main effect was found for task outcome ($F(1, 38)=26.35, p<.001$). Success was perceived as being more global than failure ($M=7.36$ v $M=5.80$). An interaction was found between group membership of target actor and task outcome ($F(1, 38)=10.35, p<.004$). Planned comparisons revealed that outgroup failure was judged to be more global than in group failure ($t(38)=3.14, p<.004$, critical alpha value 3.03, $p<.01$). Analysis of outcome effects revealed a strong group serving effect for ingroup behavior. Ingroup success was perceived to be more global than ingroup failure ($t(38)=6.03, p<.0005$, critical alpha value 3.03, $p<.01$). There were no other significant effects.

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Personal Control

A significant main effect was found for task outcome ($F(1, 38)= 6.35, p<.02$). Success was judged as being more under personal control than failure ($M=7.46$ v $M=6.79$). A second significant main effect was discerned for group membership of target actor ($F(1, 38)=4.74, p<.04$). This suggested a tendency to see outgroup behavior as being more under personal control than ingroup behavior ($M=7.43$ v $M=6.82$). This finding was, however, qualified by the interaction found between group membership of target actor and task outcome ($F(1, 38)=14.15, p<.002$). Planned comparisons revealed a highly significant group serving effect with respect to ingroup and outgroup failure. Negative outgroup behavior was attributed to be more under personal control than negative ingroup behavior ($t(38)=3.89, p<.0005$, critical alpha value 3.03, $p<.01$). Analysis of outcome effects also revealed a group serving effect for ingroup behavior. Positive ingroup behavior was perceived to be more under personal control than negative

ingroup behavior ($t(38)=3.93$, $p<.0005$, critical alpha value 3.03, $p<.01$). There were no other significant effects.

External Control

A main effect was found for task outcome ($F(1, 38)=6.86$, $p<.02$). Failure was perceived to be more under external control than success ($M=5.14$ v $M=4.45$). An interaction was also found between group membership of target actor and task outcome ($F(1, 38)=8.79$, $p<.006$). Planned comparisons revealed outgroup success to be attributed more to external control than ingroup success ($t(38)=2.71$, $p<.01$, critical alpha value 2.36, $p<.05$). Analysis of outcome effects revealed a strong group serving effect for ingroup behavior. Ingroup success was seen to be less under external control than ingroup failure ($t(38)=4.27$, $p<.0005$, critical alpha value 3.03, $p<.01$). There were no other significant effects.

Self-Esteem

To assess differences in private collective self-esteem and personal self-esteem amongst participants assigned to experimental and control conditions separate one way ANOVA's were conducted. Cell means can be seen in Table 4. A significant effect was found for private collective self-esteem ($F(2, 82)=7.56$, $p<.002$). To investigate this effect further a series of planned comparisons were conducted. Participants in the experimental condition were found to have higher

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levels of collective self-esteem than either those in the baseline control condition ($t(63)=4.21$, $p<.0005$, critical alpha value 2.94, $p<.01$) or those in the first control condition ($t(57)=2.87$, $p<.007$, critical alpha value, 2.31, $p<.05$). No differences in private collective self-esteem were found between those in the first control condition and those in the baseline control condition ($t(44)=.40$, $>.69$). The ANOVA did not reveal any significant effects with respect to personal self-esteem ($F(2, 82)=2.26$, $p>.11$).

Table 4. Experimental and control participants personal and private collective self-esteem

Self-Esteem	Experimental (SD)	First Control (SD)	Baseline Control (SD)
Private collective self-esteem	25.17 (2.31)* #	22.45 (5.00)	21.93 (3.90)
Global self-esteem	76.05 (13.22)	80.75 (11.23)	72.73 (13.88)

* $p<.01$, differences in experimental and the first control group participants private collective self-esteem by Dunn's test (experimental, $N=39$; first control, $N=20$).

$p<.05$, differences in experimental and baseline control group participants private collective self-esteem by Dunn's test (experimental, $N=39$; baseline control, $N=26$).

Note: More positive scores denote higher levels of self-esteem.

DISCUSSION OF EXPERIMENT 2

One hypothesis was tested in this experiment. This predicted that when category members were assigned to experimental and control conditions equivalent in terms of social identity salience, those in the experimental condition would experience enhanced levels of social identity based self-esteem, following the display of group serving attributional biases. The results supported this

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hypothesis. In the experimental condition, women showed a variety of group serving attributional biases. Thus, for example ingroup (i.e. female) success was perceived to be less a consequence of external control than outgroup (i.e. male) success. Similarly, outgroup failure was judged to be the result of more stable, global and personally controllable causes than ingroup failure. A number of outcome effects were also found. Ingroup success was attributed to more internal, global and personally (as well as less externally) controllable, causes than ingroup failure. After the display of these biases, women in the experimental condition were subsequently found to have higher levels of social identity based self-esteem than those in either the baseline or first control conditions. No differences were found with respect to personal self-esteem. These findings reinforce those reported in experiment one to the extent that, they suggest that enhanced levels of social identity based self-esteem amongst those who display group serving attributional biases are not merely a function of identity salience.

GENERAL DISCUSSION

The research presented in the current study sought to investigate the relationship between group serving attributional biases and self-evaluation. To this end, two separate experiments were carried out. The first experiment showed that category members (i.e. women) who manifested group serving attributional biases displayed higher levels of social identity based self-esteem. The second experiment, conducted in order to assess whether these findings were a consequence of identity salience, produced similar results. Thus, in experiment two, when category members (i.e. women) were assigned to experimental and control conditions equivalent in social identity salience, those who manifested group serving attributional biases experienced enhanced levels of social identity based self-esteem. Personal self-esteem remained unaffected in each experiment. The results from experiments one and two are, therefore, very much in keeping with the assumptions of the present investigation. That is, when category members display group serving attributional biases it is social identity based and not personal self-esteem that is likely to be affected. These findings are consistent with SIT to the extent that they suggest, that group serving attributional biases are, in part, affected by attempts to achieve and maintain a positive social identity.

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The results of the current analyses are comparable with those reported by Chin & McClintock (1993, experiment 2) and Branscombe & Wann (1994). Both of these studies found higher levels

of collective self-esteem amongst those who engaged in specific forms of intergroup discrimination (i.e. forced discrimination and the derogation of a threat relevant outgroup respectively). Given, however, that the researchers in each of these studies assessed the collective self-esteem associated with all the social groups people belong to, we would argue that the research presented in the present study has allowed a more accurate investigation of predictions which may be derived from SIT. Thus, in keeping with SIT, the results of the present research indicate that when the members of a 'particular' social category (i.e. women) display group serving attributional biases (or other forms of intergroup discrimination) against a relevant outgroup (i.e. men), it is the esteem associated with this 'particular' social category (i.e. women) that is elevated.

The patterns of group serving attributional biases discerned in this experiment mirror those found in several other studies, in so far, as these biases generally tended to occur with respect to the attributions made for ingroup and outgroup failure (for a review see Hewstone, 1990). More pronounced levels of attributional bias were, however, found in experiment two. The most likely explanation for this finding is that the presentation of the group membership sub-scale from Luhtanen & Crocker's (1992) collective self-esteem scale prior to the attributional tasks, may have functioned to further emphasize the salience of social category membership. Prior research has repeatedly shown that increased social identity salience can lead to exaggerated intergroup discrimination (e.g. Islam & Hewstone, 1993; Mullen, Brown & Smith, 1992).

The results of the present study indicate that self-esteem, assessed at the appropriate level of specificity, may be elevated following the display of group serving attributional bias. As such, these findings may be added to a growing body of literature linking various forms of intergroup discrimination to self-evaluation (e.g. Hunter et al., 1997; Long & Spears, 1997). This is, of course not to question the relevance of the other phenomena which are undoubtedly involved in intergroup conflict (e.g. Hogg & Abrams, 1988), to suggest that the display of group serving attributional biases will always function to enhance self-esteem (see Hewstone, 1988; Turner, Hogg, Oakes,

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Reicher & Wetherell, 1987) or indeed to imply that self-esteem is the primary psychological motive in intergroup behavior (e.g. Hogg & Abrams, 1993; Solomon, Greenberg & Pyszczynski, 1991). Rather it is, quite simply, an acknowledgement that social identity and self-evaluation processes are relevant variables in any proper account of intergroup conflict. We would conclude, nevertheless, by pointing out that the link between various forms of intergroup discrimination and those components of the self derived from social identity is more complex than that many researchers have often assumed. The research presented in the current paper goes some way in helping to explicate this relationship.

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FOOTNOTES

1. The distracter attributional tasks were identical in format to those used in the experimental and control scenarios. However, these tasks required participants to attribute cause to gender neutral targets who had succeeded and failed at mathematical and physical tasks.

2. In an attempt to ensure that participants were not simply conforming to social norms, as regards any perceived differences in the academic competencies of men and women, an independent pilot study was conducted. In this investigation, participants (N=38, 19 women and 19 men) evaluated the academic competency of women and men on a pair of 7-point Likert scales (7-competent 1-incompetent). A 2 (group membership of perceiver: men/women) x 2 (group membership of target: women/men) analysis of variance (ANOVA), with repeated measures on the last factor, was used to analyze the data. No main or interaction effects were found (both $p > .45$). This would tend to suggest that the emergence of intergroup differentiation on the (relatively more unobtrusive) attributional tasks is not the sole consequence of social norms.

3. To guard against gender bias in the naming of stimulus persons (see Kasof, 1993 for a review) a separate pilot study was conducted. Participants (N=63) evaluated the pleasantness of the male and female sex typed names that were to be used in the present study (e.g. David, Michelle). Responses were scored on a 7-point Likert scale (7-pleasant, 1-unpleasant). A repeated measures t-test revealed that there were no significant differences ($M=4.23$ v $M=4.31$, $t(62)=-.48$, $p > .63$). This indicates that the names used in the present study to denote target actors were similarly evaluated.

4. This analysis facilitates the examination of what Hewstone (1990) refers to as categorization effects.

5. Although, the group membership sub-scale is, in some respects, conceptually similar to the private collective self-esteem sub-scale (see Luhtanen and Crocker, 1992 for a review) data from two separate pilot studies found these sub-scales to be largely unrelated (N=91, $r=.06$; N=97, $r=.15$).

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