Running head: THE SELF-ESTEEM HYPOTHESIS

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Abstract

Distinctions are made between global and specific, personal and social, and trait and state self-esteem, and these are used to structure a review of over 40 studies concerning social identity theory's hypothesis that (1) intergroup discrimination elevates self-esteem and (2) low self-esteem motivates discrimination. It is observed that researchers have tended to employ measures of global personal trait self-esteem in their investigations of this self-esteem hypothesis, and it is argued that measures of specific social state self-esteem are more consistent with social identity theory's assumptions. Although no convincing evidence is found for the self-esteem hypothesis in its full and unqualified form, it is argued that this is due to a lack of specificity in its formulation and it is suggested that a more qualified and specific version of the hypothesis may be more appropriate.

Social Identity Theory's Self-Esteem Hypothesis: A Review and Some Suggestions for Clarification

Why do social groups engage in discriminatory behavior against one another? Usually, intergroup discrimination can be explained in terms of a realistic conflict of interests (see Campbell, 1965). For example, inequity in limited resources or differences in religious or political values can often be cited as legitimate causes of intergroup discrimination. However, in some cases discrimination may occur in the absence of sociological variables such as these, suggesting that they may not be necessary explanatory constructs.

Social identity theory (Tajfel & Turner, 1979; see also Hogg & Abrams, 1988) proposes that salient social categorization coupled with ingroup identification are both necessary and sufficient for intergroup discrimination to occur along a mutually valued and relevant comparison dimension. The theory explains such apparently irrational discrimination in terms of fundamental social psychological processes that may occur in addition to, as well as in the absence of, any historical, ideological, or material justification for conflict.

Social identity theory's predictions have received empirical support from studies employing the minimal group paradigm (Tajfel, Billig, Bundy, & Flament, 1971; for reviews, see Brewer, 1979; Mullen, Brown, & Smith, 1991). Here, participants are randomly and anonymously divided into two groups (e.g., "Group A" and "Group B") ostensibly on the basis of trivial or arbitrary criteria (e.g., preference for art or the toss of a coin). They are then asked to distribute a valuable resource (e.g., money or evaluative points) between other participants who are usually only identified by code number and group membership. No social interaction is allowed to occur between participants, and they are not given the opportunity to award points to themselves. These conditions are assumed to eliminate all rational motives, such as interpersonal pressures or self-interest, from the resource-distribution task. Furthermore, the minimal social content of the newly formed groups is thought to exclude the influence of any group-specific norms that might prescribe conflict.

Typically, participants in minimal group experiments have been found to allocate more money to members of the ingroup than to members of the outgroup. Notably, this intergroup discrimination is displayed even when it fails to optimize absolute ingroup rewards (e.g., Tajfel et al., 1971), suggesting that ingroup members wish to maximize ingroup profit relative to the outgroup, rather than simply accumulate as much money for the ingroup as possible.

Oakes, Haslam, and Turner (1994) have summarized five variables that social identity theory assumes to be related to the degree of intergroup discrimination displayed in the minimal group paradigm:

(1) the degree to which subjects identified with the relevant ingroup and (2)   the salience of the relevant social categorization in the setting, (3) the   importance and relevance of the comparative dimension to ingroup identity, (4) the degree to which the groups were comparable on that   dimension (similar, close, ambiguously different), including in particular, (5) the ingroup's relative status and the character of the perceived status   differences between the groups (Tajfel, 1978b; Turner, R. Brown and Tajfel,
1979; Sachdev and Bourhis, 1987). (p. 83)

One crucial variable has been excluded from this list: self-esteem. Social identity theory proposes that minimal group members discriminate in favour of their ingroup in order to imbue it with a "positive distinctiveness" (Hogg & Abrams, 1988, p. 23). The motivation behind this strategy is thought to be the desire to achieve, maintain, or enhance a positive social identity. It is assumed that, by establishing positive distinctiveness for the ingroup as a whole, ingroup members are establishing a positive social identity for themselves and hence positive self-esteem.

Hogg and Abrams (1990; see also Abrams & Hogg, 1988) have derived two informal corollaries from Turner's (1982) exposition of this assumption, and these are taken to embody the self-esteem hypothesis:

1. Successful intergroup discrimination enhances social identity and   thus elevates self-esteem. Self-esteem is a dependent variable, a   product of specific forms of intergroup behaviour.

2. Depressed or threatened self-esteem promotes intergroup   discrimination because of a need for self-esteem. Self-esteem is an   independent variable, a motivating force for specific forms of   intergroup behaviour. (p. 33)

Research investigating the self-esteem hypothesis has tended to focus on either corollary 1 (Chin & McClintock, 1993, Expt.'s 1 & 2; Gagnon & Bourhis, 1996; Hewstone, Islam, & Judd, 1993, Expt. 2; Hogg & Turner, 1985a, 1985b; Hogg, Turner, Nascimento-Schulze, & Spriggs, 1986, Expt. 1; Hunter, Platow, Howard, & Stringer, 1996; Hunter, Stringer, & Coleman, 1993; Islam & Hewstone, 1993, Expt. 2; Kelly, 1988; Mullin & Hogg, 1995; Nascimento-Schulze, 1993; Oakes & Turner, 1980; Turner & Spriggs, 1982, as cited in Lemyre & Smith, 1985; Vanbeselaere, 1991, 1996; Vickers, Abrams, & Hogg, 1985, as cited in Abrams & Hogg, 1988) or corollary 2 (Abrams, 1982, 1983, as cited in Abrams & Hogg, 1988, and Hogg & Abrams, 1990; Bourhis, 1994; Brockner & Chen, 1996; J. Brown, Collins, & Schmidt, 1988, Expt.'s 1 & 2; Crocker & Luhtanen, 1990; Crocker & Schwartz, 1985; Crocker, Thompson, McGraw, & Ingerman, 1987, Expt.'s 1 & 2; Finchilescu, 1986; Hogg & Turner, 1987; Long & Spears, 1995, as cited in Long & Spears, 1997; Long, Spears, & Manstead, 1994; Meindl & Lerner, 1984, Expt. 1; Platow, Harley, Hunter, Hanning, Shave, & O'Connell, 1997, Expt.'s 1 & 2; Ruttenberg, Zea, & Sigelman, 1996; Sachdev & Bourhis, 1984, 1985, 1987, 1991; Seta & Seta, 1992, 1996; Sidanius, Pratto, & Mitchell, 1994; Smith & Tyler, 1997, Expt. 2). Relatively few studies have attempted to address both corollaries simultaneously (Branscombe & Wann, 1994; Hogg & Morkans, 1989, as cited in Hogg & Abrams, 1990; Hogg & Sunderland, 1991; Hogg et al., 1986, Expt. 2; Lemyre & Smith, 1985; Maass, Ceccarelli, & Rudin, 1996, Expt.'s 1 & 2; Meindl & Lerner, 1984, Expt. 2; Verkuyten, 1997; Wagner, Lampen, & Syllwasschy, 1986).

There are some serious limitations with studies that examine one corollary without also investigating the other. Correlations between discrimination and self-esteem do not establish the direction of causality between the two. Hence, positive correlations between discrimination and posttest self-esteem could imply either that discrimination elevates self-esteem (as per corollary 1) or that it has no effect on self-esteem and that people with high pretest self-esteem tend to discriminate more than people with low pretest self-esteem. Similarly, negative correlations between pretest self-esteem and discrimination could be interpreted either as evidence that low pretest self-esteem motivates discrimination (as per corollary 2) or as evidence that people who engage in high levels of discrimination tend to possess low self-esteem for some other reason, perhaps even as a consequence of their discrimination.

The presence of appropriate control conditions can alleviate these interpretational problems to some extent, however, any conclusive test of the self-esteem hypothesis should ideally examine both of its corollaries simultaneously. It is not enough to show that low self-esteem promotes discrimination or that it is elevated by discrimination. The self-esteem hypothesis makes the specific predictions that low self-esteem promotes discrimination and that this discrimination then elevates self-esteem. In this sense, studies that address one aspect of the hypothesis without the other have less than half the interpretational power of those that investigate both together.

Different Types of Self-Esteem

Many researchers (Abrams & Hogg, 1988; Branscombe & Wann, 1994; Brewer & Miller, 1996; Chin & McClintock, 1993; Crocker & Luhtanen, 1990; Hogg & Abrams, 1990; Hogg & Sunderland, 1991; Hunter et al., 1996; Kelly, 1988; Long & Spears, 1997; Long et al., 1994; Wagner et al., 1986) have drawn attention to a mismatch between the type of self-esteem that is typically measured in investigations of the self-esteem hypothesis and the type of self-esteem that should be being measured according to social identity theory's assumptions. Three distinctions between different types of self-esteem help to clarify this issue. These included (a) global vs. specific self-esteem (e.g., Rosenberg, Schooler,

Schoenbach, & Rosenberg, 1995), (b) <u>trait</u> vs. <u>state</u> self-esteem (e.g., Brewer & Miller, 1996; Heatherton & Polivy, 1991), and (c) <u>personal</u> vs. <u>social</u> self-esteem (e.g., Breckler & Greenwald, 1986; Crocker & Luhtanen, 1990; Long et al., 1994; Luhtanen & Crocker, 1991, 1992).

<u>Global vs. Specific Self-Esteem</u>

Rosenberg et al. (1995) point out that, "in general, self-esteem has not proved to be an impressive predictor of behavioral outcomes" (p. 144). They suggest that this lack of predictive power may be due, in part, to researchers' ignorance of the global-specific distinction. Global self-esteem refers to the esteem in which one holds one's overall self-image, whereas specific self-esteem refers to the esteem in which one holds a particular self-image. Following Fishbein and Azjen (1975), it is argued that specific measures of self-esteem will prove to be more powerful predictors of related specific behavior than global measures (see also Crocker, Luhtanen, Blaine, & Broadnax, 1994; Dutton & Brown, 1997). In the context of the self-esteem hypothesis, measures of pretest self-esteem should therefore be made specific to the particular ingroup under investigation.

In addition, particular instances of intergroup discrimination are liable to have more of an impact on specific, rather than global, self-esteem. Hence, posttest measures should also address the ingroup involved in the discrimination. These issues of specificity are especially relevant in the minimal group paradigm, where the social categories that are employed are likely to possess only very limited significance for participants' overall self-images.

<u>Trait vs. State Self-Esteem</u>

At any given moment an individual's level of self-esteem can be divided into two separate components: trait and state self-esteem (for a related discussion, see Kline, 1993). Trait self-esteem is the product of self-evaluations that are made over a relatively long period of time, whereas state self-esteem is the product of self-evaluations carried out in the immediate present.

Traditional self-esteem scales have tended to focus on self-esteem as a fundamentally stable trait and to regard fluctuations in test-retest performance as inconvenient error variance. However, self-esteem may also be conceived as the product of a dynamic process of self-evaluation that is constantly updating previous self-attitudes according to new experiences. From this perspective, trait self-esteem is more properly regarded as the average of a series of state self-esteem values that vary across time.

When considering the self-esteem hypothesis, the trait-state distinction is important for three reasons. First, it would seem commonsense to employ state self-esteem scales when attempting to detect transitory changes in self-regard brought about through the sort of short-term discrimination that is exhibited in laboratory research. Second, as Oakes et al. (1994) noted, social identity theory makes it plain that the immediate salience of one's self-image as an ingroup member influences the degree of subsequent discrimination. This implies that self-esteem should be addressed in the here and now of the experimental context, rather than across time (see Long & Spears, 1997). Third, in the case of the minimal group paradigm social categorizations are more likely to have an impact on state, rather than trait, self-esteem because participants perceive their group membership to be new and transient (see Hogg & Sunderland, 1991).

<u>Personal vs. Social Self-Esteem</u>

The distinction between personal and social self-esteem is the most important from a theoretical perspective because it reflects the distinction between personal and social identity that is so crucial to social identity theory's nonreductionist account of intergroup behavior. Social identity theory proposes that group members engage in intergroup discrimination in order to achieve, maintain, or enhance the positive distinctiveness of their social identity. In other words, group members are motivated to manage their <u>social</u> self-esteem: the esteem in which they hold the shared self-image that constitutes their social psychological ingroup. The notion of social self-esteem involves a redefinition of self-esteem at the group level as an attitude concerning a collective self-image. This

reconceptualization of self-esteem leaves it commensurate with social identity theory's group-level concept of positive distinctiveness and reinforces the idea that group members are striving for positive self-esteem as ingroup members, rather than as individuals.

To misinterpret the self-esteem hypothesis in terms of personal self-esteem would be to recast social identity theory as an individualistic theory of intergroup behavior (for a discussion, see Long & Spears, 1997). Reductionist theories of this type argue that the social group is no more than an aggregation of separate individuals who behave as a group in order to satisfy their own individual needs and motives (for a discussion, see Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Although this notion of functional interdependence may provide a plausible account of intergroup discrimination at the interpersonal level, it has difficulty explaining discrimination that occurs in the absence of interpersonal contact, such as in the minimal group paradigm. Consequently, it is important to differentiate this personal self-esteem hypothesis from social identity theory's social self-esteem hypothesis.

The various types of self-esteem discussed above (i.e., global vs. specific, personal vs. social, and trait vs. state) can be combined to form eight conceptually separate forms of self-esteem. Example items are presented for each type of self-esteem in Table 1.[1]

-- Insert Table 1 about here --

Different Types of Self-Esteem Scale

It seems clear that a fair test of the self-esteem hypothesis can only be accomplished using measures of specific social state self-esteem. However, there has been some disjuncture between theory and research in this respect, and this may be attributed to the lack of appropriate self-esteem scales that are currently available.

Most self-esteem scales tend to focus on global personal trait self-esteem (e.g., Julian, Bishop, & Fiedler's, 1966, evaluative dimension of the semantic differential scale, JBF; Kuhn & McPartland's, 1954, Twenty Statements Test,[2] TST; Rosenberg's, 1965, Self-Esteem Scale, RSES; Sherwood's, 1962, Self-Concept Inventory, as cited in Blascovich & Tomaka, 1991). Some scales have been designed to measure the trait self-esteem connected with specific areas of one's personal identity (e.g., Helmreich & Stapp's, 1974, Texas Social Behaviour Inventory,[3] as cited in Blascovich & Tomaka, 1991; Marsh & O'Neill's, 1984, Self-Description Questionnaire III, as cited in Hunter et al., 1996). A few scales purport to tap global personal state self-esteem (Gergen's, 1962, Self-Valuation Triads test, as cited in Major, Sciacchitano, & Crocker, 1993; Heatherton & Polivy's, 1991, State Self-Esteem Scale).

Only one scale has attempted to address social self-esteem: Luhtanen and Crocker (1992) have developed and tested (Crocker & Luhtanen, 1990) a scale designed to measure global social trait self-esteem. The Collective Self-Esteem Scale (CSES) consists of four 4-item subscales assessing membership esteem (self-evaluation as an ingroup member), identity esteem (evaluation of the subjective importance of the ingroup), public self-esteem (perceptions of other's evaluations of the ingroup), and private self-esteem (self-evaluation of the ingroup as a whole).

The CSES has been shown to have significant but low correlations with global personal trait self-esteem (measured using RSES), "suggesting that although collective and personal self-esteem are related, the two constructs are relatively distinct empirically as well as conceptually" (Luhtanen & Crocker, 1991, p. 223). Although this may be true, the scale does not qualify as the ideal instrument for testing the self-esteem hypothesis (for a discussion, see Long & Spears, 1997).

The first problem with the CSES relates to its content. As Luhtanen and Crocker (1992) readily admit, only the private subscale approaches the conceptualization of social self-esteem implied by social identity theory. The remaining three subscales focus on interpersonal evaluations of belonging, importance, and respect by others. Consequently, for the purposes of testing the self-esteem hypothesis the 16-item CSES actually reduces to a 4-item subscale. The small size of this subscale is bound to render it relatively insensitive.

A second problem with the CSES is that it is designed to assess trait, rather than state, self-esteem. This makes it unsuitable for detecting the type of short-term changes in self-esteem that may occur as a result of discrimination (see Maass et al., 1996).

Finally, the scale's instructions require participants to consider their "gender, race, religion, nationality, ethnicity and socioeconomic class" (Luhtanen & Crocker, 1992, p. 305, italics in the original) simultaneously while responding to each item. Presuming that participants possess the cognitive capacity to accomplish this rather complex task, the scale should theoretically provide a measure of global, rather than specific, social self-esteem. Crocker et al. (1994) argue that the global nature of the CSES makes it possible to apply it to new groups, such as those created in the minimal group paradigm, however, it is difficult to understand how global social self-esteem might relate to any specific instance of intergroup behavior. As Abrams (1992) remarks, "there is no logical reason why evaluations of all of one's social-group memberships should be equally positive, or that positive regard of several implies positive esteem of any particular one" (p. 65).

To be fair, Luhtanen and Crocker (1992) point out that their scale is flexible enough to be adapted to address specific ingroups without compromising its psychometric properties. Some research can attest to the scale's psychometric robustness in this respect (Crocker et al., 1994; Ethier & Deaux, 1990; Long et al., 1994; Phinney, Chavira & Tate, 1993; Ruttenberg et al., 1996; Verkuyten, 1997).

All in all then, the private subscale of the CSES aims to elicit a global evaluation of many different ingroups across time, rather than an immediate evaluation of a specific salient ingroup. To our knowledge, no purpose-built measures of either specific social trait or specific social state self-esteem exist.

Collating the Evidence

More than 20 studies have addressed the self-esteem hypothesis since the first major review in this area (Abrams & Hogg, 1988; see also Hogg & Abrams, 1990) and although subsequent minor reviews have dealt with some of this new evidence (e.g., Abrams, 1992; Crocker et al., 1993; Long & Spears, 1997), they have not attempted to evaluate old and new evidence together. The aim of this article is to provide a comprehensive review of research relevant to the self-esteem hypothesis.

Content and Structure of the Review

We had some reservations about evaluating evidence relating to corollary 2 that relies on differential group status. Social identity theory predicts that members of low status groups will have relatively low specific social self-esteem, and they should therefore possess greater motivation to engage in intergroup discrimination than members of high status groups (see Hinkle & Brown, 1990). However, some researchers have expressed concerns about equating status with self-esteem too readily (Abrams & Hogg, 1988; Crocker et al., 1993; Hogg & Sunderland, 1991).

Status hierarchies between ingroups and outgroups are usually anchored by relatively objective criteria (e.g., money or power). Consequently, there is likely to be relatively little variability between different group members' perceptions of ingroup and outgroup status. In contrast, specific social self-esteem derives from subjective satisfaction with an ingroup and is likely to be far more variable between members of the same group. The attitude that one holds about a given ingroup may be influenced by others' attitudes about that group, however, it will also retain a fair amount of independence from these attitudes. Hence, even members of low status groups can possess high specific social self-esteem (for a review, see Crocker & Major, 1989). Consequently, there is theoretical grounding for treating specific social self-esteem as separate from ingroup status. We therefore decided to discount evidence relating to corollary 2 that relies on differential group status (exclusions include Bourhis, 1994; J. Brown et al., 1988, Expt. 2; Crocker & Luhtanen, 1990; Finchilescu, 1986; Platow et al., 1997, Expt. 1; Sachdev & Bourhis, 1984, 1985, 1987, 1991; for a review of other unequal status group studies, see Sachdev & Bourhis, 1987).[4]

We also viewed evidence depending on normative discrimination as being potentially problematic. Normative discrimination refers to discrimination that is prescribed by explicit

or implicit cues embodied in the intergroup situation. So, for example, discrimination that occurs between two groups that have a long history of conflict can be treated as being relatively normative because it is prescribed by previous intergroup relations.

Turner (1980) argues that normative discrimination merely reflects the status quo of the current intergroup situation and so does not represent genuine social competition (see Turner, 1975). In contrast, what we will call competitive discrimination (i.e., socially competitive discrimination) operates against intergroup norms to bring about social change vis-à-vis positive ingroup distinctiveness. The self-esteem hypothesis only really applies to competitive discrimination. Normative discrimination is not thought to be linked to identity-contingent self-esteem (see Abrams & Hogg, 1988; for a related discussion, see Nascimento-Schulze, 1993).

It remains possible, however, that normative discrimination provides a way of satisfying the need for positive self-esteem independent of social identity theory's positive distinctiveness explanation. The self-satisfaction derived from "doing the right thing" by complying with relevant intergroup norms may enhance self-esteem (cf. corollary 1; for a discussion, see Hogg et al., 1986). Furthermore, group members who possess low self-esteem may be motivated to exhibit greater normative discrimination in anticipation of this enhancement (cf. corollary 2).

Considering that the need for positive self-esteem may motivate, and be satiated by, both competitive and normative discrimination, evidence involving normative discrimination should theoretically be discounted from this review in order to reduce the risk of accepting false evidence in favour of the self-esteem hypothesis. However, most cases of intergroup conflict are likely to contain both forms of discrimination in varying degrees, and it is difficult to say with any certainty that one form has taken precedence over the other. For example, competitive discrimination may predominate between groups that have a history of conflict if, for some reason, group members perceive the intergroup situation to be relatively insecure and amenable to social change. Consequently, we decided to include evidence deriving from intergroup situations in which normative discrimination was possible, on the assumption that it was not inevitable. However, we also decided to treat this evidence separately from that deriving from situations in which competitive discrimination was most probable in order to provide a clearer picture of both sets of evidence.

Hence, the following review is divided into two sections. The first section deals with experiments in which normative discrimination is unlikely to occur (e.g., discrimination between groups of equal status, such as in the standard minimal group paradigm). The second section contains evidence that derives from experiments that may confound competitive discrimination with normative discrimination (e.g., discrimination between groups of unequal status, such as most real groups). In each section, supportive and unsupportive evidence for each corollary of the self-esteem hypothesis is presented in turn, followed by studies that address both corollaries simultaneously.[5]

Evidence For and Against the Self-Esteem Hypothesis
Evidence based on Competitive Discrimination

Corollary 1

Supportive Evidence. Oakes and Turner (1980) conducted the first test of corollary 1. Participants were randomly assigned to one of two minimal groups ostensibly on the basis of their preference for abstract paintings by Klee and Kandinsky. Participants in the experimental condition then completed an intergroup points-distribution task while those in the control condition read a newspaper article about arranged marriages. All participants then completed a composite posttest measure of global personal state self-esteem containing items from the TST, JBF, and RSES (see previous).

Significant intergroup discrimination occurred in the experimental condition. Furthermore, participants in the experimental condition reported significantly higher posttest self-esteem than those in the control condition. This result was reliable on the TST and JBF, but not the RSES. The researchers concluded that "minimal intergroup discrimination does tend to increase self-esteem" (p. 299). However, they were also aware of a number of

other explanations that may have accounted for their findings, and it is worth considering these in some detail because they provide a useful framework within which to evaluate later studies.

First, Oakes and Turner suggested that the minimal group paradigm might contain implicit <u>demand characteristics</u> (Orne, 1962) that goad participants into exhibiting intergroup discrimination. Hence, it could be argued that discrimination is an artefact of the experimental situation rather than a genuine social psychological phenomenon. Furthermore, according to this demand characteristics hypothesis, the elevated self-esteem reported in the experimental condition may be attributed to the self-satisfaction that participants derive from "doing well" in the experiment by complying with its implicit goal of eliciting discriminatory behavior (for a discussion, see Hogg et al., 1986).

In their defence against this explanation, Oakes and Turner cite unpublished work by St. Claire (1979, later published in St. Claire & Turner, 1982) that, in their opinion, contradicts the demand characteristics hypothesis. However, Berkowitz (1994) has recently subjected St. Claire and Turner's (1982) study to criticisms that seem to refute their original conclusions and hence to revive the demand characteristics debate (see R. Brown, 1986; Farsides, 1993; Hartstone & Augoustinos, 1995; Schiffmann & Wicklund, 1992; Tajfel et al., 1971). Consequently, compliance with demand characteristics and the concomitant increase in self-regard associated with this compliance remain tenable explanations of discrimination and differential self-esteem in the minimal group paradigm.

Second, Oakes and Turner (1980) proposed that the constant reference to group memberships made throughout the intergroup points-distribution task may have increased the salience of participants' social identity. It is argued that this increase in salience could have elevated self-esteem in the experimental condition independent of any effects of discrimination.

Subsequent research has been unsupportive of this salience per se hypothesis. Hogg et al. (1986, Expt.'s 1 & 2) categorized participants as minimal group members either explicitly or implicitly (using a similar procedure to Oakes & Turner, 1980) and then asked them to complete an intergroup points-distribution task. Both explicitly and implicitly categorized participants engaged in significant intergroup discrimination and showed higher global personal state self-esteem (measured using Oakes & Turner's, 1980, method) than those who had not discriminated, suggesting that category salience was not a significant factor in determining posttest self-esteem.

Further evidence against the salience per se hypothesis comes from Lemyre and Smith (1985) who compared the posttest global personal state self-esteem of participants who had completed a standard intergroup points-distribution task with that of participants who had completed intra-ingroup and intra-outgroup versions. It was reasoned that if the elevation of self-esteem was brought about as a sole consequence of the salience-enhancing properties of the points-distribution task, then participants in these three conditions would not differ significantly in terms of their posttest self-esteem. In fact, participants in the intergroup condition reported significantly higher self-esteem than those in the intragroup conditions, suggesting that intergroup discrimination elevated self-esteem over and above any effects caused by increased salience.

A third criticism is that the tasks in Oakes and Turner's (1980) experimental and control conditions were of unequal psychological significance. Hence, it is possible that participation in a psychology experiment may have led to an increase in self-esteem for people in the experimental condition (see Lemyre & Smith, 1985). Alternatively, the task of reading a newspaper may have led to a decrease in self-esteem for people in the control condition (see Abrams & Hogg, 1988).

A fourth criticism relates to the effects of minimal social categorization independent of discrimination. Lemyre and Smith (1985) found that the self-esteem reported by participants immediately after they had been categorized as minimal group members was lower than that reported by uncategorized participants. They proposed that this difference may either be because categorization represented a threat to personal identity or because

participants experienced more uncertainty about the purpose of their categorization relative to those who went on to employ it during the points-distribution task. Both possibilities are applicable to the categorized participants in Oakes and Turner's control condition.

Messick and Mackie (1989) have pointed out that "if minimal categorization creates a challenge to self-esteem, and if intergroup bias is a consequence of that threat, the generalisability of studies using such categorization manipulations will be severely restricted" (p. 60). However, additional evidence concerning Lemyre and Smith's (1985) categorization-depression hypothesis is equivocal, with some studies finding no support (Chin & McClintock, 1993) and others finding support but with qualifications (Hogg & Turner, 1987; Vanbeselaere, 1991; Wagner et al., 1986).

Finally, the psychometric properties of Oakes and Turner's (1980) self-esteem measure can be brought into question. This composite scale included items from three separate scales presented in a random order. As Abrams and Hogg remark, "the consequences of this are difficult to predict, but it is unlikely that the validity of any of the scales remained intact" (p. 319).

Furthermore, Oakes and Turner instructed participants to respond in terms of how they felt in the immediate situation in an effort to tap state, rather than trait, self-esteem. Again, there is a distinct possibility that this procedure compromised the validity of the scales concerned. For example, in the RSES participants were asked to indicate the degree to which they agreed or disagreed with the statement "at times I think I am no good at all", however, they were also instructed to respond in terms of how they felt "right now". These conflicting demands may have confused participants and led to a mixture of state- and trait-oriented responses.

Further evidence that competitive discrimination elevates self-esteem comes from other minimal group experiments. Mullin and Hogg (1995) found that minimal group members who had been categorized on an explicitly random basis reported higher levels of global personal state self-esteem (measured using a single item) after completing an intergroup points-distribution task than uncategorized participants who had completed an interpersonal points-distribution task. Similarly, Hogg et al. (1986, Expt. 1) found that minimal group members who had engaged in intergroup discrimination reported higher levels of global personal state self-esteem (TST, JBF, and RSE combined) than those who had not discriminated.

Chin and McClintock (1993) have put forward social value theory as an alternative to social identity theory in order to account for increments in self-esteem following discrimination. Social value theory proposes that individuals can be classified as possessing either prosocial or competitive social value orientations. During interpersonal points-distribution, prosocial individuals tend to minimize the difference between allocations made to the self and others, whereas competitive individuals tend to maximize this difference.

Chin and McClintock (1993) propose that behavior that is congruent with one's social value orientation provides an important source of self-esteem. Consequently, they argue that increments in self-esteem following minimal intergroup discrimination may be attributed to a consistency between intergroup behavior and a competitive interpersonal social value orientation. This is quite different from social identity theory's explanation, which accounts for elevated posttest self-esteem in terms of intergroup, rather than interpersonal, processes. This theoretical discrepancy is highlighted by Chin and McClintock's additional predictions that individuals who possess a prosocial orientation will experience higher self-esteem following fair intergroup behavior but lower self-esteem following discrimination.

In a test of these predictions (Chin & McClintock, 1993, Expt. 1), prosocial and competitive individuals (classified according to pretest data obtained weeks beforehand) took part in a minimal groups experiment. Participants were categorized using the Klee-Kandinsky procedure (see Oakes & Turner, 1980) before completing an intergroup points-distribution task that either required them to be fair, to be discriminatory, or allowed them to choose either strategy freely. In a fourth condition, participants were categorized but did not

discriminate, and in a fifth, baseline, condition participants were neither categorized nor given the opportunity to discriminate. Posttest global personal state self-esteem was measured using the RSES, JBF, and the Self-Concept Inventory (see previous) combined.

Competitive participants engaged in significantly more discrimination than prosocial participants in the free-choice condition, supporting the hypothesis that interpersonal social value orientation influences intergroup behavior. Furthermore, there was a significant interaction between forced points-distribution strategy (i.e., fairness vs. discrimination) and social value orientation (i.e., prosocial vs. competitive) in terms of self-esteem. However, although secondary analyses revealed the self-esteem of competitive individuals to be significantly higher than that of prosocial individuals in the forced discrimination condition, it was not significantly lower in the critical forced fairness condition. These results therefore seem more in line with corollary 1 of the self-esteem hypothesis than with social value theory. It is also interesting to note that, contrary to Lemyre and Smith's (1985) categorization-depression hypothesis, Chin and McClintock found no difference in self-esteem between categorized and uncategorized participants who did not discriminate.

In a second experiment, Chin and McClintock (1993, Expt. 2) used a posttest measure of global social self-esteem (CSES, presumably in its trait form) in place of personal state measures. Again, self-esteem was found to be higher following forced discrimination than forced fairness or no discrimination. Notably, this effect did not interact with social value orientation.

Vanbeselaere (1991) categorized participants randomly, but ostensibly on the basis of the degree to which each of two pictures (scenes of a seashore and a forest) made the stronger impression on them. Participants then completed a perceptual ability task, estimating the lengths of lines, before proceeding to evaluate the performance of each group in this task. Both pre- and post-test global personal state self-esteem (JBF) were measured immediately before and after discrimination using a between-subjects design.

Significant intergroup discrimination occurred and, consistent with corollary 1, posttest self-esteem was significantly higher than pretest self-esteem. It was also found that the posttest self-esteem reported by categorized participants who had discriminated was equivalent to that reported by uncategorized participants who had not discriminated, adding support to Lemyre and Smith's (1985) categorization-depression hypothesis.

Interestingly, participants who were categorized simultaneously as members of two groups reported higher pretest self-esteem than those who had only been categorized as single-group members. Reductions in self-esteem resulting from the imposition of minimal social categorizations do not, therefore, appear to occur in an additive fashion.

Finally, Gagnon and Bourhis (1996) categorized participants on an explicitly random basis (the toss of a coin) before asking them to complete an intergroup points-distribution task. Ingroup identification (single item) and specific social state self-esteem (five items tapping feelings about group membership) were then measured. In line with corollary 1, a regression analysis found that discrimination significantly predicted positive self-esteem. Additional regression analyses suggested that this association was only relevant insofar as participants identified with the ingroup.

Unsupportive Evidence. Three studies of competitive discrimination have found unsupportive evidence for corollary 1 (Hogg & Morkans, 1989, see later; Hogg & Sunderland, 1991, see later; Hogg & Turner, 1985a). Hogg and Turner (1985a) categorized participants as members of two minimal groups on an explicitly random basis and then asked them to complete the usual intergroup points-distribution task. Although significant discrimination occurred during this task, it was unrelated to posttest global personal trait self-esteem (RSES).

Corollary 2

Supportive Evidence. Only two studies of competitive discrimination have found supportive evidence for corollary 2 (Hogg & Sunderland, 1991, see later; Platow et al., 1997, Expt. 2). Platow et al. (1997, Expt. 2) categorized participants using the Klee-Kandinsky procedure before measuring their global personal state self-esteem (JBF) and

specific social state self-esteem (using two items focusing on relative ingroup worth). Participants then completed a standard intergroup points-distribution task.

A significant interaction between personal and social self-esteem was obtained in terms of discrimination. Participants who possessed high personal and low social self-esteem and participants who possessed low personal and high social self-esteem both engaged in significant discrimination, whereas those who possessed high or low levels of both forms of self-esteem did not. However, follow-up analyses revealed that participants with high personal and low social self-esteem discriminated more than those with high personal and high social self-esteem. This evidence lends support to the conceptual distinction between global personal and specific social self-esteem and provides limited support for corollary 2 vis-à-vis individuals who possess high personal self-esteem.

Unsupportive Evidence. Eight experiments have found that, in direct opposition to corollary 2, high pretest self-esteem is associated with greater competitive discrimination (Abrams, 1982, 1983, as cited in Abrams & Hogg, 1988, and Hogg & Abrams, 1990; Brockner & Chen, 1996; Crocker & Luhtanen, 1990; Crocker et al., 1987; Seta & Seta, 1992, 1996; Sidanius et al., 1994). Abrams (1982, as cited in Abrams & Hogg, 1988, and Hogg & Abrams, 1990) found that pretest global personal trait self-esteem (RSES) correlated positively with intergroup evaluative bias, reward bias, and trait differentiation. This last association for trait differentiation was replicated in a subsequent study (Abrams, 1983, as cited in Abrams & Hogg, 1988, and Hogg & Abrams, 1990).

Crocker et al. (1987, Expt. 1) categorized participants as minimal group members on an explicitly random basis by asking them to draw lottery tickets that designated group membership. Participants then completed a measure of global personal trait self-esteem (RSES). Specific personal state self-esteem was then manipulated across participants via false positive or negative feedback concerning individual performance on a personality test.

Participants showed significant intergroup discrimination on a series of evaluative traits but this was unrelated to global personal trait self-esteem. Furthermore, no significant differences in discrimination were found between participants who had received positive feedback and those who had received negative feedback. The authors concluded that "the extent of ingroup favouritism shown by subjects in a minimal intergroup situation may be unrelated to needs for self-enhancement as operationlized by either trait self-esteem or transient threats to the self-concept" (p. 911).

Participants in Crocker et al.'s (1987, Expt. 1) study went on to rate above- and below-average personality test scorers. Although, overall, above-average scorers were rated more positively than below-average scorers, participants who received failure feedback tended to be significantly more generous in their ratings of below-average scorers than participants in a no feedback control condition. It can be argued that, since the category of "below-average scorers" represented an ingroup for participants who received failure feedback, these findings represent ingroup favouritism.[6] Furthermore, since this ingroup favouritism was found to be significantly more pronounced for participants who possessed high global personal trait self-esteem, these results contradict corollary 2.

In a partial replication of Crocker et al. (1987, Expt. 1), Brockner and Chen (1996) found that American participants with high global personal trait self-esteem (measured on the Revised Janis-Field Self-Esteem Scale; Eagly, 1967, as cited in Brockner & Chen, 1996) showed greater discrimination following negative feedback than those with low self-esteem. This interaction between high global personal trait and low specific personal state self-esteem was not found to be significant for participants from the People's Republic of China, suggesting it to be specific to certain cultures.

Seta and Seta (1992) modified Crocker et al.'s (1987, Expt. 1) design such that in a participant condition minimal group members received false feedback concerning the average personality test performance of the minimal ingroup and outgroup taking part. They were informed either that both groups had failed, both groups had succeeded, the ingroup had failed and the outgroup had succeeded, or the outgroup had failed and the ingroup had succeeded. Following this feedback, participants evaluated the test

performance of the ingroup and outgroup on a set of traits. In an <u>observer</u> condition people only read through the personality test before evaluating the performance of two minimal groups to which they did not belong. Like Crocker et al.'s (1987, Expt. 1) no feedback condition, this control condition provided a measure of baseline (i.e., normative) discrimination against which the degree of competitive discrimination could be gauged. The global personal trait self-esteem (RSES) of all participants was measured prior to test feedback.

Ingroup and outgroup evaluations did not differ significantly following either ingroup failure or outgroup success feedback for <u>participants</u>, but they did differ significantly and in a direction consistent with each type of feedback for <u>observers</u>. Hence, a rather passive, but viable, form of discrimination occurred among participants compared with observers.

<u>Participants</u> who possessed high personal self-esteem exaggerated the difference between their evaluative ratings of the ingroup and outgroup significantly in the condition where the ingroup succeeded and the outgroup failed. In contrast, <u>participants</u> who possessed low personal self-esteem seemed to exhibit an outgroup-favouring bias under these conditions. These results, which were replicated in a subsequent study (Seta & Seta, 1996), are contrary to corollary 2, which predicts that individuals with low self-esteem will show the greatest polarization of ratings in favour of the ingroup.

Crocker and Luhtanen (1990) also ran an experiment similar to Crocker et al. (1987, Expt. 1) and found significant discrimination between minimal group members, but no significant relationship between this discrimination and either pretest global personal trait self-esteem (RSES) or global social trait self-esteem (the private subscale of the CSES).

Sidanius et al. (1994) conducted a minimal groups experiment in which participants were randomly divided into "overestimators" and "underestimators", ostensibly on the basis of their performance on a dot-estimation task. Participants then rated each group along the dimensions of "able", "intelligent", "stupid", and "incompetent" as well as rating how willing they were to engage in cooperative or competitive tasks with the outgroup in the future. Pretest global personal trait self-esteem (RSES) was measured prior to categorization.

It was found that "the higher the subjects' level of trait self-esteem, the greater the difference in perceived competence between ingroup and outgroup [in favour of the ingroup] and the less willing subjects were to cooperate than to compete with the outgroup" (p. 161). Again, these results would appear to be the opposite of those predicted by corollary 2.

Two studies of competitive discrimination report evidence that people with low global personal trait self-esteem do not discriminate more than those with high self-esteem (J. Brown et al., 1988, Expt. 1; Crocker & Schwartz, 1985). Crocker and Schwartz (1985) have found that people with low trait self-esteem report more negative evaluations of others in general but do not engage in intergroup discrimination more than those with high self-esteem. Participants were asked to complete a measure of global personal trait self-esteem (RSES) before being categorized as minimal group members via the lottery ticket procedure (see Crocker et al., 1987, Expt. 1). Participants then indicated their expectations about the personalities of ingroup and outgroup members on five positive and five negative evaluative traits.

Intergroup discrimination only occurred on positive evaluative traits and was not associated with self-esteem. Instead, participants with low self-esteem rated both ingroup and outgroup members more negatively than did those with high self-esteem. Similar results have been obtained by Crocker et al. (1987, Expt. 1) and Crocker and Luhtanen (1990).

J. Brown et al. (1988, Expt. 1) provide evidence to suggest that people with different levels of pretest global personal trait self-esteem differ in the type, rather than the extent, of discrimination that they display. Participants completed a measure of global personal trait self-esteem (the Texas Social Behaviour Inventory, see previous) before being categorized as "overestimators" or "underestimators" using the dot-estimation procedure (see Sidanius et al., 1994). Half of the underestimator group and half of the overestimator group were

then taken into a different room. Participants in each room completed a brainstorming task during which their group had to suggest different applications for a fly swatter. They then rated solutions to this task provided by the ingroup and outgroup from only one of the rooms. This meant that participants rated ingroup solutions to which they had personally contributed in one room, while in the other room participants rated ingroup solutions to which they had not contributed. Hence, the design consisted of a 2 (origin of target solution: same room vs. different room) x 2 (target group solution: ingroup vs. outgroup) mixed design with repeated measures on the last factor.

People who had high self-esteem engaged in significant discrimination in the same room condition but not in the different room condition. In other words, people with high self-esteem discriminated between ingroup and outgroup solutions when they had personally contributed to the ingroup's solutions but not when they had not contributed to these solutions. The opposite pattern was found for people who had low self-esteem: Significant discrimination occurred in the different room condition, but not in the same room condition. Furthermore, these results were due to significant differences in ingroup favouritism for people with high self-esteem and significant differences in outgroup derogation for people with low self-esteem.

The researchers concluded that people with high self-esteem seem to prefer relatively direct methods of self-enhancement (i.e., ingroup favouritism and discrimination directly linked to the self) whereas those with low self-esteem tend to opt for more indirect methods (i.e., outgroup derogation and discrimination that is only tacitly linked to the self). This study should be held as being unsupportive of corollary 2, which implies a clear distinction between individuals with high and low pretest self-esteem in terms of the degree of discrimination they subsequently display.

Experiments Addressing Corollaries 1 and 2 Simultaneously

Four studies of competitive discrimination have tested the self-esteem hypothesis in its entirety (Hogg & Morkans, 1989, as cited in Hogg & Abrams, 1990; Hogg et al., 1986, Expt. 2; Hogg & Sunderland, 1991; Lemyre & Smith, 1985). Lemyre and Smith (1985) designed the most carefully controlled test of the self-esteem hypothesis to date. Their minimal groups experiment controlled for the effects of categorization per se, points-distribution per se, and any interaction between the two in terms of increased group salience.

The core of the experiment consisted of a 2 (categorization: present vs. absent) x 2 (points-distribution task: interpersonal vs. intergroup) between-subjects design. Categorization was operationalized using the lottery ticket procedure. Pre- and post-test global personal state self-esteem were measured immediately before and after discrimination in a between-subjects design using a composite scale consisting of the RSES, JBF, the Self-Concept Inventory, a single direct measure of self-esteem, and a half-length version of the TST.

A regression analysis on a composite index of all five self-esteem scales showed that the posttest self-esteem of categorized participants was significantly predicted by intergroup discrimination, adding support to corollary 1. Contrary to corollary 2, however, a similar regression analysis revealed no significant relationship between categorized participants' pretest self-esteem and their subsequent discrimination.

Importantly, pretest self-esteem was found to be significantly lower for categorized participants than for uncategorized participants on all the self-esteem measures apart from the Self-Concept Inventory and the direct single item, suggesting that categorization per se depressed self-esteem (see previous). Furthermore, although the posttest self-esteem of categorized participants who had discriminated was found to be significantly higher than their pretest self-esteem, it was at an equivalent level to the pretest self-esteem of uncategorized participants. Taken together, this evidence can be taken to support corollary 1, but with an important caveat: Intergroup discrimination does seem to elevate self-esteem relative to its level immediately after minimal social categorization, but only to the level it was at immediately before this categorization.

Hogg and Sunderland (1991) and Hogg and Morkans (1989, as cited in Hogg & Abrams, 1990) have conducted two very similar studies. Hogg and Sunderland (1991) manipulated specific personal state self-esteem across participants using bogus feedback on a word association task to produce success and failure conditions. Minimal group members (categorized on an explicitly random basis) and uncategorized participants then completed an intergroup points-distribution task. Global personal state self-esteem (JBF) was measured immediately before and after this task using a between-subjects design.

In support of corollary 2, categorized participants who received negative feedback about their performance on the word association task exhibited significantly greater discrimination than those who received positive feedback. However, contrary to corollary 1, "greater intergroup discrimination was not associated with higher post-test levels and/or significant increase [sic] in transitory self-esteem" (p. 58).

In contrast to this study, Hogg and Morkans (1989, as cited in Hogg & Abrams, 1990) found no significant difference in discrimination between success and failure conditions. There was a slight tendency for posttest global personal state self-esteem (JBF) to be higher under failure than success conditions, however, since this difference was not accompanied by differential levels of discrimination, it cannot be taken as evidence in favour of corollary 1 (see Hogg & Abrams, 1990).

Finally, Hogg et al. (1986, Expt. 2) found no evidence for corollary 2 and limited evidence for corollary 1. In this minimal groups experiment, pretest global personal trait self-esteem and posttest global personal state self-esteem were measured within-subjects using TST, JBF, and RSES.

Contrary to corollary 2, high and low pretest trait self-esteem individuals did not differ significantly in the extent of their discrimination. Only participants with low pretest trait self-esteem reported significantly higher posttest state self-esteem than participants in a control condition who had not discriminated. Participants with high pretest trait self-esteem did not differ significantly from those in the control condition in terms of their posttest state self-esteem. This evidence may be treated as being supportive of corollary 1 on the understanding that it only relates to certain types of individuals, namely people with low pretest trait self-esteem.

Summary

Table 2 sets out the supportive and unsupportive competitive discrimination evidence for each corollary of the self-esteem hypothesis, grouping studies according to the type of self-esteem that was measured or manipulated.[7] 9 experiments are supportive and 3 are unsupportive of corollary 1, whereas 3 experiments are supportive and 16 are unsupportive of corollary 2. This lead us to the cursory conclusion that competitive discrimination enhances self-esteem but is not motivated by depressed self-esteem.

-- Insert Table 2 about here --

Evidence based on Competitive and/or Normative Discrimination

Corollary 1

Supportive Evidence. Turner and Spriggs (1982, as cited in Lemyre & Smith, 1985) conducted a minimal groups experiment in which cooperative and competitive instructions were manipulated orthogonally with interpersonal and intergroup points-distribution in a between-subjects design. Posttest global personal trait self-esteem was measured using the TST, JBF, and RSES.

As expected, the greatest discrimination occurred in the condition containing competitive instructions and intergroup points-distribution. Furthermore, self-esteem was significantly higher on the RSE and JBF under competitive conditions than under cooperative conditions.

As Lemyre and Smith (1985) note, it is difficult to draw any firm conclusions from this study because the competitive-cooperative manipulation confounds the experimental design: Self-esteem may have been elevated by either intergroup discrimination per se or by the effects of competitive instructions independent of discrimination. It is also possible that the competitive instructions interacted with social categorization to produce normative

discrimination, and this may have elevated self-esteem independent of competitive discrimination. Aside from these criticisms, this evidence can be read as being consistent with corollary 1.

Further support for corollary 1 comes from experiments employing more meaningful social categorizations. Hewstone et al. (1993, Expt. 2) found significant intergroup discrimination between Muslim (majority) and Hindu (minority) participants on a series of nonstereotypical evaluative traits. Furthermore, a regression analysis of posttest global personal state self-esteem (JBF) on target group evaluations found that, consistent with corollary 1, self-esteem was relatively enhanced by higher evaluations of the religious ingroup and lower evaluations of the religious outgroup.

A relatively subtle test of corollary 1 has been proposed by Hewstone (1990). Drawing from Pettigrew (1979), it is predicted that the attribution of positive ingroup behavior and negative outgroup behavior to internal causes serves to enhance self-esteem. Conversely, the attribution of negative ingroup behavior and positive outgroup behavior to external causes is thought to protect self-esteem.

In a test of these predictions, Islam and Hewstone (1993, Expt. 2) asked Muslim students to attribute the cause of an actor's behavior in a series of vignettes using a 2 (actor's religion: ingroup vs. outgroup) x 2 (actor's nationality: ingroup vs. outgroup) x 2 (actor's behavior: positive vs. negative) between-subjects design. This created four different group memberships for the actor (double ingroup, double outgroup, and two crossed groups; for a discussion, see Hewstone et al., 1993). Posttest global personal state self-esteem (JBF) was measured immediately after these attributions.

A regression analysis found that internal attributions made for the positive behavior of double ingroup members significantly predicted high self-esteem. In addition, external attributions made for the positive behavior of one of the two crossed groups also predicted high self-esteem. Assuming, in line with social identity theory, that this crossed group was perceived to be an outgroup (for a discussion, see R. Brown & Turner, 1979), this evidence seems congruent with corollary 1.

Hogg and Turner (1985b) categorized participants according to perceived interpersonal similarity and group distinctiveness and then asked them to take part in an intergroup points-distribution task. A principal component factor analysis found that posttest self-esteem (measured using a single item, presumably addressing global personal trait self-esteem) emerged as a weak factor that loaded on intergroup discrimination, providing support for corollary 1.

Finally, three real group studies that focus on corollary 1 have found limited supportive evidence (Hunter et al., 1996; Kelly, 1988; Vanbeseleare, 1996). Kelly (1988) measured intergroup differentiation between the supporters of various political parties in terms of perceived intragroup heterogeneity in favour of the ingroup, sympathy with the outgroup's views, and desire for close contact with the outgroup. Posttest global personal self-esteem was measured using the TST, JBF, and RSES (presumably in their trait forms).

No significant correlations occurred between intergroup differentiation and self-esteem as measured by either the TST or JBF. Data from the RSES indicated that there were significant positive correlations between the degree of perceived intragroup heterogeneity favouring the ingroup and self-esteem for Conservative supporters. Similar correlations occurred between all three measures of intergroup differentiation and the RSES for Social Democratic Party supporters.

This evidence can only be taken as limited support for corollary 1 because evidence was found for the supporters of some political groups (i.e., Conservative and Social Democratic Party) but not for others (e.g., Labour Party, Liberal Party, Communist Party), suggesting that the results may only apply to certain types of supporter or the normative prescriptions of the party that they support.

Hunter et al. (1996) asked Protestant (majority) and Catholic (minority) Northern Irish schoolchildren to rate members of each religious group on a series of evaluative traits. Pre- and post-test specific and global personal state self-esteem (the Self-Description

Questionnaire III, see previous) were measured using a within-subjects design. Significant intergroup discrimination occurred, and participants tended to show an increase in specific aspects of their personal self-esteem (e.g., the domains of academic ability, verbal ability, honesty, physical appearance, parental relations, and religion). Notably, this increase was not apparent using a global self-esteem subscale (consisting of six items from the RSES), supporting the researchers' contention that only specific aspects of self-esteem are susceptible to change following discrimination.

Hunter et al.'s (1996) results are questionable for two reasons. First, participants in the control group, who were not given the opportunity to discriminate, actually showed a significant decrease in some aspects of their specific self-esteem (physical ability and sex relations), and this casts doubt on the reliability of the findings in the experimental condition. The reduction of self-esteem in the control group is not particularly surprising when one considers that pretest state self-esteem was measured three weeks before the main experiment. By definition, state self-esteem scales are more sensitive to situational variables than trait scales and are not supposed to have good test-retest reliability. Hence, any number of extraneous variables could have affected state self-esteem either during pretest measurement or immediately before discrimination.

Second, the self-esteem changes reported above were found only among Catholic children. This is particularly worrying because Protestant children exhibited roughly twice as much discrimination as Catholic children in the experimental condition and so, according to corollary 1, would be expected to report the greatest difference in self-esteem.

Finally, Vanbeselaere (1996) measured the global personal state self-esteem (JBF) of high, low, and neutral status group members after they had evaluated group performances on a line-length estimation task. Intergroup discrimination correlated significantly with the self-esteem of people in the high status group but not with that of people in the neutral or low status groups. Consequently, this study can only be said to find support for corollary 1 under certain conditions.

Unsupportive Evidence. Vickers et al. (1985, as cited in Abrams & Hogg, 1988) found that participants who acted against a prescriptive norm of cooperation by engaging in minimal intergroup discrimination reported lower posttest global personal self-esteem (JBF, presumably in its trait form) than those who cooperated. The researchers suggest that this reduction may have resulted from norm violation per se. Alternatively, participants who cooperated may have experienced elevated self-esteem as a result of complying with the relevant norm. Notwithstanding these possibilities, this evidence can be read as being in direct opposition to corollary 1.

Two real group studies addressing corollary 1 have found unsupportive evidence (Hunter et al., 1993; Nascimeto-Schulze, 1993). Hunter et al. (1993) asked Protestant and Catholic schoolchildren to make attributions about the cause of an actor's behavior in a series of vignettes. A 2 (participant's religion: Protestant vs. Catholic) x 2 (actor's religion: ingroup vs. outgroup) x 2 (actor's behavior: positive vs. negative) mixed design was employed with repeated measures on the last two factors. Posttest global personal trait self-esteem was measured using the general-self subscale of the Self-Description Questionnaire III.

Catholic children made significantly more internal attributions for positive ingroup behavior than for positive outgroup behavior and significantly more internal attributions for negative outgroup behavior than for negative ingroup behavior. Protestant children's attributions did not vary significantly as a function of target group. Self-esteem was not significantly associated with attributional differentiation either across or within groups. This evidence is therefore unsupportive of corollary 1.

Finally, Nascimento-Schulze (1993) asked Brazilian bank clerks to compare their banks on a series of evaluative dimensions before completing two measures of global personal trait self-esteem (RSES and TST). Contrary to corollary 1, no significant differences were found between the self-esteem of participants who discriminated and the self-esteem of those who did not discriminate.

Corollary 2

Supportive Evidence. Long and her colleagues (Long & Spears, 1995, as cited in Long & Spears, 1997; Long et al., 1994) have investigated the relationship between personal and social self-esteem in terms of subsequent discrimination. Long et al. (1994; see also Long & Spears, 1997) asked Dutch students to complete three measures of global personal trait self-esteem (JBF, RSES, and the Texas Social Behaviour Inventory) and a measure of specific social trait self-esteem (CSES, modified to be specific to Dutch psychology students). The students then took part in a brainstorming task during which they were asked to think of an advertising slogan encouraging the use of phosphate-free detergents. They then evaluated one of their own group's solutions, a solution produced by another group of Dutch students (i.e., a second ingroup) and a solution produced by an outgroup (German or Swiss students, depending on condition).

Contrary to corollary 2, participants with high personal self-esteem engaged in significant discrimination whereas participants with low personal self-esteem did not. However, personal and social self-esteem interacted such that participants with high personal and low social self-esteem displayed greater discrimination than those who possessed the other three possible combinations of personal and social self-esteem. This evidence is therefore consistent with that provided by Platow et al. (1997, Expt. 2) in suggesting that personal and social self-esteem are separate constructs and that corollary 2 is only valid for social self-esteem when personal self-esteem is also taken into account.

Long and Spears (1995, as cited in Long & Spears, 1997) conducted a similar study to Long et al. (1994). Again, they found that participants who possessed high global personal trait self-esteem (JBF, RSES, and the Texas Social Behaviour Inventory) discriminated significantly more than those with low self-esteem. However, no interaction between personal and social self-esteem was obtained. The CSES as a whole did not predict discrimination, however, participants with low scores on the public subscale of the CSES were found to discriminate significantly more than those with high scores, adding support to corollary 2 in terms of specific personal trait self-esteem.

Finally, Crocker et al. (1987, Expt. 2) found that pretest global personal trait self-esteem (RSES) interacted marginally with membership in different status sorority groups to predict ingroup favouritism. Congruent with corollary 2, people with low self-esteem exhibited the greatest ingroup favouritism in high status sororities, however, in opposition to corollary 2, people with high self-esteem showed the greatest ingroup favouritism in low status sororities. Consequently, this evidence only provides limited support for corollary 2.

Unsupportive Evidence. Three real group experiments have found no relationship between pretest self-esteem and discrimination (Hogg & Turner, 1987; Ruttenberg et al., 1996; Smith & Tyler, 1997, Expt. 2). Hogg and Turner (1987) found no relationship between pretest global personal state self-esteem (measured on 20 behavioral characteristics) and intergroup points-distribution between male and female groups. Interestingly, they found that categorization in terms of gender increased self-esteem for males, but decreased self-esteem for females (cf. Lemyre & Smith, 1985).

Ruttenberg et al. (1996) asked Jewish and Arab participants to complete a measure of global social trait self-esteem (CSES) followed by a revised version of Levinson and Sanford's (1944, as cited in Ruttenberg et al.) Anti-Semitism Scale. They then rated the humorous content of a selection of stereotype-based jokes and cartoons.

No significant correlations occurred between self-esteem and the measure of prejudice or discrimination for either ethnic group. Following a regression analysis, the authors concluded that global social trait self-esteem "was not a strong predictor of attitudes toward the outgroup or of reactions to humour disparaging the outgroup" (p. 218).

Smith and Tyler (1997, Expt. 2) found that pretest global personal trait self-esteem (RSES) correlated negatively with negative ratings of both ingroup and outgroup members of campus sororities. No significant correlations were found with positive ratings of either ingroup or outgroup. This evidence converges with that provided by minimal group studies showing that people with low self-esteem have more of a negative attitude towards others

in general, but do not discriminate more than those with high self-esteem (Crocker & Schwartz, 1985; Crocker & Luhtanen, 1990; Crocker et al., 1987, Expt. 1).

Smith and Tyler (1997, Expt. 2) also found that pretest global social trait self-esteem (CSES) showed significant positive correlations with positive ratings of the ingroup but not with positive ratings of the outgroup or negative ratings of either in- or out-group. This evidence only suggests that people with high social self-esteem regard ingroup members as possessing more positive qualities than do people with low self-esteem and does not, therefore, provide supportive evidence for corollary 2.

Experiments Addressing Corollaries 1 and 2 Simultaneously

Four studies have attempted to test both corollaries of the self-esteem hypothesis using real groups (Branscombe & Wann, 1994; Meindl & Lerner, 1984, Expt. 2; Verkuyten, 1997; Wagner et al., 1986). Branscombe and Wann (1994) found limited support for both corollaries of the self-esteem hypothesis.   American participants watched a film clip of a boxing match between an American and a Soviet fighter. In an identity-threatening condition participants were shown a clip in which the American fighter lost the match and in an unthreatening condition they were shown a clip in which he won. Pretesting four weeks prior to this manipulation established the extent to which each participant identified with America and allowed the construction of a 2 (identification: high vs. low) x 2 (outcome of boxing match: identity-threatening vs. unthreatening) between-subjects design.

Following the film clip, participants were provided with the opportunity to derogate a variety of outgroups, including Russians. Pre- and post-test global social trait self-esteem were measured in a within-subjects design using half the items from the private subscale of the CSES immediately before outgroup derogation and the other half immediately after derogation.

High identifiers showed significantly lower self-esteem after watching the American boxer lose the match than they did after he won, whereas low identifiers did not differ significantly in their level of self-esteem between these conditions. In addition, high identifiers in the identity-threatening condition derogated the Russian outgroup significantly more than those in the unthreatening condition. Again, this difference was not significant among low identifiers. Hence, consistent with social identity theory, outgroup derogation was promoted by a threat to identity-contingent self-esteem when the relevant identity was highly valued. The crucial question is whether this derogation led to an increase in self-esteem.

Analyses using a median split on Russian derogation scores found that high derogators reported a significantly greater positive shift from pre- to post-test self-esteem than low derogators in the identity-threatening condition. A similar shift was not apparent in the unthreatening condition. It therefore appears that outgroup derogation leads to an increase in global social self-esteem for people who have a high level of identification with the ingroup and who have undergone a threat to that identification. Again, this is consistent with social identity theory's assumptions.

Wagner et al. (1986) found support for corollary 2 but not for corollary 1. An audio tape recording of a debate about television was played to undergraduate law students, who were then informed that the discussion ability was of a medium standard. In a low status condition it was then mentioned that previous research had shown the discussion ability of law students to be worse than that of economics students. In a neutral condition participants were informed that previous research had compared the discussion abilities of different departments but were not told about the results of this research. Finally, in a control condition no mention of previous research was made.

Participants in the low status and neutral conditions evaluated the discussion ability of medical students, while those in the control condition evaluated the discussion ability of students without being informed of their departmental affiliation. Pre- and post-test self-esteem were measured immediately before and after derogation in a between-subjects design using a semantic differential scale and a shortened and modified version of Coopersmith's (1967) self-esteem scale.

Four of the items from Coopersmith's scale, concerning intellectual achievement at university, were significantly different from the rest of the scale and from the semantic differential scale. These were analysed separately as <u>achievement self-esteem</u> (i.e., specific personal trait self-esteem). The remaining Coopersmith items were combined with the semantic differential scale to provide a measure of global personal trait self-esteem.

Pretest achievement self-esteem was significantly lower in both the low status and neutral conditions compared with control conditions. It is therefore debatable whether the status manipulation contributed to the difference between the low status and control conditions or whether this difference was simply the result of the categorization-depression effect that seems to have occurred in the neutral conditions. Whatever the case, no significant differences in outgroup evaluation appeared between the three conditions. However, pretest achievement self-esteem was significantly negatively correlated with outgroup evaluation across conditions, lending some support to corollary 2. Contrary to corollary 1, no significant differences in either type of posttest self-esteem occurred from pre- to post-test measures.

One problem with Wagner et al.'s (1986) study is that the low status of the ingroup (law students) relative to one outgroup (economics students) was expected to affect relations with regard to a second outgroup (medicine students). Devaluation of a second outgroup may not necessarily restore self-esteem that is contingent upon the status relations between the ingroup and a first outgroup. Indeed, Branscombe and Wann (1994) found that discriminating against outgroups that were irrelevant to the original identity threat actually caused a decrease in self-esteem.

In defence of their design, Wagner et al. argue that because the ingroup's status relationship with the second outgroup is more ambiguous than that between the ingroup and the first outgroup, it will be perceived as being more unstable and amenable to social change. Hence, their design represents an attempt to protect against the confounding influence of normative discrimination. As they put it, "the presence of a second outgroup which has no relevant relationship to the status hierarchy of the ingroup and the first outgroup, may provide an opportunity to obtain a 'cleaner' measure of ingroup bias" (p. 23). Further research needs to be conducted to ascertain the viability of this experimental design.

In contrast to Wagner et al. (1986), Maass et al. (1996, Expt. 1) have found support for corollary 1, but not for corollary 2. Intergroup discrimination was measured in terms of the degree to which different linguistic categories were employed. Northern Italian hunters and environmentalists were asked to select phrases that best described the actions of cartoon representations of members of each group. Threat was manipulated prior to this task such that half the participants received an antagonistic message from the outgroup and half received a cooperative message. Pre- and post-test measures of global personal trait self-esteem (4 items from the RSE) and specific social trait self-esteem (the private and identity subscales of the CSES) were taken before the threat manipulation and after discrimination using a between-subjects design.

In line with research on intergroup attribution (e.g., Islam & Hewstone, 1993, Expt. 2) and previous research on linguistic intergroup bias, participants selected abstract (as opposed to concrete) phrases to describe the positive actions of ingroup members significantly more than the positive actions of outgroup members (for a review, see Maass & Acuri, 1996). They also selected abstract phrases to describe the negative actions of outgroup members significantly more than the negative actions of ingroup members. This bias was found to be significantly more pronounced in the identity-threatening conditions.

In support of corollary 1, linguistic intergroup discrimination correlated positively with both types of posttest self-esteem, however, significant increases in self-esteem from pre- to post-test were only found in the identity-threatening condition in terms of specific social trait self-esteem. No significant increases in global personal trait self-esteem were identified from pre- to post-test. Contrary to corollary 2, no significant correlations were identified between linguistic discrimination and either type of pretest self-esteem.

In a second experiment employing Swiss students of either northern or southern Italian origin, Maass et al. (1996, Expt. 2) found no significant relationship between either pre- or post-test specific social trait self-esteem and linguistic intergroup discrimination.

Finally, two real group experiments find no support for either corollary of the self-esteem hypothesis (Meindl & Lerner, 1984, Expt. 2; Verkuyten, 1997). In contrast to social identity theory, Meindl and Lerner (1984) have suggested that the experience of personal failure, and the lowered personal state self-esteem that results, engenders both ingroup and outgroup favouritism in the service of self-enhancement. They propose that outgroup favouritism enhances an ingroup's positive distinctiveness because any group that is in a position to favour an outgroup is normally regarded as being superior to that outgroup.

In tests of this hypothesis, Meindl and Lerner (1984, Expt.'s 1 & 2) manipulated the specific personal state self-esteem of English-speaking Canadian students to form two conditions. In a low self-esteem condition participants were asked to fetch a chair to sit on during the experiment. The chair was rigged to cause an "accident" involving a graduate student's computer-card collection, which participants believed contained carefully arranged dissertation data. In a control condition participants retrieved the chair without causing the accident. Following this manipulation, participants indicated the extent to which they agreed with aggressive and benevolent attitude positions concerning Quebec's relationship with the rest of Canada.

Participants in the low self-esteem condition agreed significantly more with both aggressive and benevolent attitude positions than those in the control condition. These results seem to suggest that both ingroup and outgroup favouritism are reactions to lowered self-esteem and so cannot be taken to support corollary 2, which only predicts intergroup discrimination in favour of the ingroup as a response to low self-esteem.

Meindl and Lerner (1984, Expt. 2) included a measure of posttest global personal trait self-esteem (RSES) in their second experiment. Contrary to corollary 1, posttest self-esteem was not found to be associated with evaluations of either aggressive or benevolent attitudes.

Verkuyten (1997) measured the pretest specific social trait self-esteem of Dutch students (using the private subscale of the CSES, modified to be specific to Dutch students) before asking them to complete three social distance scales concerning the degree of contact desired between Dutch and Moroccan students. Posttest global personal state self-esteem was then measured (JBF).

Pretest self-esteem was not correlated with subsequent group evaluations and, in a regression analysis, neither ingroup nor outgroup evaluations significantly predicted posttest self-esteem. Consequently, this evidence cannot be taken to support either corollary of the self-esteem hypothesis.

In separate regression analyses it was found that positive ingroup evaluations predicted positive posttest self-esteem for people with high pretest self-esteem, whereas negative outgroup evaluations predicted positive posttest self-esteem for people with low pretest self-esteem. This evidence therefore seems congruent with J. Brown et al.'s (1988) proposal that people with high self-esteem tend to enhance their positive self-regard through ingroup favouritism whereas those with low self-esteem enhance their self-regard via outgroup derogation.

<u>Summary</u>

Table 3 sets out the supportive and unsupportive competitive and/or normative discrimination evidence for each corollary of the self-esteem hypothesis, grouping studies according to the type of self-esteem that was measured. 9 experiments are supportive and 10 are unsupportive of corollary 1, whereas 4 experiments are supportive and 12 are unsupportive of corollary 2.

-- Insert Table 3 about here --

<u>Conclusions</u>

In line with previous work by Hogg and Abrams (1990) and Crocker et al. (1993), the current review finds more evidence in favour of corollary 1 than corollary 2. Overall, 18

experiments are supportive and 13 are unsupportive of corollary 1, whereas 7 experiments are supportive and 28 are unsupportive of corollary 2. Furthermore, only one study (Branscombe & Wann, 1994) out of the eight that address the self-esteem hypothesis in its entirety finds support for both corollaries.

From this exhaustive review of the literature, it would seem as if intergroup discrimination leads to an increase in self-esteem but is not motivated by a need for self-esteem. This is contrary to social identity theory, which relies on a motivational explanation of discrimination. This explanation fails unless either both corollaries of the self-esteem hypothesis receive convincing support or corollary 2 receives support and some other explanation is offered to account for the redundancy of corollary 1. Consequently, it can be concluded that the majority of evidence does not support social identity theory's self-esteem hypothesis in its full and unqualified form.

It is of interest to note that, contrary to corollary 2, nine studies found individuals with high global personal trait self-esteem to be the most discriminatory (Abrams, 1982, 1983, as cited in Abrams & Hogg, 1988, and Hogg & Abrams, 1990; Brockner & Chen, 1996; Crocker et al., 1987; Long & Spears, 1995, as cited in Long & Spears, 1997; Long et al., 1994; Seta & Seta, 1992, 1996; Sidanius et al., 1994). This evidence is congruent with the idea that individuals who possess generally low self-esteem lack the self-confidence to engage in self-enhancement via intergroup discrimination (see Abrams, 1992; Abrams & Hogg, 1988; Hogg & Abrams, 1990). However, it remains uncertain as to whether this hypothesis applies equally well to more specific facets of self-esteem (cf. Platow et al., 1997, Expt. 2).

Table 4 compares the number of experiments that find supportive and unsupportive evidence for each corollary in terms of the different types of self-esteem that were measured or manipulated. It can be seen that, for both corollaries, specific self-esteem provides a higher proportion of supportive evidence than global self-esteem, social self-esteem provides a higher proportion than personal self-esteem, and state self-esteem provides a higher proportion than trait self-esteem. This evaluation adds some support to our contention that the self-esteem hypothesis may be more applicable to specific, social, and state forms of self-esteem than to global, personal, and trait forms.

-- Insert Table 4 about here --

A tentative reformulation of the self-esteem hypothesis can be stated as follows:

1. Successful competitive intergroup discrimination enhances social   identity and thus increases the specific state self-esteem associated   with that identity.

2. Low specific social state self-esteem promotes competitive intergroup discrimination because of a need for this type of self-esteem.

Only two studies make any attempt to measure specific social state self-esteem (Gagnon & Bourhis, 1996; Platow et al., 1997, Expt. 2), and it is encouraging to note that both find supportive evidence for the self-esteem hypothesis. Future research should use more specific measures of self-esteem by either adapting existing scales (e.g., the CSES) or constructing new ones. However, two potential problems should be taken into account before employing measures of specific social state self-esteem.

First, it may be difficult to disguise the hypothesized connection between self-esteem and discrimination from participants. For example, in a between-subjects design participants in both pre- and post-test conditions are likely to discern some relationship between the item "at the moment, I feel good about my group" and their treatment of the ingroup. Furthermore, within-subject operationalizations of pre- and post-test measures, as advocated by some researchers (Branscombe & Wann, 1994; Hogg et al., 1986, Expt. 2; Hunter et al., 1996; Verkuyten, 1997; cf. Hogg & Sunderland, 1991), are liable to exacerbate this problem.

Blatant use of specific social state measures is therefore inadvisable because they are liable to increase the impact of demand characteristics and self-presentational concerns. Recent work in the area of implicit social cognition seems to offer a way around this problem. For example, Greenwald and Banaji (1995) discuss the possibility of implicit

measures of self-esteem. Similarly, relatively unobtrusive measures of intergroup discrimination have been developed (e.g., Fazio, Jackson, Dunton, and Williams, 1995; Islam & Hewstone, 1993, Expt. 2; Maass et al., 1996, Expt. 1).

Second, as Abrams and Hogg (1988) note, "experiments which have reported ingroup bias in terms of trait adjective ratings, affective ratings and performance evaluation ratings...are, in effect, directly tapping the relative esteem in which subjects hold their own group" (p. 323). In other words, some measures of discrimination may also act as measures of specific social state self-esteem. Employing such measures as indices of discrimination to be related to explicit measures of specific social state self-esteem therefore runs the risk of obtaining artefactual results. Consequently, it would seem appropriate to employ more behavioral measures of discrimination (e.g., intergroup points- or money-distribution) in conjunction with specific social state self-esteem measures.

Suggestions for Further Clarification

As mentioned previously, one reason for the confusion surrounding empirical support for the self-esteem hypothesis is the vast array of methods and experimental designs that have been employed in its investigation. Further clarification and elaboration of the self-esteem hypothesis may help to alleviate this problem.

First, there remains some ambiguity concerning the exact nature of changes in self-esteem brought about via discrimination. The notion that increments in self-esteem may serve different functions seems to have been implicitly acknowledged in the literature, where reference is commonly made to achieving, maintaining, and enhancing positive self-esteem.

Logically, achieving positive self-esteem consists of raising initially low or neutral self-esteem to a higher level. Maintaining positive self-esteem involves restoring initially high self-esteem following its reduction or retaining its original level throughout an esteem-threatening experience. Finally, enhancing positive self-esteem involves further increasing initially high levels of self-esteem.

These distinctions are important because it is possible that discrimination is effective at fulfilling some functions more than others. For example, as Lemyre and Smith (1985) propose, it is possible that discrimination only restores self-esteem that has previously been lowered, rather than bringing about any absolute increment. In addition, some sort of ceiling effect may prevent the continual enhancement of positive self-esteem beyond a certain limit.

A second ambiguity concerns the distinction between the threat of low self-esteem and the actual experience of low or depressed self-esteem (see Farsides, 1995). Corollary 2 of the self-esteem hypothesis seems to cover both eventualities and yet it remains an empirical question as to whether they involve comparable processes or produce comparable results.

Third, Farsides (1995) has noted that researchers have neglected to investigate whether successful discrimination enhances self-esteem, as per corollary 1 of the self-esteem hypothesis. Presumably, the distinction between successful and unsuccessful discrimination relates to the results of the discrimination concerned. Unsuccessful discrimination involves the failure of discriminatory acts to bring about the desired positive distinctiveness. One way to operationalize a clearer test of corollary 1, therefore, would be to include feedback conditions in which participants are informed about the effects that their intergroup behavior has had upon the positive distinctiveness of each group.

Fourth, as Brewer (1979) notes, some researchers do not distinguish between ingroup favouritism and outgroup derogation so that "it is often ambiguous whether the comparison rests on enhancement of the in-group, devaluation of the out-group, or both" (p. 321). Brewer (1979) argues that self-enhancement occurs mainly via ingroup favouritism whereas Wills (1981) suggests that it results more from outgroup derogation. Again, a more precise analysis would facilitate a better understanding of any relationship that might exist between self-esteem and these two forms of discrimination (see J. Brown et al., 1988; Verkuyten, 1997).

A finer distinction is also required between ingroup identification and social self-esteem. Some researchers include ingroup identification subscales or items as part of social self-esteem scales (e.g., Luhtanen & Crocker's, 1992, CSES). Others include social self-esteem subscales or items as part of ingroup identification scales (e.g., Brown, Condor, Mathews, Wade, & Williams, 1986). Considering this blurred distinction, it is unsurprising that research attempting to relate pretest measures of ingroup identification to discrimination has met with similarly inconclusive results as investigations of the self-esteem hypothesis (for a review, see Hinkle & R. Brown, 1990). Indeed, failure to distinguish between ingroup identification and social self-esteem may have hindered progress in both areas of research. After all, social identity theory predicts that pretest identification will correlate positively with discrimination, but that pretest self-esteem will correlate negatively with discrimination. Consequently, single scales that attempt to measure both dependent variables simultaneously are in danger of entangling competing effects.

It would therefore seem prudent to separate operationalizations of ingroup identification and social self-esteem. One possibility would be to restrict measures of identification to issues of importance and measures of self-esteem to issues of group evaluation. The need to distinguish between identification and self-esteem is reinforced by research suggesting that the self-esteem hypothesis may only be applicable to individuals who possess a high degree of identification with the ingroup (Branscombe & Wann, 1994; Gagnon & Bourhis, 1996).

Questions also remain concerning the relationship between the different varieties of self-esteem that have been discussed. Long and Spears (1997) argue that pretest personal and social self-esteem interact such that people with high personal and low social self-esteem discriminate more than those of the other three possible combinations of personal and social self-esteem. Here, it is argued that low social self-esteem provides both a threat to positive personal identity and the motivation to improve the positivity of social identity. This argument seems to make most sense in terms of global personal trait and specific social state self-esteem.

In general, individuals who possess high global and low specific self-esteem should possess an additional drive for self-consistency that adds to their need for self-esteem in motivating self-enhancement. Similarly, individuals who have high trait and low state self-esteem should have a double incentive to engage in self-enhancement compared with those who possess the other three possible combinations of trait and state self-esteem. Adding these predictions together, it might be expected that individuals with high global personal trait and low specific social state self-esteem will possess the greatest motivation to engage in intergroup discrimination compared with those possessing the other six combinations of self-esteem.

Finally, the distinction between competitive and normative discrimination deserves greater attention. Ideally, the self-esteem hypothesis should be tested in the minimal group paradigm in order to avoid the confounding effects of normative discrimination. Some researchers argue against minimal groups in this area of research, suggesting that self-esteem is likely to have stronger links with real group memberships than transient and relatively inconsequential group memberships (e.g., Crocker et al., 1987; Crocker & Luhtanen, 1990; cf. Nascimento-Schulze, 1993). Although this may be the case in terms of global personal trait self-esteem, it does not seem unreasonable to expect measures of specific social state self-esteem to be sensitive enough to relate to the social identities provided by minimal groups.

This said, research involving real groups plays an important role in providing ecological validity for social identity theory and so should never be discounted. Future real-group experiments should be designed to maximize the perception of relevant status hierarchies as being insecure and amenable to social change (e.g., Wagner et al., 1986) and new techniques should be used to account for any normative discrimination that might

occur alongside competitive discrimination (e.g., Crocker et al., 1987, Expt. 1; Seta & Seta, 1992, 1996).

The controvertible findings regarding the self-esteem hypothesis have led some researchers to conclude that it has been overimplicated in social identity theory's analysis (e.g., Abrams & Hogg, 1988; Hogg & Abrams, 1990). Extensions of social identity theory have tended to either ignore the self-esteem hypothesis (e.g., Turner et al.'s, 1987, self-categorization theory) or to curtail its generality and include other motivational processes in its place (e.g., Brewer, 1991, 1993; Hogg & Abrams, 1993). We have argued that the lack of firm empirical support for the self-esteem hypothesis may be due to its imprecise formulation. We have sought to provide some clarification using different types of self-esteem and suggest that future research employs measures of specific social state self-esteem. However, further clarification is required in order to allow a more thorough investigation of the relationship between self-esteem and intergroup discrimination.

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Footnotes

1. One anonymous reviewer noted a possible conceptual confusion arising between the global-specific distinction and uni- vs. multi-dimensional measures of self-esteem. Certainly the two distinctions refer to similar ideas, however, the global-specific distinction refers to a type of self-esteem whereas the uni- vs. multi-dimensional distinction refers to a type of scale. Hence, it is theoretically possible to measure both global and specific self-esteem as either uni- or multi-dimensional constructs. However, the potential for multi-dimensional scales is liable to decrease as the specificity of the self-aspect being evaluated increases. Hence, it will be easier to construct a multi-dimensional global personal trait self-esteem scale than a multi-dimensional specific social state self-esteem scale.

2. The Twenty Statements Test requires respondents to generate twenty different responses to the question "who am I?" and then to rate their self-esteem in terms of each response. This technique will inevitably elicit a list of social identities (e.g., "I am a man"). Although each response represents a measure of specific social trait self-esteem, when all responses are combined to create an overall score it would seem more appropriate to treat the scale as a measure of global personal trait self-esteem.

3. The Texas Social Behaviour Inventory focuses on interpersonal, rather than intergroup social self-evaluation.

4. Bourhis (1994) and Sachdev and Bourhis (1984, 1985, 1987, 1991) also include posttest measures of self-esteem in their studies, however, these cannot be legitimately related to corollary 1 because they are confounded by manipulations of power or status, or both.

5. The self-esteem hypothesis does not explicitly acknowledge distinctions between different types of self-esteem, and so these distinctions are only included for purposes of comparison and are not used to evaluate whether a particular piece of evidence is supportive or unsupportive.

6. Since ingroup favouritism and outgroup derogation were measured relative to a baseline condition in which the amount of normative discrimination prescribed by the status differences of above- and below-average scorers was ascertained, they represent competitive discrimination unconfounded by normative discrimination.

7. Given the diversity of methods, designs, and measures that have been employed to test the self-esteem hypothesis we opted for a qualitative rather than quantitative review in order to provide a more detailed analysis of the limited number of studies that are available.

Table 1

Eight Types of Self-esteem and Example Items

Type of self-esteem	Example item
Global personal trait	Usually, I feel good about myself.
Specific personal trait	Usually, I feel good about my physical appearance.
Global personal state	At the moment, I feel good about myself.
Specific personal state	At the moment, I feel good about my physical appearance.
Global social trait	Usually, I feel good about my social groups.
Specific social trait	Usually, I feel good about my gender.
Global social state	At the moment, I feel good about my social groups.
Specific social state	At the moment, I feel good about my gender.

Table 2

Evidence based on Competitive Discrimination

Type of self-esteem	Corollary 1		Corollary 2	
	Supportive evidence	Unsupportive evidence	Supportive evidence	Unsupportive evidence
Global personal trait		Hogg & Turner (1985a)		Abrams (1982)[b] Abrams (1983)[b] Crocker & Schwartz (1985) Hogg et al. (1986, Expt. 2) Crocker et al. (1987, Expt. 1)[b] J. Brown et al. (1988, Expt. 1) Crocker & Luhtanen (1990) Seta & Seta (1992)[b] Sidanius et al. (1994)[b] Brockner & Chen (1996)[ab] Seta & Seta (1996)[b]
Specific personal trait				
Global personal state	Oakes & Turner (1980) Lemyre & Smith (1985)	Hogg & Morkans (1989) Hogg & Sunderland (1991)		Lemyre & Smith (1985) Platow et al. (1997, Expt. 2)

Type of self-esteem	Corollary 1 Supportive	Corollary 1 Unsupportive	Corollary 2 Supportive	Corollary 2 Unsupportive
	Hogg et al. (1986, Expt. 1) Hogg et al. (1986, Expt. 2)[a] Vanbeselaere (1991) Chin & McClintock (1993, Expt. 1) Mullin & Hogg (1995)			
Specific personal state			Hogg & Sunderland (1991) Brockner & Chen (1996)[a]	Crocker et al. (1987, Expt. 1) Hogg & Morkans (1989)
Global social trait	Chin & McClintock (1993, Expt. 2)			Crocker & Luhtanen (1990)
Specific social trait				
Global social state				
Specific social state	Gagnon & Bourhis (1996)[a]		Platow et al. (1997, Expt. 2)[a]	

[a] indicates evidence that it is limited to certain conditions or individuals (see text for details). [b] indicates unsupportive evidence that finds the reverse effect to that which is predicted by the self-esteem hypothesis.

Table 3

Evidence based on Competitive and/or Normative Discrimination

	Corollary 1		Corollary 2	
	Supportive evidence	Unsupportive evidence	Supportive evidence	Unsupportive evidence
Type of self-esteem				

Global personal trait	Turner & Spriggs (1982) Hogg & Turner (1985b) Kelly (1988)[a]	Meindl & Lerner (1984, Expt. 2) Vickers et al. (1985)[b] Wagner et al. (1986) Nascimento-Schulze (1993) Hunter et al. (1993) Maass et al. (1996, Expt. 1)		Wagner et al. (1986) Long et al. (1994)[b] Long & Spears (1995)[b] Maass et al. (1996, Expt. 1) Smith & Tyler (1997, Expt. 2)
Specific personal trait		Wagner et al. (1986)	Wagner et al. (1986) Long & Spears (1995)	
Global personal state	Hewstone et al. (1993, Expt. 2) Islam & Hewstone (1993, Expt. 2) Vanbeselaere (1996)[a]	Hunter et al. (1996) Verkuyten (1997)		Hogg & Turner (1987)
Specific personal state	Hunter et al. (1996)[a]			Meindl & Lerner (1984, Expt.'s 1 & 2)
Global social trait	Branscombe & Wann (1994)[a]		Branscombe & Wann (1994)[a]	Ruttenberg et al. (1996) Smith & Tyler (1997, Expt. 2)
Specific social trait	Maass et al. (1996, Expt. 1)	Maass et al. (1996, Expt. 2)	Long et al. (1994)[a]	Maass et al. (1996, Expt. 1) Maass et al. (1996, Expt. 2) Verkuyten (1997)

Global social state

Specific social state

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[a] indicates evidence that it is limited to certain conditions or individuals (see text for details). [b] indicates unsupportive evidence that finds the reverse effect to that which is predicted by the self-esteem hypothesis.

Table 4

<u>Number of Experiments that find Supportive and Unsupportive Evidence using Each Type of Self-Esteem</u>

Type of self-esteem	Number of experiments			
	Corollary 1		Corollary 2	
	Supportive evidence	Unsupportive evidence	Supportive evidence	Unsupportive evidence
Global	15	11	1	22
Specific	3	2	6	6
Personal	14	12	4	22
Social	4	1	3	6
Trait	6	9	4	22
State	12	4	3	6