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The Role of Self-Esteem in Intergroup Behaviour

The Role of Self-Esteem in Intergroup Behaviour

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Thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy
in the Faculty of Social Sciences at the University of Kent at Canterbury, June 1999.

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Abstract

The aim of this thesis was to explore ways of testing social identity theory's (Tajfel & Turner 1979) "self-esteem hypothesis". Abrams and Hogg (1988) identified two corollaries of the self-esteem hypothesis. The first is that successful intergroup discrimination enhances social identity and thus elevates self-esteem. The second suggests that, because of a motivational need for positive self-esteem, low self-esteem will motivate intergroup discrimination. The self-esteem hypothesis is one the most controversial issues of social identity theory in terms of the diverse findings obtained from studies conducted in this area. The empirical evidence remains equivocal for either corollary. In this thesis it was argued that the lack of firm empirical support for the self-esteem hypothesis may be due to misunderstandings related to design, measurement of self-esteem, and type of groups employed. This thesis examined these issues and studies were conducted to address them. Laboratory and real group studies were conducted. It was found that even when issues related to design, measurement, and type of groups were taken into consideration, there were additional factors which play an important role in testing the self-esteem hypothesis. There was support for corollary two of the self-esteem hypothesis when real groups were employed and intergroup discrimination was operationalised as outgroup derogation and not as ingroup bias. Corollary one was supported when intergroup evaluations had an important outcome for the group and when the attributes of intergroup evaluations were positive. The implications of the findings of this thesis are discussed in the context of social identity theory and avenues for future research are suggested.

Memorandum

The research for this dissertation was conducted at the Department of Psychology, University of Kent at Canterbury, whilst the author was a full-time postgraduate research student receiving a Departmental Teaching Assistantship.

The theoretical and the empirical work herein is the independent work of the author. Intellectual debts are acknowledged in the text. The execution of the studies reported in this thesis required some limited assistance from other people. Their role was limited to assisting in aspects of the procedure, such as distributing experimental materials.

The author has not been awarded a degree by this or any other university for the work included in this thesis.

Dedication

If I speak the tongues of men and of angels, but have not love, I am only a resounding gong or a clanging cymbal. If I have the gift of prophecy and can fathom all mysteries and all knowledge and I have faith that can move mountains, but have not love, I am nothing. If I give all I possess to the poor and surrender my body to the flames, but have not love, I gain nothing. Love is patient, love is kind. It does not envy, it does not boast, it is not proud. It is not rude, it is not self-seeking, it is not easily angered, it keeps no record of wrongs. Love does not delight in evil but rejoices with the truth. It always protects, always trusts, always hopes, always preserves (Corinthians, 13, 1-7).

We are told to love but we hate and kill each other. Hundreds of people are loosing their lives in conflicts and wars all over the world.

To the One who taught us love and is love

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I would also like to thank everybody in the Department of Psychology for providing support and assistance and particularly my friend and office-mate Gillian Marks who was always ready to listen and encourage.

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CHAPTER 1

Social Psychological Approaches to Intergroup Discrimination

PRISTINA – War-wary eyes flicker to life and turn to a flint as a group of housewives taking shelter in a Pristina cellar begin to discuss ethnic Albanians. “You try living with them for a couple of years” says Busa as she grinds coffee beans for her family. “Always when our country is in a bad position they attack us. They try to impose their traditions on us”. Her views are echoed across Kosovo. In Mitrovica, Zdvarko Trajovic, president of the regional council, says of the ethnic Albanians “The Serbian Republic gave them everything and they gave us nothing. They would not pay their taxes, they refused to join the army, they tried to break the system.” As well as criticising ethnic Albanians for boycotting elections, failing to pay the bills and plotting insurrection, many Kosovan Serbs also condemn the ethnic Albanian community for bearing large number of children. “We Serbs only have one, two or three children” says another Serb, “and we are afraid of the number of children they have. We are nervous that they do this to try to take over” (Prentice, The Times, 26 May 1999).

KRUMA, Albania – Officers of the Kosovo Liberation Army vow to “take blood revenge”. Albanians from inside and outside of Kosovo - determined to fight for freedom in the Yugoslav Republic of Serbia - arrive here on the border daily to prepare for what they expect to be the next Balkan war. “ I am better off dead,” says Shefqet Krasniqi, a Kosovan Albanian former university student who has turned to

fighting the Serbs full time. "I have lost my identity, my name and my school. I have got nothing else to loose." Another Kosovan Albanian, member of the Kosovo Liberation Army says, "We are now waiting for 200,000 dead as in Bosnia, the Serbs will never be pardoned. For each one of us who dies, there is another coming to fight" (Smucker, Chronicle News, 11 November 1998).

If Kosovan Serbs and Kosovan Albanians have such feelings for one another, can they ever live together harmoniously? Why do groups have feelings of hostility and discriminate against one another? What leads people to maltreat others, to disadvantage them and prevent them from access to important resources? Since the turn of the century, social psychologists have attempted to explain the causes of discrimination between groups. LeBon (1895) explained discrimination in terms of a "herd instinct" behaviour. Adorno, Frenkel-Brunswik, Levinson and Sanford (1950) perceived discrimination as an expression of a particular personality type. Sherif (1966) explained it in terms of incompatible group interests. Tajfel and Turner's (1979) social identity theory explained it in terms of people's need for a positive social identity.

Social identity theory's prediction that people discriminate against other groups to maintain and enhance their identity and therefore their self-esteem (Tajfel & Turner, 1979) became known as the "self-esteem hypothesis" and is the topic of investigation in this thesis. Abrams and Hogg (1988) identified two corollaries of the self-esteem hypothesis. The first is that 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. The second suggests that, because of a motivational need for positive self-esteem, low or threatened self-esteem will

motivate intergroup discrimination. Self-esteem is an independent variable, a motivating force for specific forms of intergroup behaviour.

The self-esteem hypothesis is one the most controversial issues of social identity theory in terms of the diverse findings obtained from studies conducted in this area. The empirical evidence remains equivocal for either corollary. In terms of the first corollary, Oakes and Turner (1980) and Lemyre and Smith (1985) found increased levels of self-esteem among those who displayed intergroup discrimination. Chin and McClintock (1993) and Hogg and Sunderland (1991) found no such effect. The findings of studies in relation to the second corollary of the self-esteem hypothesis are even more confusing. Blanz, Mummendey and Otten (1995) found that low self-esteem, manipulated through status, leads to high levels of discrimination. On the other hand, Sachdev and Bourhis (1987, 1991) found that low status leads to outgroup bias and Crocker and colleagues (1987, 1990) found that it is people with high self-esteem who show more ingroup bias.

As a consequence of the contradictory findings in this area, Hogg and Abrams (1990) and Brown (1995) have started to question the role of self-esteem in explaining intergroup behaviour. However, Hunter, Platow, Howard and Stringer (1996) have argued that it is important before questioning the role of self-esteem in intergroup behaviour, to note that there are a number of methodological shortcomings associated with the research that has been conducted in this area.

The identification of problems with the design and measurement in previous studies on the self-esteem hypothesis was the primary motivation to begin a Ph.D. in this area in 1995. During the time the research was being conducted a number of reviews of the area were published (Hunter et al., 1996; Long & Spears, 1997; Rubin & Hewstone, 1998). A number of the issues raised in these reviews formed part of the original 1995 plan for the thesis. Some of the other issues raised have helped to refine my plans during the conduct of the research.

The aim of this chapter is to provide a historical account of the development of the social identity theory and the self-esteem hypothesis. However, in order to establish the proper theoretical and historical context for the contribution made by social identity theory, other social psychological approaches to intergroup discrimination that preceded the social identity theory will be discussed. Before providing a critical review of these approaches and giving a detailed account of social identity theory, definitions of the group, the distinction between personal and social identity, and theories of group identification will be discussed.

Definitions of the group

According to Brown (1988), there is a wide diversity of meanings associated with the word "group". Some theorists such as Campbell (1958) define group in terms of common fate. According to Campbell (1958), a group is a collection of individuals with common fate. Sherif and Sherif (1953) define group in terms of status and role relationships. Thus, a group is two or more individuals who have well-defined relationships with one another determined by status and power differences. However, the above definitions apply to small groups and do not account for large-scale groups such as ethnic groups which can also influence people's

behaviour to a great extent. This problem led Tajfel and Turner (1986) to propose a definition of groups in terms of people's self-categorisations. Tajfel and Turner (1986), define a group as:

A collection of individuals who perceive themselves to be members of the same social category, share some emotional involvement in this common definition of themselves, and achieve some degree of social consensus about the evaluation of their group and of their membership in it (p.15).

According to this definition, three components may contribute to one's social identity. A cognitive component (awareness of membership in a group), an emotional component (sense of emotional involvement with the group) and an evaluative component (self-esteem of the group).

Similarly, Hogg and Abrams (1988), define a social group as "a collection of individuals who classify, define and evaluate themselves in terms of a common social category membership" (p.184). Hogg and Abrams (1993) also argue that an appropriate social psychological definition of the social group should account for all sorts of groups, distinguish between groups and individuals, and contain theoretical constructs expressed in such a way as to avoid the pitfalls of reductionism.

Distinction between personal and social identity

An important issue that also needs to be discussed here is the distinction between personal and social identity. Maslow (1954) argues that from the moment we are born, we embark on a life journey to find our identity. Worchel (1998) argues that this journey determines our relationship

with the groups we belong to. On one hand, we want to be accepted and valued by others. Groups protect and support us. On the other hand, to be members of groups, we have to show obedience and place group needs above personal needs. Thus, there is a distinction between personal and social identity.

This distinction was already made at the beginning of the modern psychological thinking. William James (1890) distinguished between the "I" and the "me" and talked about duality in self-representation. Mead (1934) argues that the self consists of the "me" (a sociological component) and the "I" (personal component).

Tajfel (1974) argued that we hold two identities. A personal identity that, according to Hogg and Abrams (1993), is "grounded in idiosyncrasies of self and one's close interpersonal relationships" (p.184) and a social identity derived from our membership into different groups that is "cognitively represented as a component of the self-concept"(p.184). According to Tajfel (1974), individuals are constructed through the mediation of groups that they belong. In other words, who we are and how we relate to others is determined by the groups we belong whether by assignment or by choice. Tajfel was born in Poland from a Jewish family. He left Poland at eighteen and studied in France. He served in the French Army and spent five years of his life in various German prisoner-of-war camps in Germany during the Second World War. During this five-year period, he lived under the false identity of being French. If the German authorities had discovered that he was a Polish rather than a French Jew, he would have been killed. Tajfel used his experience of living under a false identity to illustrate his distinction between interpersonal and intergroup behaviour. He argued that his personal characteristics did not matter. It was the

social category (Polish Jewish nationality) if it had been discovered that would determine his fate. Thus, groups have a profound impact on individual's identity and life experiences.

The next question is why people identify with groups. Some of the theoretical perspectives that have been advanced to explain why people identify with groups are discussed below.

Theories of group identification

Sociobiological & psychodynamic theories of group identification

According to sociobiological theories of group identification, groups are defined by kinship (Archer, 1991), while according to psychoanalytic theories, groups are defined by experience and culture (Freud, 1921/1960; Volkan, 1988).

According to Archer (1991) human species produce behaviour benefiting anyone who carries the same genes. Thus, there is a genetic disposition to behave differently toward "insiders" (those who share common genes) and "outsiders" (nonkin outgroups). According to van den Berghe (1981), this idea is the basis for a sociobiology of ethnocentrism. According to this idea, cooperation will occur only between those who share a high proportion of genes since helping relatives will perpetuate one's own genes. Conversely, the likelihood of conflict between individuals increases as the proportion of shared genes decreases.

Freud's (1921/1960) theory of group identification focuses on the role of the group leader as the object of identification. Freud also used the phrase "narcissism of minor differences" to refer to the preoccupation of group members with small or trivial elements that distinguished them from

other groups. Volkan (1988) used this as a basis for a theory of identity formation that holds that individual identity is achieved through the process of defining "allies" and "enemies". The process begins in the first few months of life as the infant learns to distinguish familiar faces from strangers. This process of differentiation between "us" and "them" continues in an attempt to achieve a stable definition of self.

Social comparison theory of group identification

A classic theory of group identification is provided by Festinger's (1954) social comparison theory of affiliation. Festinger (1954) begins by proposing that there is a universal human drive to evaluate our beliefs and that we need a sense of subjective validity for our abilities and beliefs about ourselves and the world around us.

Festinger (1954) argues that most of our knowledge about ourselves and the world does not come from direct personal experience. If you run 1500 meters in five minutes, you don't know if you are a good athlete. Without some knowledge of how fast the other athletes run you can't know how good you are. Of course, in order to make a realistic appraisal of our abilities, we need to compare ourselves with people who will provide the most reliable information for us. According to Festinger (1954), beliefs are also seen as valid or appropriate when are shared by similar others. Similarity to reference groups induces stability and confidence in one's own perceptions. Darley (1966) argued that agreeing with members of one's ingroup increases certainty and subjective validity of beliefs and attitudes. Our confidence in the correctness of our beliefs is not affected if the outgroups do not share our opinions or values. Thus, only ingroup members are important sources of validation of our beliefs.

Self-categorisation theory of group identification

An alternative account of group identification to social comparison theory is provided by self-categorisation theory (Turner, Hogg, Oakes, Reicher & Wetherell, 1987). The basis of self-categorisation theory is the distinction between ingroups and outgroups which is the result of social-categorisation processes. The emphasising of the differences between different categories and similarities between members of the same category results in ingroup identification. Thus, there is a depersonalisation of the individual, making people perceive themselves as representatives of their ingroups and as possessing the characteristics of these ingroups which distinguish them from other groups.

Motivational theories of group identification

According to Hogg and Abrams (1993), self-categorisation theory is heavily cognitive since it emphasises the categorisation processes and does not take into consideration the motivational processes of group identification. Social identity theory (Tajfel & Turner, 1986) takes into consideration the categorisation processes but also adds some motivation components in explaining group identification. According to social identity theory, the emphasising of the differences between different categories and similarities between members of the same category are combined with a need for positive self-esteem and this results in ingroup identification. Thus, the motivational component of group identification that is added by social identity theory, is the need for positive self-esteem. However, the findings of the studies testing the role of self-esteem as a motivational component in ingroup identification have been contradictory. Ellemers, van Knippenberg, de Vries and Wilke (1988) found that group identification is motivated by the need for positive self-esteem. By contrast, Turner, Hogg, Turner and Smith

(1984) found that there is little direct evidence that the need for positive self-esteem motivates ingroup identification. This was also supported by Crocker and Major (1989) who found that members of disadvantaged or stigmatised groups identified strongly with their groups.

Swann (1987) argues that another motivational factor that influences group identification is the need for self-verification, the need to establish a consistent, coherent self-image. Abrams and Hogg (1988) propose that this need for self-definition is the primary motive for social identification. According to Hogg and Abrams (1993), "uncertainty-reduction is an individual motivation, but one that inevitably can only be realised by group belongingness" (p.189). They suggest that enhanced self-esteem is a consequence of the uncertainty reduction achieved through group identification. Thus, enhanced self-esteem and self-verification are aspects of the same motivational process.

According to Brewer's (1991) optimal distinctiveness theory, human beings have two powerful social motives: a need for inclusion that is satisfied by including the self into larger collectives, and an opposing need for differentiation that is satisfied by distinguishing the self from others. The less inclusive groups are, the more identification because groups which are not highly inclusive satisfy both these needs simultaneously.

Social psychological approaches to intergroup discrimination

The early "herd instinct" theories and personality approaches to prejudice and discrimination will be described first. Then the frustration-aggression theory and how it was developed into the theory of relative deprivation will be discussed. The theory of realistic conflict of interests will

then be described. The rest of the chapter will focus on social identity theory and particularly on those aspects of social identity that are relevant to an explanation of intergroup discrimination.

Herd instinct theories

When we see a group of people acting violently during a football match, it is easy to say that they "got carried away by the crowd". This explanation of intergroup behaviour is one of the earliest theories of social psychology of group behaviour and was proposed by LeBon (1895). According to LeBon (1895), the feeling of anonymity and the contagion in a crowd situation make individuals lose their rationality and acquire instead a "group mind". Thus, under the influence of collective mentality, people's instincts of destruction are freed from normal social constraints. This results in irrational behaviour and acts of violence.

LeBon's ideas influenced other researchers who also attempted to explain intergroup behaviour. Zimbardo (1969) developed a theory of "deindividuation". According to Zimbardo (1969), the feeling of anonymity in a group situation makes people to stop feeling responsible for their acts and therefore engage in irrational and uncontrolled behaviour. Zimbardo (1969) conducted a number of experiments to test whether deindividuation leads to greater levels of aggression. In his first experiment, half of the participants were deindividuated by being asked to wear a shapeless coat and a hood over their head with holes cut out for their eyes. The rest of the participants retained their individual identity. The findings of this study were supportive of the theory that deindividuation leads to greater levels of aggression. However, in a subsequent experiment with Belgian soldiers, an exactly opposite result was obtained, those in the

anonymous condition were less aggressive than those who were identifiable. According to Zimbardo (1969), a possible reason for this is that the soldiers, because they were wearing uniforms, were deindividuated before the experiment began. However, Johnson and Downing (1979), using a similar procedure with Zimbardo (1969), found that anonymity results in increased prosocial behaviour. Johnson and Downing (1979), asked all participants to wear special clothes. In the individuation condition, participants were given to wear a nametag attached to their costumes to reinforce individuality. In half the conditions, participants were given to wear a robe resembling a Ku Klux Klan outfit. In the remaining conditions, participants were asked to wear a robe looking like a nurse's gown. Johnson and Downing (1979) found that those wearing the nurse's uniform showed more prosocial behaviour, and especially in the deindividuated condition than those wearing the Ku Klux Klan outfit. Thus, as Johnson and Downing (1979) found, being a member of the crowd does not necessarily make people to behave in a violent way. Johnson and Downing (1979) argued that the type of behaviour in a crowd situation does not depend on anonymity but on the norms that are salient in the particular situation.

The personality approach to intergroup discrimination

One theory that attempted to explain intergroup discrimination and received considerable support is the idea that intergroup discrimination can mainly be explained by personality characteristics. This theory was proposed by Adorno, Frenkel-Brunswick, Levinson and Sanford (1950). Their hypothesis was that "an individual's political and social attitudes formed a coherent pattern and that this pattern was an expression of deep-lying trends in personality" (Adorno et al., 1950, p.1). Adorno et al. (1950) argue that prejudice is the product of an

authoritarian personality. Working from a Freudian perspective, Adorno et al. (1950) believed that prejudice is a symptom of individual abnormality of psychological functioning. They argue that children who have very strict parents develop an authoritarian personality syndrome. This happens because the child's natural aggression towards the parents is displaced on to alternative targets because of the fear to displace it directly to the parents. The result is to identify with all authority figures that symbolise the parents and be aggressive towards lower status and power groups (non-ingroup members).

Adorno et al. (1950) administered 2,000 questionnaires to white middle class individuals to test the relationship between personality and attitudes. They found correlations usually greater than 0.6 between authoritarianism and discrimination. In India, Sinha and Hassan (1975) also found that religious prejudice against Muslims was also predictable from the Authoritarianism of some high-caste Hindu men.

Billig (1976) has argued that Adorno et al.'s (1950) theory over-emphasises the role of the individual. According to Billig (1976), Adorno et al.'s (1950) theory reduces substantial social phenomena to the psychological characteristics of an individual ignoring the socio-cultural factors that play an important role in explaining discrimination. Pettigrew (1958) conducted a cross-cultural study in South Africa and United States. Although he found high levels of anti-black prejudice among the participants, their level of authoritarianism measured by Adorno et al.'s (1950) F-scale was not very high.

According to Billig (1976), another criticism of Adorno et al.'s (1950) theory is that it is not possible that all the members of a group who discriminate against other groups have the same personality characteristics. This means that the personality approach to discrimination is not sufficient. There must be other factors involved too.

Brown (1995) argues that another limitation of the personality approach to discrimination is the "historical specificity of prejudice". In other words, if discrimination can be explained by personality characteristics, how can sudden increases and decreases of prejudice be explained over short periods of time. For example, as Hogg and Abrams (1988) state the British government sold arms to Argentina, a friendly country to Britain, and Argentina later used these arms against Britain in the Falklands conflict.

Relative deprivation

In contrast to a personality approach to intergroup discrimination, Dollard, Doob, Miller, Mowrer and Sears (1939) considered prejudice to be a product of the normal everyday functioning of the human mind. This approach is known as the frustration-aggression theory. Mowrer and Sears (1939) hypothesized that the problems caused by a depressed economy increase people's frustration that in turn increases levels of aggression. Dollard et al. (1939) argue that "frustration always leads to some form of aggression". According to Dollard et al. (1939), people use psychic energy in order to achieve a goal. If this goal is achieved, then this energy is dissipated. If the goal cannot be achieved, then this energy is experienced as psychic tension, which can only be relieved by aggression, usually against the cause of frustration. When the agent of frustration is unavailable, then aggression becomes redirected onto an

alternative target. Hovland and Sears (1940) were the first to use the term of "displacement" that Adorno et al. (1950) used later and suggested that aggression would not be directed towards to what caused the frustration but would be displaced towards more vulnerable targets such as minority groups.

The findings in support of the "displacement hypothesis", are mixed. Miller and Bugelski, (1948) conducted an experiment with young Americans at a camp. One evening, participants were announced they had to do some boring tasks instead of entertaining themselves in town as it has been planned. Miller and Bugelski (1948) measured the men's ethnic attitudes before and after the frustrating event. They used a control group experiencing no frustration and found that participants' attitudes were less favourable after the frustration. This finding confirmed the "displacement" hypothesis. On the other hand, Stagner and Congdon (1955) did not find an increase in discrimination in students following the frustration of failing some academic tests.

These inconsistencies led to the decline in the popularity of frustration-aggression theory. According to Hogg and Abrams (1988), there are two problems with the frustration-aggression hypothesis. The first one is that it is difficult to explain why one group should be a more obvious target to displace aggression on to than any other. The second is that this theory does not enable us to distinguish between the "instantaneous" aggression that results from a simple insult from somebody and the "simmering" aggression that results from not having our goals achieved.

Berkowitz (1962) suggested that frustrations produce a "readiness to aggress" which is expressed as aggression when the target can be safely attacked. Moreover, aggression increases when aggression cues (e.g. weapons) are present. Furthermore, he argued that people do not protest unless they have a strong sense of control over their situations. Moreover, it is not intergroup inequalities that frustrate people but intragroup inequalities. Berkowitz (1962) argued that the most powerful frustration is that brought about by a sense of relative deprivation, the feeling that relative to certain other people, one is deprived of some desired object.

Thus, the limitations of the frustration-aggression theory and Berkowitz's (1962) arguments led to the development of Gurr's (1970) theory that placed less emphasis on the hardship of economy and frustration and focused on the relative deprivation. According to Gurr (1970), relative deprivation arises from a perceived discrepancy between what one has and what one feels that he should have.

There are two types of relative deprivation. The first one is called "egoistic" and the second "fraternal". Egoistic results from the individual's sense of deprivation relative to other individuals. Fraternal deprivation results from people's perception of their group's fortunes relative to that which they expect for their group. The concept of fraternal relative deprivation allows us to go beyond simple motivational models such as frustration-aggression, and to explore the more social bases of intergroup behaviour. Walker and Pettigrew (1984) argued that the fact that fraternal aggression is based on group, rather than individual behaviour, becomes a

more suitable construct to explain intergroup behavior such as discrimination. Thus, fraternal deprivation allows the shift of behaviour from an interpersonal to an intergroup level.

Brown (1995) argues that the theory of relative deprivation offers important insights in the explanation of intergroup discrimination. However, it placed a strong emphasis on the comparison processes and it is difficult to predict which groups or individuals will be adopted for comparisons. Relative deprivation theorists such as Muller (1980) have suggested that cultural norms determine which groups and individuals will be adopted for comparisons. However, Martin and Murray (1983) argue that the nature and choice of referents still need to be resolved by the relative deprivation theory.

Theories of conflict of group interests

The answer to which groups will be adopted for comparisons, is given by Campbell's (1965) realistic group conflict theory. According to this theory, intergroup behaviour will tend to reflect group interests. If these interests are incompatible, then the response will be negative behaviour such as intergroup discrimination. If they are compatible then the result will be positive behaviour such as tolerance. The strongest proponent of this theory was Sherif (1966). Campbell's (1965) realistic group conflict theory seems to solve many of the problems associated with the authoritarian personality, frustration-aggression and relative deprivation approaches. Hostile intergroup attitudes are caused as a function of intergroup behaviour, and not interpersonal behaviour. Further, conflict is caused for real resources and not by a feeling of deprivation.

Sherif and Sherif (1953), Sherif, White, and Harvey (1955) and Sherif, Harvey, White, Hood and Sherif (1961) tested experimentally Campbell's (1965) realistic group conflict theory. These studies became known as "summer camp studies" because they were under the guise of a summer holiday camp. The participants in these studies were 12-year old boys who came from non-deprived environments, to ensure that their subsequent behaviour could not be attributed to any pre-existing deprivation. In the first stage of the experiments, participants were split into two groups and participated in some activities in these groups. At this stage the groups had nothing to do with each other. In the second stage of the experiments, a series of competitions were organised between the two groups. The winner of these competitions would win something and the loser would win nothing. Thus, an objective conflict of interest was introduced. At this stage, when an objective conflict of interest was introduced, the groups became hostile towards each other. The findings of these studies provide strong evidence for the realistic conflict explanation of discrimination. Later laboratory (e.g. Brown, 1988) and field studies (e.g. Struch & Schwartz, 1989) also confirmed Sherif and colleagues' (1953,1955,1961) basic findings. Rabbie and Horwitz's (1969) finding that interdependence of outcomes between groups was sufficient to create ingroup bias even when winning or losing was determined by the flip of a coin was also important.

Thus, Campbell's (1965) realistic group conflict theory, provides a powerful explanation of discrimination. Nevertheless, according to Turner (1981), there are a few limitations that make it impossible to explain all forms of prejudice and discrimination. The first is the existence of negative attitudes and behaviour even under co-operative situations. In Brown's (1984) experiments, school children that were competing for a prize (own versus other school),

favoured their own school more as would be predicted by realistic conflict theory. However, Brown (1984) found that even under cooperative conditions participants still favoured their own group. The second problem is that whether conflict is caused by a competition over concrete things such as money or land, or by less materialistic things such as prestige or need to achieve success. Sherif (1966) defines group interests as "an economic interest, a political advantage, a military consideration, prestige, or a number of others" (p.15). Therefore, Sherif (1966) does not specify clearly what he means by group interests.

Social identity theory

Tajfel (1974) was very critical of the theories that attempted to reduce robust social phenomena such as intergroup discrimination to individual differences (Adorno et al., 1950) and herd instincts (Le Bon, 1895). Tajfel (1981) also criticised the frustration-aggression theories that reduced conflict to individually experienced feelings of frustration and ignore the shared beliefs and social identities. In relation to group interest theories, Tajfel (1981) argued that social identity theory was not an alternative theory of explaining discrimination to the realistic group conflict theory (Campbell, 1965), but a complementary process and an interacting part in the "complex web of causation" of discrimination.

Thus, explanations in terms of personality, egoistic deprivation reduce important phenomena such as discrimination to individual differences and do not take into consideration the collective nature of intergroup relations. Fraternal deprivation and realistic group conflict explain discrimination but they are not necessary preconditions. Studies by Tajfel (1970) and Tajfel and

Billig (1974) demonstrated intergroup discrimination even in the absence of the perception of differences of interests or attainments between two groups.

Minimal group paradigm

Tajfel started his research on the causes of discrimination in 1970, attempting to develop a theory that explained discrimination without having the limitations of the preceding theories in this area. Tajfel (1970) started by creating an intergroup situation. The situation was "intergroup" only because two different groups were created. Subjects were told that they were brought together to participate in a study of "decision-making". They first had to guess the number of dots in rapidly projected clusters or express preference for the paintings of one or two painters, Klee and Kandinsky. They were then divided into two groups, on the basis of their choice during the first task. The "social categorisation" variable was the only necessary variable in this situation. There was no interaction or contact between group members, no group goals or personal self-interest and no history of conflict between the groups. Tajfel and Turner (1979) argue that they were "purely cognitive". There was only the perception of "we exist as an ingroup" and "they exist as an outgroup". This intergroup situation became known as the "minimal group paradigm". Each participant was placed in a separate cubicle and was informed as to which of the two groups he/she belonged. Participants were then provided with a booklet in which they were required to award points representing money to two other individuals. They knew what were their own group membership and the group membership of those between whom they were dividing the money, but those others had code numbers and their individual identity was unknown. Subjects indicated how they wanted to allocate money to two individuals (one from the ingroup and one from the outgroup) by selecting one of thirteen pairs of numbers

which were presented in the form of a distribution matrix. Participants tended to award more money to members of the ingroup. In the second set of experiments, the matrices were constructed in a way that the experimenters could assess the type of decision strategies that participants used. These strategies were: fairness (equal distribution of points between groups), maximum joint profit (maximise number of points obtained so that all the subjects together could get the greatest possible amount of money out of the experimenters), maximum ingroup profit (maximise number of points for ingroup) and maximum difference (maximise the difference in favour of the ingroup in the number of points awarded). Some of the matrices that were used by Tajfel (1970) can be seen in Table 1.

Table 1

Matrices used by Tajfel (1970)



Matrix 1 19 18 17 16 15 14 13 12 11 10 9 8 7
 1 3 5 7 9 11 13 15 17 19 21 23 25

Matrix 2 23 22 21 20 19 18 17 16 15 14 13 12 11
 5 7 9 11 13 15 17 19 21 23 25 27 29

Matrix 3 7 8 9 10 11 12 13 14 15 16 17 18 19
 1 3 5 7 9 11 13 15 17 19 21 23 25

Matrix 4 11 12 13 14 15 16 17 18 19 20 21 22 23
 5 7 9 11 13 15 17 19 21 23 25 27 29



In each of the above matrices, participants chose one term (e.g. 18/3, matrix 1). In matrices 1 and 2 when figures on the top represented points awarded to a member of the outgroup, maximum joint profit, maximum ingroup profit and maximum difference in favour of the ingroup could be located in the right side of the matrices. When figures on the top represented points awarded to a member of the ingroup, maximum ingroup profit and maximum difference in favour of the ingroup were at the left side of the matrices. In matrices 3 and 4, outgroup on

top represents all maxima located at the right side of the matrix. Ingroup on top represents maximum joint and maximum ingroup profits at the right, and maximum difference in favour of the ingroup at the left extreme.

The minimal group paradigm has yielded a consistent pattern of results. Subjects allocated more money to ingroup than to outgroup members, trying to maximise ingroup profit. Tajfel's (1970) idea that social categorisation alone was sufficient for intergroup discrimination was first published in 1972 in an article that reviewed the social categorisation processes. In this article, Tajfel argues that there is a psychological need for groups to have a positive identity and, to be able to have this positive identity, they need to distinguish themselves positively from other groups. Thus, the aim of intergroup comparisons is to establish and maintain a positively valued identity.

Tajfel (1972) argues that a person's social identity is comprised of all the social categories that he belongs to, and which have been internalised to define the self together with their emotional and value significance. Thus, according to Tajfel (1972), the cause of discrimination is the psychological pressure of groups for positive distinctiveness. This pressure makes them to favour their ingroups over the outgroups. Tajfel (1972) used the data from his minimal group experiments to back up this theory. This theory became known as social identity theory.

Subsequent to the description of social categorisation processes in 1972, Turner (1975) developed the idea of "social competition". Turner (1975) has proposed that competition between two groups may have two forms. It can be objective or social. A battle over territory is

a form of objective competition. However, when the aim is to alter the position of one's group regardless of the objective gains or losses, this is called social competition. According to Turner (1975), the finding that subjects in the minimal group paradigm show ingroup bias and aim for the maximum differentiation strategy, even when they are only awarding points, rather than actual money, suggests that they are engaging in social competition. After his paper in 1972, Tajfel elaborated more on social identity theory. He proposed the following causal psychological sequence: social categorization, social identity, social comparison and positive distinctiveness. This psychological sequence was used to explain intergroup relations and social change.

Social identity theory is quite complex and is difficult to be summarised in a few paragraphs. Tajfel (1979) described social identity theory as a "conceptual tripod with three legs".

First leg of the tripod

The first leg is the causal psychological sequence: social categorization, social identity, social comparison, positive distinctiveness. According to Tajfel (1974), these four processes are linked in the following way. Categorisation, by dividing the world into groups, makes the person to identify with a group. The group(s) with which the person identifies provides a satisfactory identity when the comparisons of one's own group(s) with other groups are favourable, and as a result positive distinctiveness is achieved for one's own group (s) relative to other groups. Thus, social identity theory analyses intergroup relations and group behaviour in terms of two separate processes: 1) the cognitive process of categorisation and 2) the motivational process of self-enhancement or self-esteem.

The cognitive process of categorisation assigns individuals to social categories and emphasises similarities in the same category and differences between different categories on dimensions associated with the categorisation. The cognitive element of social identity theory and more specifically the idea that emerged from the minimal group studies that social categorisation is sufficient to generate intergroup competition inspired great interest and controversy at the same time. Hogg and Abrams (1988) argue that individuals in the minimal group study categorise themselves in terms of the social category provided by the experimenter, and that this process of categorisation emphasises intergroup differences on the only dimension available - the allocation points. Deschamps and Doise (1978) found that when one categorisation (e.g. male/female) becomes crossed or intersected by another (e.g. young / adult), then the impact of social categorisation was weakened. Thus, as Hogg and Abrams (1988) argue, "this purely cognitive analysis of intergroup differentiation has difficulty in accounting adequately for variations in the extremity of differentiation and for the ethnocentric nature of that differentiation" (p.53).

The other major way in which social identity regulates social behaviour is through motivational processes associated with self-conception and the most important and obvious motivational process is the need for positive self-esteem. Tajfel and Turner (1979) describe this as a need for positive social identity and positive self-esteem. This idea led to the development of the self-esteem hypothesis which was elaborated later into two corollaries by Abrams and Hogg (1988).

The inspiration behind Tajfel's psychological sequence of social categorization, social identity, social comparison, positive distinctiveness was Bruner's (1957) notion that the greater the

subjective value of a physical object, the greater the overestimation of its perceived size. In 1959, Tajfel proposed a more cognitive interpretation. He suggested that overestimation is a tendency to emphasise differences between stimuli in different categories and also emphasise similarities between stimuli within the same category. Tajfel's main interest was intergroup behaviour and so he applied this idea to the domain of personal perception. Social categorisation of people into different social categories produces an accentuation of intercategory differences and intracategory similarities of stereotypic dimensions. Tajfel believed that discrimination involves a categorisation process, and a search for coherence. Tajfel (1969) states that " the need to preserve the integrity of the self-image is the only motivational assumption we need to make in order to understand the direction that the search for coherence will take" (p.92). The coherence motive has been displaced in favour of a self-enhancement motive derived from Festinger's (1954) theory of social comparison processes. Tajfel (1972) argued that the aim of social comparisons is to attain a "positively valued distinctiveness from other groups" (p.3).

Second leg of the tripod

According to Turner (1996), the second leg of the tripod is the social and psychological processes that make behaviour to shift from an interpersonal to an intergroup level and the psychological consequences that this shift has. For example, social conflict makes it more possible that people will try to find solutions at an intergroup level rather than individuals pursuing personal self-interest.

What Tajfel (1974) proposed was that social behaviour falls somewhere along a continuum with two extremes, from purely interpersonal to purely intergroup behaviour. Quite where it falls depends on three factors. The first is the clarity with which the social categories could be identified. When they can be clearly identified (man-woman, black-white) then social behaviour tends to fall towards the intergroup end. When social categories are less clear then social behaviour is more likely to be interpersonal. The second factor is the extent to which the behaviour within each category is variable or uniform. Salient groups promote uniform behaviour. The third factor is whether one person's attitude towards others is idiosyncratic or uniform and predictable. We deal in many different ways with friends while groups deal with other groups in very specific ways mainly determined by stereotyped perceptions.

Tajfel's idea of interpersonal-intergroup continuum developed as part of the evolution of social identity theory. Tajfel (1979) argued that "purely" interpersonal behaviour is determined by the individual's characteristics and interpersonal attitudes, while "purely" intergroup behaviour is determined by the individual's membership of different groups or categories. This distinction between interpersonal and intergroup behaviour was conceptualised by Tajfel (1974) in terms of "acting in terms of self" versus "acting in terms of one's group".

Third leg of the tripod

The third leg of the tripod is the social contextualisation of seeking positive social identity. Turner (1996) argues that Tajfel's psychological dynamic of seeking positive social identity does not substitute the theories of conflicting group interests or the sociological variables that

explain discrimination. It is just "an interacting part of the complex web of causation" (p.17) that explains discrimination.

Tajfel's own writings show that he insisted upon the historical nature of intergroup phenomena. He believed that social psychology on its own could not understand social phenomena and should never hope to produce complete explanations. In this respect, Tajfel's writings resemble the writings of Moscovici (1984), who wanted to create social psychology as "an anthropological and historical science" (p. 948). Tajfel (1981) explicitly states the limitations of social psychology's explanation of intergroup phenomena. He asserted that "I do not believe that explanations of social conflicts and social injustice can be mainly or primarily psychological" (p.7).

Tajfel (1974) argued that people belong to different groups and societies that are socially and historically evolved. These groups and societies have their own meanings, values, political and economic relations between them which are internalised by their members to define themselves subjectively. Tajfel (1974) emphasised the impact of sociostructural variables on intergroup behaviour. He attempted to integrate the psychological dynamic of seeking positive social identity with the social reality of groups that stand in power and status relations to one another. Therefore, power and status play an important role in explaining intergroup behaviour.

According to Jones (1972), social power can be defined as the degree of control that one group has over itself and of outgroups. Based on this definition, the allocation task used in the minimal intergroup experiments can be seen in terms of assignment of power. In experiments

where allocation power is assigned independently of status differences between groups, Sachdev and Bourhis (1985) found that members of higher power and equal power categories discriminate more against outgroups than members of low power groups. Members of low power groups may prefer allocations and status differentials that favour their ingroup, but without power their preference will not be expressed in actual allocations. Sachdev and Bourhis (1985) found that when low status groups are given power to control allocation outcomes do show significant intergroup discrimination.

Apart from power, Tajfel and Turner (1986) argue that status differentials are also critical in understanding intergroup relationships. Sachdev and Bourhis (1987) define status as "the relative position of groups on valued dimensions of comparison such as educational achievement, occupation, social standing, speech styles, etc" (p.278). Whether we belong to a high or a low status group determines our intergroup attitudes.

High status groups have already achieved positive status differentials and should have less need to discriminate. However, this is not always the case. High status groups may discriminate against low status groups on equity grounds. When high status groups are asked to compare themselves with a low status group, they are likely to give answers that reflect their self-evident superiority. In a review of 42 studies, Mullen, Brown and Smith (1992) found that high status groups showed more ingroup bias. According to Mullen et al. (1992) most of the studies finding more ingroup bias among higher status ingroups have involved more particular, transitory, task specific conceptualisations of status (e.g. superior scores on some laboratory

task). On the other hand, most of the studies showing ingroup bias among lower status ingroups have used global status cues.

According to Blanz, Mummendey and Otten (1995), an important factor that affects the occurrence and the degree of ingroup bias is the relatedness of the ingroup bias measure to the status differentials. According to Sachdev and Bourhis (1987), participants tend to reproduce the experimental status differentials if the dependent measures are strongly related to the status dimension. High status participants tend to confirm their superiority while low status participants acknowledge their inferiority. On other dimensions of evaluation, however, which are irrelevant to the nature of the status differences between groups, differences between high and low status groups in the degree of ingroup bias are eliminated. Sachdev and Bourhis (1987) argue that when evaluating groups of traits such as likeability, friendliness, and cooperativeness, members of both high and low status groups rate their ingroup more positively than the outgroup. Brewer, Manzi and Shaw (1993) found that on these dimensions low status groups often show greater ingroup favouritism than high status groups, possibly as compensation for unfavourable ingroup comparisons on status-relevant dimensions.

Sachdev and Bourhis (1987) modified the minimal group paradigm so the groups were of equal and unequal status. They found that equal and high status groups showed similar levels of ingroup favouritism. By showing ingroup favouritism, high status groups restate their superiority while equal status groups attempt to achieve positive distinctiveness. In a later study by Sachdev and Bourhis (1991), where both power and status of the groups were manipulated, the same findings were obtained. Brown (1984) conducted a series of studies on intergroup

similarity. He found that status similarity increased the need for positive distinctiveness. Brown and Abrams (1986) found that when the outgroup was similar to the ingroup in status, then the amount of bias increased.

Tajfel (1974) distinguished between intergroup status differentials based on "secure" and "insecure" social comparisons depending on whether "cognitive alternatives" to the existing social system may or may not be conceived. "Secure" groups are those which have different status and see no "cognitive alternatives" to the status quo. "Insecure" groups compare themselves to other groups of different status and their relationship with the other groups is perceived as unstable and illegitimate. Therefore, "insecure groups" see "cognitive alternatives" to the status quo and can engage in social action to change the existing status relationships within a given society. Tajfel and Turner (1986) distinguished three different avenues of responding to an "insecure" negative identity, each with different implications for collective movements.

The first avenue is social mobility. With social mobility, individuals dissociate themselves from the lower status ingroup and seek identification with the higher status outgroup. Thus, in a spirit "if you can't beat them, join them", subordinate groups want to leave their group and join a higher status or more prestigious group. However, the strategy of social mobility to achieve positive social identity is most likely only in social systems characterised by permeability of boundaries and high opportunity for upward social mobility. Ellemers, van Knippenberg, de Vries and Wilke (1988) found that when this is the case, then participants tend to lower their level of identification with their subordinate group. When this is not possible, then Tajfel and

Turner (1986) argue that subordinate groups tend to compare themselves with more subordinate groups in order to enhance their identity.

The second avenue is social creativity. Group members use this strategy to achieve positive distinctiveness. By selecting new dimensions of comparison on which the ingroup is regarded as inferior or new values of the old dimensions, the group can increase its prestige. The "black is beautiful" movement in the USA, the "hippies" in the 1970's and the "punks" are an example of this strategy characterised by an attempt to reject the moral and cultural norms of the society at that time. Another possibility also is that low status groups may "stagnate", that is, accept their negative identity. According to Vaughan (1978), an example of this is the Maoris or the Pariahs in Hindu India. These groups accepted their inferiority without questioning their positions. Yet, these groups have been developing a positive identity for themselves since the 1960's. They have changed their comparative dimensions and included dimensions that the dominant white group possesses.

The third avenue of responding to an insecure negative identity is social competition. When the comparison between groups is perceived to be insecure, then low status group members may seek to change the structure of intergroup dominance and status differentials by engaging in direct competition with higher status groups. An example of this strategy is the civil rights movement in the 1960's instigated by the black people in the USA. However, for something like this to happen, subordinate group members have to feel that there is a possibility that the state of affairs can change. Until they are sure that this can happen, they would not like to psychologically risk by comparing themselves with superior groups.

It is therefore clear, that people want to achieve positive distinctiveness and most of the time are concerned with the maintenance and enhancement of social identity. Tajfel and Turner (1986) distinguish three different ways in which status relationships among groups may be subject to change. These are the perceived permeability of group boundaries and the perceived stability and legitimacy of the status differences between the groups. These factors play an important role in determining which social group will be chosen as a referent, and which strategy will be adopted by individuals to achieve positive social identity.

According to Turner (1975), the legitimacy of a status differential is the degree to which it is perceived as legitimate and fair or unfair and unjustified. Subordinate groups will seek positive distinctiveness from superior groups when they feel that their inferiority is illegitimate. Stability refers to how easily the whole nature of status relations between groups in society can change. Thus, as illegitimacy and instability increase, intergroup discrimination will also increase.

Permeability refers to the extent to which group members can expect to move from one group to another. According to social identity theory, under conditions of high permeability, members of lower status groups will tend to prefer membership of the higher status outgroup and members of high status groups will increase their commitment to their current group membership. When status differentials are perceived to be unstable or illegitimate, members of low status groups exhibit significantly stronger ingroup identification than when status relationships are stable. At the same time, perceived instability of the status hierarchy threatens the positive distinctiveness of high status groups. Sachdev and Bourhis (1991) argue that secure status differentials may

reduce the salience of intergroup comparisons and discrimination, but insecurity heightens the motivation to maintain status distinctions on the part of high status group members. Thus the way in which people strive for, or maintain positive social identity will be heavily influenced by their subjective perceptions of the nature of the relations between groups and in particular how stable and legitimate the outcomes of intergroup comparisons are.

Turner and Brown (1978) experimentally manipulated the perceived legitimacy and stability of status differences between subject groups and measured ingroup identification, ingroup favouritism and social creativity. They found that high status groups were most biased and that illegitimate groups showed the highest levels of discrimination. When status differences were unstable, ingroup bias was higher only in legitimate high status groups and illegitimate low status groups.

Ellemers, Wilke and van Knippenberg (1993) provided a demonstration of the importance of permeability, legitimacy and stability on intergroup relations. They conducted an experiment that used a management work simulation. Participants were divided into higher-status management role and worker role after an organisational problem-solving task (this is what they were made to believe). Following this, permeability, legitimacy and stability were manipulated. Consistent with Turner and Brown (1978), changes in illegitimacy and instability increased the levels of ingroup favouritism. This was also the case for permeability.

One important point of all these studies is that these effects are mostly observed by high than low status groups suggesting that making status relations illegitimate and unstable you threaten the identity of the high status groups and they attempt to enhance it.

Factors affecting the occurrence of intergroup discrimination

Mummendey (1995) argues that intergroup discrimination under conditions of the minimal group paradigm is stable and consistent. However, if the intergroup situation is not minimal, there must be some conditions that foster the tendency to show ingroup bias and others which reduce the tendency to show ingroup bias. In its original formulation, social identity theory, claims that a positive association between social identity and intergroup discrimination exists under "certain specific conditions" (Turner et al., 1987). Hinkle and Brown (1990) also argued that groups do not always evaluate themselves positively relative to other groups. This depends on certain conditions or factors.

One of the most important factors that social identity theory assumes to be related to ingroup discrimination is the degree to which participants identify with the ingroup. Hinkle and Brown (1990) presented summary results from fourteen studies, which examined the relationship between group identification and ingroup bias. According to the findings of these studies, group identification and group bias were not always positively associated. Mlicki and Ellemers (1996) have also reported similar findings from a series of four studies with Polish and Dutch psychology students as natural groups. The only studies which have provided unambiguous support for a strong relationship between group identification and ingroup bias were Abrams' (1984) and Kelly's (1988) research on rival schools and political parties which are very

competitive groups. Therefore, the nature of group seems to play an important role in the relationship between group identification and ingroup bias. More recently, Jetten, Spears and Manstead (1997) showed that the relationship between identification and ingroup bias is moderated by specific group norms that are salient and influence the willingness to display ingroup bias. According to Turner (1991), group norms express important aspects of an identity and, therefore, group members should be motivated to act according to these norms. Thus, high identifiers should be more concerned to act according to these norms than low identifiers. In line with Hinkle and Brown (1990), it can be concluded that there is no evidence of a consistently positive relation between group identification and ingroup bias. It seems therefore, as Brown (1995) argues that "the hypothesised link between social identity and biased intergroup comparisons proposed by Tajfel and Turner (1986) while undoubtedly a potent motivator of intergroup behaviour in some contexts, may not be quite generic as they had originally assumed" (p. 187).

A second factor that Tajfel and Turner (1979) argue that should affect the degree to which groups want to construct a positive identity is the relevance of the outgroup to identity. Brown (1978) in a study of aircraft factory workers, found that the production workers never showed ingroup favouritism when they compared themselves with other groups. According to Brown (1978), this probably happened because either they could sustain positive distinctiveness by comparing themselves with groups which were not covered by this study or because their identity as production workers was not important to them.

Another factor affecting the degree, to which groups want to construct a positive identity, is the availability of intergroup comparisons on relevant evaluative dimensions. Mummendey and Simon (1989) found that ingroup favouritism was most likely to be seen on comparison dimensions important to the ingroup. Hunter, Platow, Bell, Kypri and Lewis (1997) conducted two studies and found that the importance of comparison dimensions played an important role in evaluating the prediction of social identity theory that people discriminate against outgroups in order to enhance their identities. However, in a meta-analysis of 137 studies (Mullen, Brown and Smith, 1992) found that there was a tendency for the magnitude of ingroup bias to decrease as a function of the relevance of the evaluative comparison dimension.

Threat to identity is another prerequisite for ingroup bias. Social identity theory predicts that intergroup discrimination occurs only when the identity of a social group is threatened. Threats can vary from the mild threat manipulated in the laboratory to the more open derogatory attitudes of another group in a real world setting. An example of the first type of threat mentioned is shown by Brown and Ross's (1982) experiment where participants were divided randomly into two groups, then were divided according to their performance on a test and then were given the opportunity to evaluate the capabilities of the two groups. In fact groups feedback, "very bad", "bad" and "good" evaluations were manipulated by the experimenters. Brown and Ross (1982) found that participants who received "very bad" and "bad" comments from the outgroup showed the highest levels of discrimination against the outgroup. However, in a meta-analysis by Mullen et al. (1992) it was found that members of low status groups experimentally created in the laboratory on the basis of success and failure feedback did not show more ingroup bias than members of equal-or high status group. This contradicts the

prediction of social identity theory that ingroup bias is considered a standard or inevitable product of status-related threats to identity. However, members of low status groups which are experimentally created in the laboratory may simply evaluate the outgroup in a way that reflects the experimentally imposed status differences. Mullen et al. (1992) found that for members of natural groups, ingroup bias did not depend on the relative status position, although there was a slight trend for groups of lower status to show more ingroup bias.

Williams (1984) suggested that enhancement of identity presupposes that group members have "agentic or self-orientated social styles". This means that the group members' primal concern should be achievement and status. When groups operate in a more "socio-emotional" manner, then they are probably not concerned with the maintenance or enhancement of their identity. William's (1984) hypothesis was not experimentally supported. Brown and Smith (1989) found that women, who tend to have a more communal orientation, have been found to display intergroup discrimination in the same level with men. This led Brown and Smith (1989) to conclude that in agentic groups there is a concern for achievement and status comparisons (cognitive kind), ingroups operating in a more socio-emotional manner there is a concern with more affective dimensions of comparisons such as friendliness and sociability.

Another factor determining when groups are concerned to construct a positive identity, is the perception of homogeneity of the group. Brown and Smith (1989) found that minorities tend to think that are more homogeneous than majorities. Simon and Pettigrew (1989) found a strong relationship between perceived ingroup homogeneity and importance of ingroup membership. According to Simon and Brown (1987), minority groups try to maintain their cohesion when are

threatened by majority groups and may consider comparison dimensions of cohesion more important than comparison dimensions of power and achievement. However, Brown and Smith (1989) and Sachdev and Bourhis (1984) found that minority groups do not show more ingroup bias than majority groups.

Hinkle and Brown (1990) argue that the identity maintaining process becomes important only when groups have a "comparative ideology" and a "collectivist orientation". Hinkle and Brown (1990) suggested a taxonomy of groups along two dimensions: 1) individualism versus collectivism; 2) non-comparative versus comparative ideology. Individualism-collectivism refers to the level of comparison subject. Individualists emphasise individual differences while collectivists emphasise intergroup differences. According to Hinkle and Brown (1990), groups which have a "comparative ideology", tend to compare themselves with other groups and groups with a "non-comparative ideology" switch from a non-comparative ideology to a comparative ideology depending on the context. Hinkle and Brown (1990) suggest that the identity maintaining process becomes important only when groups have a "comparative ideology" and a "collectivist orientation".

Critiques of social identity theory

Social identity theory has contributed to a great deal toward understanding intergroup relations. However, there are some issues unresolved. The first one is that social identity theory did not specify which group memberships a person will use to form the basis of his identity. Abrams (1996) argues that Tajfel did not make this point clear because he was mainly concerned with groups, which provide a meaningful basis of identity such as such as cultural, ethnic and

religious groups. Furthermore, discrimination can normally be seen between these types of groups.

Self-categorisation theory (Turner et al., 1987) also provided an answer for the above limitation. The self-categorisation theory which has been called a "cousin" of social identity theory, elaborates in detail on the social-cognitive basis of group membership and focuses on the explanation, not of a specific kind of group behaviour but on how individuals act as a group. Self-categorisation theory pays less attention to motivational factors and emphasises social categorisation. According to Turner et al. (1987), the self is a cognitive structure and self-categorisation can be described as " a part of a hierarchical system of classification" (p. 44-45). Thus, Turner et al. (1987) argue that " all social comparisons with others depend upon the categorisation of the others as part of a self-category at some level of abstraction" (p. 48). For self-categorisation theory, the perception of self as a uniquely differentiated person shifts towards the perception of self as an "interchangeable exemplar of some social category" (Turner, 1985). Turner et al. (1987) argue that level of categorisation depends on context as well as perceiver's purposes and goals. Thus, changes in the context result in changes in self-conception. However, self-categorisation theory is concerned with the antecedents, nature and formation of psychological group formation and does not include any reference to self-esteem, positive distinctiveness, motives or motivation. Thus, as van Knippenberg and Ellemers (1993) argue, it is a purely cognitive theory which "treats human beings as detached observers processing information about stimulus groups in which no personal commitment or interest is at stake" (p.18).

The second and most controversial issue of social identity theory is the motivational components of intergroup behaviour. According to social identity theory, one important reason why people display ingroup bias is that this enhances social identity, thereby elevating the self-esteem. This prediction of social identity theory, which is known as self-esteem hypothesis was embodied by Abrams and Hogg (1988) into two corollaries. The first is that 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. The second suggests that, because of a motivational need for positive self-esteem, low or threatened self-esteem will motivate intergroup discrimination. Self-esteem is an independent variable, a motivating force for specific forms of intergroup behaviour. A review of the studies conducted in the area of self-esteem hypothesis and important methodological and conceptual obstacles associated with research in this area will be discussed in the next chapter.

CHAPTER 2**A Review of the Self-Esteem Hypothesis and Suggestions for Clarification**

According to Luhtanen and Crocker (1991) the idea that intergroup discrimination may be related to self and therefore self-esteem has been very popular. Ehrlich (1973) argued that attitudes towards others are linked to attitudes toward the self and suggested two reasons why self-attitudes and intergroup discrimination may be related. First, the person may generalise self-attitudes to others. Thus, people who have low self-regard may assume that others are also unworthy of regard. Second, derogation of others may enhance self-attitudes. In the first case, a person's level of self-esteem is assumed to affect intergroup evaluations, whereas in the second case, one's level of self-esteem is affected by intergroup evaluations.

A second perspective is Wills' (1981) theory of downward comparison. Wills (1981) argues that people are motivated to maintain and enhance their subjective well-being. In order to achieve this, they compare oneself with a less fortunate other. This is called a downward comparison. They use this type of comparison because it enables them to feel good about themselves. Wills (1981) argues that people are most likely to engage in downward comparison when their self-esteem is low, or their subjective well being is threatened. Thus, Wills (1991) considers intergroup discrimination to be a downward comparison process, motivated by individuals' need to have a positive view of themselves.

A third perspective on self-esteem and intergroup discrimination is provided by social identity theory (Tajfel & Turner, 1979/1986) and was discussed in detail in the previous chapter. Like

downward social comparison theory, social identity theory assumes that people are motivated to maintain or enhance their self-esteem. The difference between social identity theory and downward social comparison theory is that they conceptualise self-esteem in different ways. Wills (1981) conceptualises self-esteem in very personal and individualistic ways, while Tajfel and Turner (1979/1986) differentiate between two parts of the self-concept: personal identity and social identity. This distinction was discussed in the previous chapter.

Both downward comparison and social identity theory make two predictions. The first is that successful intergroup discrimination enhances social identity and thus elevates self-esteem. The second suggests that, because of a motivational need for positive self-esteem, low or threatened self-esteem will motivate intergroup discrimination. Thus, as Ehrlich (1973) suggested it, self-esteem is a motivating force for specific forms of intergroup behaviour and a product of specific forms of intergroup behaviour. These two predictions became known as the two corollaries of the self-esteem hypothesis (Abrams & Hogg, 1988).

According to Luhtanen and Crocker (1991), the two corollaries of the self-esteem hypothesis present something of a paradox. If people with low self-esteem show more ingroup bias to increase their self-esteem, why then there are some people who have chronically low levels of self-esteem? One possible answer to this is that ingroup bias is not a good strategy to increase self-esteem since enhancing one self at the expense of the others it is not a socially admired behaviour. Another possibility is that low self-esteem individuals cannot use intergroup discrimination as a self-enhancing strategy. According to Alloy and Abramson (1979), people with low self-esteem lack the confidence and cognitive ability to engage in self-favouring

discrimination. In contrast participants with normal levels of self-esteem, are likely to engage in intergroup discrimination.

Brown, Collins and Schmidt (1988) have suggested that both high and low self-esteem individuals are motivated to enhance themselves, but they use different enhancement strategies. Brown et al. (1988) argue that individuals prefer to "think as well of themselves as they can get away with". Thus, when what they can get away with is limited by self-perception, then they are unable or unwilling to interpret positive feedback in a manner that enhances the ingroup. According to Brown et al. (1988) although individuals may prefer to "think as well of themselves as they can get away with", what they can get away with is limited by a) self-perceptions b) beliefs about what others will accept, and c) objective evidence in the environment. Therefore, in order to be effective, desirable images of the self must be perceived as believable and grounded in social reality. This aspect of social life accounts for differences in the way in which people with different levels of self-esteem seek to promote a positive self-image. Those with low self-esteem doubt their competence in many areas. In contrast people with high self-esteem are confident of their abilities and further efforts at promoting self-esteem can proceed relatively unobstructed. In particular, Brown et al. (1988) argue that people with high self-esteem tend to engage in direct forms of self-enhancement, whereas those with low self-esteem tend to self-enhance indirectly. The difference between these terms concerns the degree to which the self is directly implicated in esteem-enhancing biases. Direct self-enhancement occurs when individuals exhibit esteem-enhancing biases that explicitly center around the self, whereas indirect self-enhancement occurs when individuals exhibit esteem-enhancing biases that involve other members of the social world. Brown et al. (1988) conducted

a study in which high and low self-esteem participants were divided into two groups on the basis of their perceptual style (overestimators versus underestimators). Thus, an ingroup and an outgroup was created. The ingroup and the outgroup were further divided into two, so that there was a subgroup of the ingroup that subjects belonged to, and one that they did not belong. So, four groups were created. Each of the four groups then participated in a problem-solving task. Participants had either to rate the solutions of the ingroup (which they actually belonged) and the solutions of the outgroup or solutions of the ingroup (to which they did not belong) and the solutions of the outgroup. High self-esteem subjects showed more ingroup bias (rating the ingroup's solution as better than the outgroup) when the ingroup was also their own group. Low self-esteem subjects, on the other hand, showed more ingroup bias when they rated the solution of the ingroup solution to which they did not belong. In a subsequent study, Brown et al. (1988) obtained the same findings. Thus, their results indicate that both high and low self-esteem individuals enhance the self through ingroup bias using different enhancement strategies.

Crocker, Blaine and Luhtanen (1993) have also argued that both high and low self-esteem individuals discriminate against outgroups, but in different ways. High self-esteem individuals believe that they have only positive attributes and expect positive outcomes for the future (Brockner, 1983). Low self-esteem individuals are uncertain about the attributes they have and are not very optimistic about the future (Brockner, 1983). Thus, because they differ in the positivity and certainty of themselves, they use different methods of self-enhancement. Those with high self-esteem are not concerned about the remote possibility of failure or humiliation and are therefore oriented towards success. For them, an evaluative situation is a good opportunity to enhance themselves. People with low self-esteem want to have positive attributes

but are not sure that they have them and do not expect success. For them an evaluating situation is threatening and can be humiliating. Thus, they are primarily concerned with self-protection and avoiding humiliation. Crocker, Blaine and Luhtanen (1993) suggest that ingroup ratings reveal enhancement motives, whereas outgroup ratings reveal protection motives. Thus, people with high self-esteem, because they are concerned with enhancing themselves or the ingroup, should be more likely to rate the ingroup positively rather than derogating the outgroup. People with low self-esteem, on the other hand, because they are concerned with protecting themselves or the ingroup, should be more likely to derogate the outgroup than enhancing the ingroup. Furthermore, Crocker, Blaine and Luhtanen (1993) argue that because people with high self-esteem have more positive and certain views of their ingroups than people with low self-esteem, they should be more likely to evaluate their ingroups favourably relative to outgroups.

The aim of this chapter is to provide a review of the studies conducted in the area of the self-esteem hypothesis and clarify the methodological and conceptual problems associated with research in this area. The studies that tested corollary one of the self-esteem hypothesis will be described first, followed by studies that tested corollary two. Then other motivational components suggested by some researchers (e.g. Hogg & Abrams, 1993) will be described. The rest of the chapter will focus on methodological and conceptual obstacles associated with research in the area of the self-esteem hypothesis. The chapter will close with an outline of this thesis.

Studies testing corollary one

Oakes and Turner (1980) were the first to test corollary one of the self-esteem hypothesis. Using the minimal group paradigm, they divided participants into two groups, on the basis of their preference for some paintings. In reality, participants were randomly divided into two groups and there was no interaction between them. Participants in the experimental condition were asked to complete an intergroup point-distribution task, that is allocate points between an ingroup and outgroup member. Participants in the control condition were asked to read a newspaper about arranged marriages. All participants were then asked to complete a measure of personal self-esteem. Significant intergroup discrimination occurred in the experimental condition. More importantly, and consistent with social identity theory, participants in the experimental condition reported significantly higher self-esteem than did participants in the control condition, suggesting that intergroup discrimination enhances self-esteem. Oakes and Turner (1980) concluded that intergroup discrimination in a minimal group context increases self-esteem. However, Oakes and Turner (1980) suggested that there might be alternative explanations for these findings. One of these is that the minimal group paradigm might contain demand characteristics such that the elevated self-esteem in the experimental condition might be due to the satisfaction that participants derive from doing well in the experiment, by complying with its elicited goal of eliciting discriminatory behaviour. Oakes and Turner (1980) propose that the constant reference to group memberships made during the intergroup points allocation task might also have increased the salience of the social identity which elevated self-esteem independent of the effects of the discriminatory behaviour.

Hogg, Turner, Nascimento-Schulze and Spriggs (1986, experiment 1) conducted a study to test whether increased salience of categorisation elevates self-esteem. Using the minimal group paradigm, they divided participants into two groups either explicitly or implicitly. Participants were then asked to complete an intergroup allocation task. Hogg et al. (1986) found that participants who discriminated more, reported higher levels of personal self-esteem independent of whether they were categorised implicitly or explicitly. Therefore, category salience was not a significant factor in determining self-esteem.

In an attempt to test corollary one of the self-esteem hypothesis, Turner and Spriggs (1982) conducted a minimal group experiment in which participants were instructed to be either cooperative or competitive, and were either categorised according to their painting preferences or were not categorised. Participants who were categorised according to their painting preferences were asked to allocate points between ingroup and outgroup members. Participants who were not categorised were asked to allocate points between themselves and another person. Personal self-esteem was measured after allocation of points in all conditions. Consistent with their prediction, the greatest intergroup discrimination occurred in the group condition and in the condition containing competitive instructions. Self-esteem was also higher under competitive conditions than under cooperative conditions as well as under individual conditions than under group conditions. These findings are consistent with the hypothesis that intergroup discrimination increases self-esteem. However, Lemyre and Smith (1985) have argued that self-esteem might have been elevated by either intergroup discrimination or by the effect of competitive instructions independent of the effects of discrimination. Thus, the competitive-cooperative instructions might have confounded the experimental design.

Hogg and Turner (1985) categorised participants as members of two minimal groups on a random basis and then asked them to complete an intergroup point-allocation task. Participants were then asked to complete personal self-esteem measures. Contrary to corollary one of the self-esteem hypothesis, intergroup discrimination was not related to personal self-esteem.

Vickers, Abrams and Hogg (1988) categorised participants as members of two minimal groups on a random basis and then asked them to complete an intergroup point-allocation task. Personal self-esteem was measured after the intergroup point-allocation task. Vickers, Abrams and Hogg (1988) found that participants who engaged in intergroup discrimination reported lower personal self-esteem. Vickers et al. (1985) suggest that this reduction in self-esteem may have resulted from violating the norm of cooperation and choosing to discriminate instead against the outgroup. This is in direct opposition to corollary one.

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 outgroups use, and desire for close contact with the outgroup. Significant correlations were found between personal self-esteem and intergroup differentiation only for some political parties, suggesting that the results may only apply to certain types of supporters, or, that political parties have different norms in terms of intergroup behaviour. These findings provide only limited support for corollary one.

Hogg and Sunderland (1991) manipulated subjects' personal self-esteem by providing either positive or negative feedback on a word association task to produce success and failure

conditions. Minimal group members (categorised on an explicitly random basis) and uncategorised participants then completed an intergroup point-distribution task. Personal self-esteem was measured immediately before and after this task using a between-subjects design. Contrary to corollary one, discrimination was not associated with increases in self-esteem.

Hogg and Morkans (1989) conducted a very similar study to Hogg and Sunderland (1991). Hogg and Morkans (1989) found a slight tendency for posttest personal self-esteem 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 one.

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

Hunter, Stringer and Coleman (1993) asked Protestant and Catholic school children to make attributions about the cause of an actor's behaviour in a series of vignettes. A 2 (actor's religion: ingroup vs. outgroup) X 2 (actor's behaviour: positive vs. negative) X 2 (participant's religion: Protestant vs. Catholic) mixed design was employed. Personal self-esteem was measured immediately after these attributions. Contrary to corollary one, self-esteem was not significantly correlated with attributional differentiation either across or within group.

Chin and McClintock (1993) have put forward a social value theory in order to account for increments in self-esteem following discrimination. They propose that individuals can be divided into those who possess 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 the difference. Consequently, Chin and McClintock (1993) argue that increments in self-esteem following discrimination may be attributed to a consistency between intergroup behaviour and a competitive interpersonal social value orientation. In a test of these predictions, they classified individuals according to pretest data into prosocial and competitive. Participants were then categorised randomly into two groups and completed an intergroup point-distribution task. They found that competitive participants showed more discrimination than prosocial participants supporting their hypothesis that interpersonal social value orientation influences intergroup behaviour.

Mullin and Hogg (1995) conducted a study using the minimal group design. Half of the participants were minimal group members (categorised on a random basis) and the other half were not categorised. All participants were asked to complete an intergroup point-allocation task. Mullin and Hogg (1995) found that minimal group members reported higher levels of personal self-esteem than uncategorised participants after completing the intergroup point-allocation task.

Hunter, Platow, Howard and Stringer (1996) asked Protestant and Catholic Northern Irish children to rate members of each religious group on a series of evaluative traits. Personal self-

esteem was measured before and after intergroup evaluations. Participants showed an increase in specific aspects of the personal self-esteem. This supports Hunter et al.'s (1996) hypothesis that only specific aspects of self-esteem can change following discrimination. However, the self-esteem changes were reported only among Catholic children. This is particularly worrying because the Protestant children discriminated more than the Catholic children and so according to corollary one, it would be expected to report a greater increase in self-esteem. Another problem with this study is also the fact that participants in the control group, who were not given the opportunity to discriminate, reported a decrease in self-esteem. This reduction is not surprising since pretest personal self-esteem was measured three weeks before the main experiment and many extraneous variables could have affected self-esteem either during pretest measurement or immediately before discrimination.

Vanbeseleare (1996) measured the personal self-esteem 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.

Studies testing corollary two

The second corollary of the self-esteem hypothesis has been examined in different ways. Some studies have examined the effect of ascribed esteem, operationalised as status or power on intergroup discrimination (e.g. Wagner, Lampen & Syllwasschy, 1986; Sachdev & Bourhis, 1984/1985/1987). Others obtained pretest measures of self-esteem and related them to

subsequent behaviour. (e.g. Crocker & Schwartz, 1985; Crocker, Thomson, McGraw & Ingerman, 1987).

Social identity theory (Tajfel & Turner, 1986) predicts that members of low status groups will have relatively low self-esteem, and that they should therefore possess greater motivation to engage in intergroup discrimination than members of high status groups. Laboratory studies investigating the link between status and intergroup discrimination have yielded contradictory results. Commins and Lockwood (1979) found that high status group members discriminated more than low status members and that low status group members favoured members of the outgroup, rather than members of their own group. In contrast, Branthwaite Doyle and Lightbown (1979) found that low status members discriminated more than high status members. Turner and Brown (1978) found that high status groups did not discriminate when their superiority was perceived to be completely secure. Low status group members did display outgroup favoritism when allocating points to high status outgroups for status related performance under legitimate and stable intergroup status conditions.

Wagner, Lampen and Syllwasschy (1986) manipulated the relative status of three minimal groups, such that one had higher status than the other two. Consistent with the second corollary of the self-esteem hypothesis the greatest levels of discrimination were found between the two lower status groups.

Sachdev and Bourhis (1984) manipulated the relative numbers of ingroup and outgroup numbers and predicted that minorities should show more discrimination than majorities. They

found instead, that both minorities and majorities discriminated to a comparable degree. In contrast, in two similar experiments where power (Sachdev & Bourhis, 1985) and status (Sachdev & Bourhis, 1987) were manipulated, they found more discrimination among those in a higher status. Low status group members favoured members of the outgroup on the status related dimension of creativity via the matrix ratings. This suggests that high status members did assert their superiority on the status dimension by discriminating against the low status outgroup and that low status participants acknowledged their inferiority through outgroup favouritism responses.

Thus, there is evidence for a lack of ingroup bias or even evaluation in favor of the outgroup under specific conditions. According to Blanz, Mummendey and Otten (1995), some of the factors affecting the occurrence and the degree of ingroup bias are, the size of the groups involved, their relative status and the relatedness of the ingroup bias measure to the status differentials. According to Sachdev and Bourhis (1987), participants tend to reproduce the experimental status differentials if the dependent measures are strongly related to the status dimension. High status participants tend to confirm their superiority while low status participants acknowledge their inferiority.

Tajfel and Turner (1979) also argued that low status group members acknowledge superiority of high status group members on the status related dimension of comparison. Thus, low status group members will show outgroup favouritism rather than ingroup favouritism towards high status outgroups. Conversely, high status groups compare themselves favorably with low status groups. Thus, on the comparison dimensions that are consequently perceived in favor of the

high status groups, social identity theory predicts that high status group members will discriminate against low status outgroups.

Finchilescu (1986) examined the effect of incompatibility between external and internal criteria of group membership on intergroup behaviour. According to Finchilescu (1986), group identification plays an important role in the manifestation of intergroup discrimination. However, according to Tajfel and Turner (1979), the acceptance that one is a member of certain groups implies that the internal criteria (elements of self-defining) and the external criteria (objective parameters defining the group) concur. Although most groups experience congruity between these criteria, there are also exceptions. People may be a member of a group to which they do not feel they belong. Finchilescu (1986) allocated participants to one of two groups of differential status such that the allocation was compatible or incompatible with their self-categorisation. They found that in the conditions where the internal and external criteria of group membership were incompatible, the response of the participants was determined by the status of the group to which the external criterion indicated they belonged. The participants placed in the high status group displayed as much ingroup favouritism as the members of that group who experienced no incompatibility. However, the participants placed in the low status group displayed considerably less ingroup favouritism than the members of the group that were in agreement with that placement. These findings support the central postulate of the social identity theory (Tajfel & Turner, 1979), that individuals strive to maintain or enhance their self-esteem.

Hunter, Stringer and Coleman (1993) examined the relationship between bias and personal self-esteem among Catholics and Protestants in Northern Ireland. They found little evidence of any consistently positive association between these variables in both categories. However, the Catholics demonstrated pronounced levels of bias, whereas the Protestants tended to be more selective about the dimensions on which they displayed discrimination. In Northern Ireland, Catholics generally tend to be of lower status (Whyre, 1986); they are more likely than Protestants to be unemployed, dependent on social welfare and when working to have lower incomes. This indicates that factors such as status can influence bias.

It can be argued that the results of the power and status studies are contradictory and do not enable clear-cut conclusions. Mullen, Brown and Smith (1992) argued that higher status group will exhibit more intergroup discrimination only in the context of artificial groups. In the context of real groups, it is the low status groups that will exhibit higher levels of intergroup discrimination. Furthermore, Mullen, Brown and Smith (1992) found that most of the studies showing ingroup bias among lower status ingroups have used global status cues (e.g. prestige of work unit within society) whereas only half of the studies showing ingroup bias among higher status ingroups have used such cues. Thus, Mullen, Brown and Smith (1992) argue that a concentration on transitory, task specific, conceptualisations of status might lead to misguided conclusions about the relationship between intergroup discrimination and status.

Besides the contradictory findings of the studies that manipulated self-esteem through status, Abrams and Hogg (1988) have also expressed concerns about equating status with self-esteem. They have argued that status hierarchies between ingroups and outgroups are based on objective

criteria such as money or power. Therefore, there is likely to be relatively little variability between different group members' perceptions of ingroup and outgroup status. In contrast, collective self-esteem derives from subjective satisfaction with an ingroup and is likely to be far more variable between members of the same group. Therefore, even members of low status group can possess high collective self-esteem.

Some researchers measure self-esteem directly and relate it to subsequent behaviour. Crocker and Schwartz (1985) conducted a study using the minimal intergroup paradigm. Following completion of personal self-esteem measures, participants were divided into two groups on the basis of a lottery procedure. After group assignment, participants were asked to evaluate a member of the ingroup and a member of the outgroup on adjectives related to personality characteristics. Crocker and Schwartz (1985) found that low self-esteem individuals were more prejudiced, in the sense of rating outgroups more negatively, but there was no evidence of their ingroup favouritism which requires rating the ingroup more favorably relative to the outgroup. The above findings are not consistent with the second corollary of the self-esteem hypothesis that low self-esteem subjects attempt to enhance themselves through ingroup favouritism. Ingroup favouritism was not limited to those subjects who were low in self-esteem and, according to social identity theory, more in need of self-enhancement. High self-esteem subjects also showed strong ingroup favouritism effects. Greenwald (1980) argues that if ingroup favouritism is motivated by the desire for self-enhancement through comparison with others worse off, then it can be argued that high, as well as low, self-esteem individuals are motivated by the need for self-enhancement. In Crocker and Schwartz's (1985) study group categorization was completely arbitrary. Furthermore, the ratings of ingroup and outgroup members were

completed in the absence of any interaction with ingroup or outgroup members, and in the absence of any self-enhancing properties of the ingroup such as high status or ingroup success. Evidence that derogation of others is more likely to occur under conditions of threat (Wills, 1981) suggests that these effects should be explored in a naturally occurring intergroup situation and under conditions that have implications for the self-concept.

Crocker, Thomson, McGraw and Ingerman (1987) conducted two studies to explore the effects of personal self-esteem and threats to the self-concept on evaluation of others. Their first study examined the effect of self-esteem on ingroup favouritism with two ingroup-outgroup distinctions: when the group boundaries were determined arbitrarily and when the group boundaries had evaluative implications for the self. When the group boundaries were determined arbitrarily, the ingroup favouritism effect was obtained, showing that all subjects showed ingroup favouritism. Low self-esteem subjects were overall more negative in their ratings than others but they did not show greater ingroup favouritism. These results were again contradictory to the predictions of social identity theory that ingroup bias in the minimal intergroup situation is motivated by needs of self-enhancement due to low self-esteem and threats to self-esteem. Crocker et al. (1987) obtained a different pattern of results when group boundaries had evaluative implications for the self. Contrary to social identity theory, high self-esteem subjects showed ingroup favouritism. This finding is consistent with the findings of studies reviewed by Taylor and Brown (1988), indicating that high self-esteem and non-depressed individuals engage in a variety of self-serving illusions and biases.

In order to address whether these results would generalise to naturally occurring groups, Crocker et al.'s (1987) second study was a field study of ingroup favouritism in campus sororities. Membership in a sorority is likely to contribute to one's social identity. Sororities vary in the status that they hold within university communities. Membership of a low status sorority should constitute a threat to the self-concept. Subjects in Crocker et al.'s (1987) study were from two high status, and two low status, sororities. Participants showed ingroup bias by rating ingroup members more positively than outgroup members. Lower self-esteem motivated ingroup favouritism only for those who were in higher status groups. In lower status groups, it was the higher self-esteem individuals who displayed greater ingroup favouritism. Crocker et al.'s (1987) study does not support the second corollary of the self-esteem hypothesis but suggests that it is high self-esteem people who respond to a threat to self-concept when the group boundaries have evaluative implications for the self.

Sidanius, Pratto and Mitchell (1994) conducted a minimal group experiment in which participants were randomly divided but told that divided on the basis of their performance on dot-estimation task. Participants were then asked to evaluate the ingroup and the outgroup. Personal self-esteem was measured prior to categorisation. It was found that the higher the subjects' level of self-esteem, the greater the ingroup bias. Again, these results do not support the second corollary of the self-esteem hypothesis.

Thus, the findings of the studies testing corollary one or corollary two do not provide any conclusive support for either corollary of the self-esteem hypothesis. As a result of this, Abrams and Hogg (1988) have argued that self-esteem has been over-emphasised in intergroup relations

and started to emphasize some of other motivational constructs involved in intergroup behaviour. Some of them are described below.

Motivational constructs involved in intergroup behaviour

An important motivational construct involved in intergroup behaviour is the need for cognitive balance or consistency, which once is satisfied by thought or action, the need temporarily disappears (Appley, 1991). Consistency in an intergroup context would be satisfied by self-categorisation because self-categorisation reduces inconsistencies between self and ingroup and produces stereotypical self-perception and conformity to ingroup norms. Such a reduction in ingroup differences is balanced by intergroup discrimination.

In addition to cognitive balance or consistency, control and power are important motivational considerations. Mikula (1984) argues that people really want to have control in an attempt to achieve desired outcomes and avoid undesired outcomes. Ng (1996) argues that power is a motive for intergroup behaviour and that social identity theory had nothing to say about it except that it was different from status.

Gecas and Schwalbe (1983) argue that people are motivated by a need to be efficacious in their actions. What can be defined as efficacious action depends on the social construction of the groups we belong to. More recently, De Cremer and Oosterwegel (1998) found that efficacy appeared to be a mediator of the relationship between self-esteem and intergroup evaluations.

Abrams and Hogg (1988) argue that in addition to self-esteem, intergroup behaviour might also be motivated by a need for meaning. According to Barlett (1932), people are motivated to make their experiences and themselves meaningful. In their 1990 article, Abrams and Hogg focused on the search for meaning as the main motive of intergroup behaviour. In 1993, Abrams and Hogg, proposed an uncertainty reduction model as an explanation to intergroup behaviour. This model is based on the social identity and self-categorisation theory and suggests that the basic social motivation is to reduce subjective uncertainty. Uncertainty is reduced by agreement with the members of the social categories with which we identify. Thus, uncertainty is reduced by group belongingness. Reduction of uncertainty is a pleasant feeling. People feel good when others support their beliefs and attitudes because this makes them feel sure of the correctness of their ideas. According to Hogg and Abrams' (1993) uncertainty reduction model, intergroup discrimination can be explained as an attempt of people to reduce uncertainty and feel good about themselves. Thus, people may want positive social identity not only because they want positive self-esteem but also because positive identity indicates subjective certainty and therefore subjective uncertainty is the underlying motivation. Affect is an associated aspect but is contingent on uncertainty reduction.

All the motivational constructs discussed above are very important in understanding group behaviour. However, according to social identity theory the important factor in understanding intergroup behaviour is self-esteem. Hunter, Platow, Howard and Stringer (1996) argued that the contradictory findings of the studies testing the relationship between self-esteem and intergroup behaviour are due to the methodological problems associated with research in this area. Farsides (1995) has also argued that the self-esteem hypothesis has not been tested

appropriately. The most important criticisms of research in the self-esteem hypothesis are discussed below.

Methodological shortcomings of research in the self-esteem hypothesis

Distinction between personal and collective self-esteem

According to social identity theory, the self-concept has two distinct aspects. One is personal identity and the other is social identity. Personal identity concerns one's individual characteristics. Social or collective identity concerns the characteristics of the groups that one belongs. Crocker et al. (1993) argue that personal self-esteem is the self-evaluative component of personal identity, while collective self-esteem is the self-evaluative component of the social identity

Hunter et al. (1996) have argued that the most important criticism of research into the self-esteem hypothesis is that the majority of studies have employed measures of self-esteem deriving from personal, rather than social identity. According to social identity theory ingroup bias is moderated not by personal but by collective self-esteem. Branscombe and Wann (1994) have argued that measures of personal self-esteem are at the "wrong level of abstraction" to account for behaviour at the intergroup level. Although personal self-esteem is not irrelevant to the context of intergroup behaviour, it is clearly important to measure self-esteem deriving from the social category in terms of which the people are currently acting.

Until 1986, all the self-esteem scales tended to focus on personal self-esteem (e.g. Rosenberg's 1965, self-esteem scale; Julian, Bishop & Fiedler's 1966, evaluative dimension of the semantic

differential scale; Marsh & O' Neill's, 1984, self-description questionnaire). Breckler, Greenwald and Wiggins (1986) developed the first collective self-esteem scale. This scale was based on the ego task analysis (Greenwald, 1982), which posits that there are three motivational aspects of the self: public, private and collective. Luhtanen and Crocker (1992) argue that although Breckler, Greenwald and Wiggins (1986) define the collective self as the "we" facet of the self, they still measure collective self in an individualistic way. In other words, the items that measure collective self are individualistic (e.g. "I am active in social important causes"). Tajfel and Turner (1986) argue that social identity can be positive or negative depending on individual's evaluations of the groups that one belongs and not depending on personal achievements within groups. Because of the need for a scale to assess collective self-esteem in a manner consistent with social identity theory, Luhtanen and Crocker (1992) developed and tested a scale designed to measure collective self-esteem. This consists of four subscales that assess various aspects of collective self-esteem. These are, *private collective self-esteem* (assesses one's personal judgements of how good one's social groups are), *membership esteem* (evaluations of oneself as a group member of the social group that one belongs), *public collective self-esteem* (how others evaluate one's social groups) and *importance to self-concept* (how important one's membership in the social group are to one's social group). The collective self-esteem scale, and each of its subscales has high internal consistency (alphas > .83) and acceptable test-retest reliability ($r = .68$ for the total scale) over a six week interval (Luhtanen & Crocker, 1992).

Distinction between global and specific collective self-esteem

Hogg and Abrams (1990) have argued that one explanation for the inconclusive findings for either corollary of the self-esteem hypothesis is that the majority of studies conducted in this area have used global measures of collective self-esteem. Rubin and Hewstone (1998) define global self-esteem as “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” (p.8). Abrams and Hogg (1988) argued for specificity of analyses applied to intergroup discrimination and suggested that the specific social identity implicated in the intergroup situation under consideration would be a more appropriate focus for measurement of collective self-esteem. In the context of the self-esteem hypothesis, measures of self-esteem should therefore be made specific to the particular ingroup under investigation. Luhtanen and Crocker's (1992) scale measures global collective self-esteem and there are no scales that measure specific collective self-esteem. The instructions of Luhtanen and Crocker's (1992) scale ask participants to consider their membership of the different groups they belong (e.g. race, religion, and nationality) simultaneously while responding to each item. However, Luhtanen and Crocker (1992) note that their scale is flexible and can be adapted to measure collective self-esteem derived from specific ingroups.

Operationalisation of intergroup discrimination

Another important factor contributing to the controversial findings of the studies that tested the self-esteem hypothesis is the different ways of operationalising intergroup discrimination. Mummendey and Wenzel (1997) argue that intergroup discrimination is more frequently defined as favouring one's own group over a relative outgroup. However, they note that "the

explicit downgrading and relative disadvantaging of an outgroup should also be viewed as equally, if not more, important" (p.2). This is also how Allport (1954) defined discrimination as "deny(ing) to individuals or groups of people equality of treatment which they may wish" (p.51). According to Mummendey and Wenzel (1997) this definition implies a discrepancy between how ingroups and outgroups perceive their "adequate" evaluation and treatment. Mummendey and Wenzel (1997) define social discrimination as "an ingroup's subjectively justified unequal, usually disadvantageous, evaluation of treatment of an outgroup, which the latter (or an outside observer) would deem unjustified" (p.3). Thus intergroup discrimination can be defined in an absolute way (derogation of the outgroup) and in a relative way (derogation of the outgroup relative to the ingroup).

Crocker et al. (1987) argue that distinction between negative evaluations of outgroups and negative evaluations of outgroups relative to ingroups is very important when testing the self-esteem hypothesis. Does the greater derogation of the outgroup or the greater derogation of the outgroup relative to the ingroup affect self esteem? According to Wills' (1981) downward social comparison theory, it is the derogation of the outgroup relative to the ingroup that enhances self-esteem. Thus, individuals in need of self-enhancement should derogate outgroups relative to their ingroups to enhance themselves. However, Brewer (1979) argues that self-enhancement occurs mainly via ingroup favouritism, that is favouring the ingroup over the outgroup, rather than derogating the outgroup relative to the ingroup as Wills (1981) suggested.

According to Turner (1982), social identity theory posits a need for a positive and distinctive identity that can be achieved by positive distinctiveness of one's groups in comparison with

other groups. Thus, positive discrepancies between the ingroup and the outgroup provide ingroup members with positive social identity, while negative discrepancies between the ingroup and the outgroup provide ingroup members with negative social identity. Therefore, in order to test the self-esteem hypothesis appropriately, intergroup discrimination should be operationalised as favouring the ingroup *relative* to the outgroup.

Artificial groups

Most of the studies that have attempted to assess the relationship between self-esteem and intergroup discrimination have used the minimal group paradigm. The results of research that have used this type of paradigm have yielded a consistent pattern of results. However, the minimal group paradigm has been criticised (e.g. Schiffman & Wicklund, 1992). In particular, theorists such as Crocker and Luhtanen (1990) critical of the minimal groups have argued that self-esteem and intergroup discrimination may only be associated under those conditions where the relationships between groups are meaningful and contain evaluative connotations. The strongest body of evidence emphasising the need to investigate meaningful, as opposed to artificial groups, comes from the work of Crocker and her colleagues (Crocker et al., 1987; Crocker & Luhtanen, 1990). These authors have found that when college students were assigned to groups arbitrarily, self-esteem did not affect intergroup discrimination. When, however, group membership was assigned on the basis of meaningful criteria (high and low scores on a test which the respondents believed assessed their academic and personal qualities), self-esteem was found to affect ratings of ingroup and outgroup members. Such findings indicate that experimental participants will not internalize and defend any identity, which is assigned to them arbitrarily (Schiffman & Wicklund, 1992).

According to Turner and Bourhis (1996), "the minimal group paradigm has been widely used as a methodological tool, in the belief that minimal groups do capture key psychological aspects of group formation under controlled conditions" (p.27). However, the results of the minimal group paradigm could not be used to explain phenomena in the real world where you cannot control some conditions and there are many other variables (e.g. sociostructural variables) except psychological aspects involved. The classic minimal group studies employed groups of equal status. Of course, it is difficult to find groups with equal status in the real world. Thus, minimal group experiments as Brown (1992) states "should be seen as a further step in discovering not just the shape of one of the pieces of the jigsaw, but how that piece interlocks with all the others" (p.396).

In light of all these criticisms associated with research in the self-esteem hypothesis, it is probably premature to question the role of self-esteem in intergroup behaviour and more specifically the self-esteem hypothesis. The present thesis represents an attempt to overcome the methodological shortcomings identified in tests of the self-esteem hypothesis. This will be done by taking into consideration the most important criticisms in this area that were discussed above and some further ones that will be discussed while presenting experimental work.

Outline of thesis

In the first chapter of the thesis, social psychological approaches to intergroup discrimination were discussed, focusing on social identity theory. Chapter two focused on studies conducted in the area of self-esteem hypothesis and the criticisms associated with research in this area. Chapter three describes the first of the empirical work of this thesis. Study one tests the second

corollary of the self-esteem hypothesis, focusing only on collective self-esteem and taking into consideration the methodological shortcomings associated with research in this area. In chapter four, another laboratory study, which tests the second corollary, is described. In this study, personal self-esteem was also measured. Chapter five describes a study that examines the psychometric properties of Luhatnen and Crocker's (1992) collective self-esteem scale, in order to assess whether it can be used as two short measures of collective self-esteem. Chapter six describes a "real group" study that tests both corollaries of the self-esteem hypothesis using meaningful social categories based on gender. Chapter seven describes another "real group" study that tests both corollaries of the self-esteem hypothesis. In this study, the type of the outgroup was also manipulated. Chapter eight describes a study that attempted to link the positive-negative asymmetry in social discrimination to corollary one of the self-esteem hypothesis and test whether increases in self-esteem are achieved through ingroup bias on positive or negative attributes of intergroup evaluations in the context of real groups. General conclusions and implications of the present research for future work are considered in chapter nine.

CHAPTER 3**Study One: The Effect of Status and Collective Self-Esteem on Ingroup Bias**

According to Long and Spears (1997), much of the recent controversy and debate concerning the self-esteem hypothesis has centered on the second corollary of the self-esteem hypothesis. This states that, because of a motivational need for positive self-esteem, low or threatened self-esteem will motivate intergroup discrimination. This chapter describes a study designed to test the second corollary taking into consideration recently published criticisms of research in this area.

According to social identity theory (Tajfel & Turner, 1979), the self-concept can be divided into aspects of personal and social identity. Personal identity is concerned with one's individual characteristics, whereas social identity concerns the characteristics of the groups to which one belongs. The characteristics of one's groups may or may not also be characteristics of the individual. Deaux (1992) has argued that social identity is not necessarily claimed by all those who fall into a defined category and that the meaning associated with a particular identity category may be subjectively defined. However, it remains the case that certain category memberships are more fluid than others. Certain categories are fixed throughout the life span - it is virtually impossible to change age, disability, race or gender. Other categories are defined by one's performance or status and are only changeable by a combination of luck and effort - such as socioeconomic status, performance in school, or on the sports field. Within the education system people frequently receive individual feedback which determines their membership of educational groups. In the UK individual academic performance can determine

which school one is able to attend and which class within the school one will be allocated to (Kerckhoff, 1986). At a more senior level, individual performance will determine whether one continues into higher education and which university one is able to attend. Similar processes continue to operate throughout the life span in terms of job and promotion opportunities. Finally, some categories are chosen and could be changed at will - such as the sports team one supports, or the political party that one votes for.

Studies that tested the second corollary of the self-esteem hypothesis have employed widely varying types of group and identity - from those that operationalised identity through status or power (e.g. Wagner, Lampen & Syllwasschy, 1986; Sachdev & Bourhis, 1985/1987), to those employing - fixed-categories such as gender and ethnicity (e.g. Hunter, Stringer & Coleman, 1993; Rутtenberg, Zea & Singleman, 1996). Similarly some studies have manipulated identity by feedback at an individual level (Hogg & Sunderland, 1991); others have used group-level feedback (Crocker & Luhtanen, 1990).

Manipulation of identity through group status or power

Social identity theory (Tajfel & Turner, 1986) predicts that members of low status groups will have relatively low self-esteem, and they should therefore possess greater motivation to engage in intergroup discrimination than members of high status groups. However, as discussed in the previous chapter, laboratory studies investigating the link between status and intergroup discrimination yielded contradictory results.

Commins and Lockwood (1979) found that high status group members discriminated more than low status members. In contrast, Branthwaite Doyle and Lightbown (1979) and Wagner, Lampen and Syllwasschy (1986) found that low status members discriminated more than high status members.

Sachdev and Bourhis (1984) manipulated the relative numbers of ingroup and outgroup numbers and predicted that minorities should show more discrimination than majorities. They found instead, that both minorities and majorities discriminated to a comparable degree. However, in two similar experiments where power (Sachdev & Bourhis, 1985) and status (Sachdev & Bourhis, 1987) were manipulated, they found more discrimination among those in the higher status groups. This seems to work against the self-esteem hypothesis which would predict that the less power / status, the lower the group identity-contingent self-esteem, and thus the greater the subsequent discrimination. On the other hand, Finchilescu (1986) found that groups assigned to lower status discriminated more than those assigned to higher status.

The results of studies manipulating the power and status are contradictory and it is difficult to draw any conclusions from the studies published to date. Mullen et al. (1992) argued that high status groups exhibit more intergroup discrimination in the context of artificial groups. In the context of real groups, it is the low status groups that exhibit higher levels of intergroup discrimination. Furthermore, Mullen et al. (1992) have argued that the contradictory results of the studies testing the relationship between status and ingroup bias are due to the two different conceptualisations of status. Studies that have found more ingroup bias among lower status groups have employed more global conceptualisations of status (e.g. prestige of work unit

within society). On the other hand, studies finding more ingroup bias among higher status ingroups have employed more task specific conceptualisations of status (e.g. superior scores on some laboratory task).

Manipulation of pretest self-esteem by relative power, status power or status may also be problematic. Gecas and Schwalbe (1983) have argued that members of low status groups should have low self-esteem because of limitations of their opportunities to control and manipulate their environment. Social comparison theory (Festinger, 1954) and social identity theory (Tajfel & Turner, 1986) are also compatible with the prediction that low status groups should have low self-esteem. However, Loudon (1978) has found that members of low status social groups do not have low self-esteem but that some contexts, such as educational settings, may cause low self-esteem. Milner (1984) argued that whether the level of self-esteem of a low status group is high or low depends on the specific context that it is tested and the age of the respondent. Thus, low status groups do not suffer from enduring low self-esteem but particular contexts may cause low self-esteem. Milner (1984) argues that if the self-esteem of black people is tested in inter-racial contexts in which blacks are believed to be low achievers, for example in educational settings then the self-esteem of black people may be lower.

Abrams and Hogg (1988) have also expressed concerns about treating status and self-esteem as one variable. Status differences between ingroups and outgroups are usually based on objective criteria such as money or power. Therefore, there is likely to be relatively little variability between different group members' perceptions of ingroup and outgroup status. In contrast, specific collective self-esteem derives from subjective satisfaction with an ingroup and is likely

to be far more variable between members of the same group. Hence, even members of low status groups can possess high specific collective self-esteem. Consequently, specific collective self-esteem should be treated as separate from ingroup status. Furthermore, van Knippenberg (1984) argued that manipulation of self-esteem by relative power, or status may be problematic because these variables can affect intergroup behaviour directly without the mediation of self-esteem. Thus, lower status and power groups do not automatically discriminate to improve their self-esteem. Discrimination may only be a strategy of competition among groups. Therefore, the effects upon discrimination may be independent of the possible mediation of self-esteem.

Studies employed "fixed" categories

In a real group study aiming to test both corollaries of the self-esteem hypothesis, Branscombe and Wann (1994) used a national categorisation (US students vs. Soviet Union students). They used this categorisation because Americans and Russians have a clear history of relevant and competitive social comparison. They tested the role of degree of identification with the group and level of collective self-esteem as determinants of outgroup derogation under identity threatening and non-threatening conditions. They predicted that, under conditions, which threaten group identity, derogation would occur for defensive self-protective strategies. Hence, those whose collective self-esteem would be lowered most by the threat, should display the highest levels of outgroup derogation as a means of defending their social identity, especially when the threatened identity was an important one. In the non-threat condition, assuming that the social comparison presented to subjects was sufficiently favourable, self-enhancement motives should be elicited. The findings of their study confirmed the prediction that low self-

esteem results in greater derogation, but level of self-esteem did not predict outgroup derogation in the non-threat condition.

Hunter, Stringer and Coleman (1993) examined the relationship between bias and personal self-esteem among Catholics and Protestants in Northern Ireland. They found little evidence of any consistently positive association between these variables in both categories.

Ruttenberg, Zea and Singelman (1996) asked a sample of Jewish and Arab participants in the United States to complete a measure of global collective self-esteem followed by measures of outgroup evaluation. They expected that participants with low collective self-esteem would derogate the outgroup more than participants with high self-esteem. No significant correlations were found between self-esteem and the measure of outgroup evaluation for either ethnic group.

Studies that manipulated self-esteem through evaluation feedback

Aside from studies that have manipulated self-esteem through status or power and studies that employed "fixed categories", some studies have manipulated self-esteem through evaluation outcomes such as success and failure feedback.

Hogg and Sunderland (1991) manipulated participants' personal self-esteem by providing either positive or negative feedback at an individual level on a word association task, such that half of the participants felt that they had failed and half that they had succeeded. The experience of failure or success was expected to temporarily depress or elevate the individual's sense of self-worth. In support of corollary two, lower self-esteem subjects exhibited significantly greater

discrimination than those who had higher self-esteem. In contrast to Hogg and Sunderland's (1989) study, Hogg and Morkans (1989) found no significant difference in discrimination following success or failure.

Crocker, Thompson, McGraw and Ingerman (1987) found that people who are high in personal self-esteem and receive success feedback, rate other successful individuals much more positively than those who fail. People who have high personal self-esteem and receive failure feedback rate successful individuals no more positively than those who fail. By contrast, low self-esteem subjects consistently rate success individuals more highly than failure individuals regardless of their own personal score. Thus, Crocker et al. (1987) argued that high self-esteem people enhance the implications of their success and minimize the implications of their failure.

Crocker and Luhtanen (1990) extended this work at a group level. To test the possibility that ingroup bias is a function of collective, rather than personal self-esteem, Crocker and Luhtanen (1990) conducted a study in which they assessed both personal and collective self-esteem. Threats to self-esteem were manipulated by giving groups success or failure feedback. Crocker and Luhtanen (1990) proposed that under certain circumstances people who are high in collective self-esteem would be more likely to derogate the outgroup and enhance the ingroup. Although ingroup bias was observed in Crocker and Luhtanen's (1990) study, neither collective self-esteem nor personal self-esteem moderated the strength of this effect. Indeed in a series of studies (e.g. Crocker & Swartz, 1985; Crocker et al., 1987) that have replicated the ingroup bias effect in minimal intergroup situation, there was no evidence that the magnitude of this effect depends on subject's level of self-esteem. However, Crocker and Luhtanen's (1990) study

demonstrated that collective self-esteem does moderate evaluations of ingroups and outgroups when those groups are defined as above and below average scorers on a test and one's group has succeeded or failed. Consistent with their predictions, those high in collective self-esteem responded to group failure feedback by derogating outgroups in a way which enhances or restores their collective identity. Specifically, those with high collective self-esteem, whose group succeeded, rated the ingroup higher than those whose group failed. Those with high collective self-esteem whose group failed, showed higher ratings of below average scorers than did those whose group succeeded. Subjects who were low in collective self-esteem did not significantly alter their ratings as a function of their own group's performance. Crocker and Luhtanen (1990) argue that people who are high in self-esteem are more likely to engage in self-enhancing strategies than those who are low in self-esteem, and that the same process operates at an individual or group level. Crocker and Luhtanen (1990) suggest that "many of the predictions of social identity theory may be most applicable to individuals who are high in collective self-esteem" (p.65). Swann (1987) has argued that Crocker and Luhtanen's (1990) findings are compatible with a self-consistency interpretation, that individuals are motivated to maintain a stable self-image, and hence those with high self-esteem are more likely to exhibit self-enhancing biases than those with low self-esteem.

Brown, Collins and Schmidt (1988) suggested that that both high and low personal self-esteem individuals are motivated to enhance themselves, but they use different enhancement strategies. People with high self-esteem tend to engage in direct forms of self-enhancement (biases that explicit center around the self), whereas those with low self-esteem tend to self-enhance indirectly (biases that involve other members of the social world). Brown et al. (1988)

conducted two studies to test the effect of personal self-esteem on intergroup behaviour. Consistent with their predictions, they found that high and low self-esteem participants enhanced the self through ingroup bias but the latter did so without implicating the self.

In developing this line of argument, Crocker, Blaine and Luhtanen (1993) distinguished between the motivations of people who are high and low in self-esteem. They have argued that people who are high in personal or collective self-esteem are motivated to enhance both themselves and their ingroups. Conversely, people with low personal or collective self-esteem will be motivated to protect themselves and their ingroups, in order to avoid humiliation.

Thus, the findings of the studies testing the second corollary of the self-esteem hypothesis do not provide any conclusive support for this corollary. However, there are some problems with the design and the measurement of collective self-esteem in the studies conducted in this area. First, whilst Crocker and Luhtanen's (1990) findings are interesting, the manner in which group status was manipulated is problematic. Participants were allocated to minimal groups and then told of their group's status on a test (above or below average) but with their own score excluded from the scoring process. Whilst it can be argued that groups do receive performance feedback at a group level in contexts such as sports performance, it is almost impossible to consider a real life situation in which one receives feedback about one's group's performance, from which one's own performance has been excluded. Further, as Crocker and Luhtanen's (1990) participants knew that their own score had been excluded, the true status of their group – with their own score included - remained a mystery. The implications for collective self-esteem and

ingroup bias of not knowing whether one is 'representative' of one's group, or whether one's group status might change as a result of one's own performance, are unclear.

Second, the majority of studies that have tested the relationship between collective self-esteem and intergroup behaviour employed global measures of collective self-esteem derived from all the groups that to which the participants belonged, and not from the particular identity under consideration. (e.g. Crocker & Luhtanen, 1990; Branscombe & Wann, 1994; Rutenber et al., 1996). Crocker and Luhtanen (1990) used a minimal group categorisation with which participants had no history of participation and employed a measure of global collective self-esteem, which was linked to the esteem derived from the groups that participants belonged. As discussed in chapter two, Abrams and Hogg (1988) argue that in order to test the self-esteem hypothesis appropriately, collective self-esteem derived from the particular identity under consideration should be measured and not global collective self-esteem. After the development of the collective self-esteem scale by Luhtanen and Crocker in 1992, the majority of studies switched from employing measures of personal self-esteem to measures of collective self-esteem (Luhtanen & Crocker, 1990; Branscombe & Wann, 1994). However, these studies did not switch to measures of *specific* collective self-esteem despite Abrams and Hogg's (1988) suggestions on focusing on the specific identity implicated in the intergroup situation.

Aim of this study

Study one aims to test the second corollary of the self-esteem hypothesis against Crocker and Luhtanen's (1990) self-enhancement hypothesis, under conditions minimising the methodological shortcomings associated with research in this area. This study was designed to

be methodologically similar to Crocker and Luhtanen's (1990) study but participants in the present study were clearly allocated to high and low status groups on the basis of their performance on a test. Most of the studies that have attempted to assess the relationship between self-esteem and ingroup bias in the laboratory, assigned participants into groups based on the minimal group paradigm. As discussed in chapter two, although the minimal group paradigm captures the key psychological aspects of intergroup behaviour in the laboratory under controlled conditions, it cannot be used to explain phenomena in the real world where you cannot control some conditions and there are many other variables (e.g. sociostructural) involved. Furthermore, the classic minimal group studies employed groups of equal status. Of course, it is difficult to find groups with equal status in the real world. In the real world, people are assigned into groups according to their performance or their status. As discussed above, within the education system people frequently receive individual feedback, which determines their membership of educational groups. Similar processes continue to operate throughout the life span in terms of job and promotion opportunities. In an attempt to make assignment into groups as similar as possible to the assignment into groups in the real world, participants were randomly assigned into two groups, but were told that assignment was on the basis of their score on a test of reasoning styles. Therefore, their identity was based on a characteristic with evaluative connotations - "superior" and "average" reasoning style.

Furthermore, study one focused on collective self-esteem deriving from the specific social category implicated in the intergroup situation, rather than in a decontextualised manner. To do this, Luhtanen and Crocker's (1992) collective self-esteem scale was adapted to measure

collective self-esteem specific to the group to participants were allocated – superior or average reasoning style groups.

Intergroup evaluation was measured with evaluative adjectives. Once participants were assigned to groups they completed a collective self-esteem scale and then were asked to rate members of their ingroup and the outgroup. Ingroup bias was operationalised as the difference between mean ingroup and mean outgroup evaluation. According to Turner (1982), social identity theory posits a need for positive distinctiveness of one's groups in comparison with other groups. This positive distinctiveness can be achieved by positive discrepancies between the ingroup and the outgroup. Therefore, in order to test the self-esteem hypothesis appropriately, intergroup discrimination should be operationalised as the difference between mean ingroup and mean outgroup evaluation.

The present study examines the impact of status, manipulated by personal success or failure feedback, and collective self-esteem on ingroup bias. Following social identity theory, it was predicted that high status group would have higher collective self-esteem than low status groups. In line with social identity theory, it was also predicted that low status group would show more ingroup bias, by favouring the ingroup more relative to the outgroup, than high status groups. Consistent with the second corollary of the self-esteem hypothesis, it was hypothesised that participants with low self-esteem would show more ingroup bias. Finally, following Crocker and Luhtanen's (1990) findings, it was predicted that those high in collective self-esteem would be more likely to enhance the ingroup by altering their evaluations of

superior and average scorers as a function of status, while those low in collective self-esteem would not show such self-enhancing bias.

Method

Participants

Fifty-two undergraduate students participated in the study, 32 were female, and 20 were male. All received partial course credit for their participation.

Measures

The AH5 Group Test of General Intelligence (Heim, 1968). This is a well-established measure of verbal and spatial ability. This test was structured for use in a twenty-minute period and was presented as a test of reasoning style. A sample can be seen in Appendix 1.

Collective self-esteem scale (Luhtanen & Crocker, 1992). This consists of four subscales that assess various aspects of collective self-esteem: Private collective self-esteem (assesses one's personal judgements of how good one's social groups are), membership esteem (evaluations of oneself as a group member of the social group that one belongs), public collective self-esteem (assesses one's judgements of how others evaluate one's social groups) and importance to self-concept (assesses the importance of one's social group memberships to one's self-concept). As discussed in chapter two, the collective self-esteem scale, and each of its subscales has high internal consistency (alphas > .83) and acceptable test-retest reliability ($r = .68$ for the total scale) over a six week interval (Luhtanen & Crocker, 1992). This scale was modified to

measure self-esteem derived from the specific identity implicated in the intergroup situation. Luhtanen & Crocker's (1992) instructions require participants to consider their "gender, religion, nationality, ethnicity, and socioeconomic class" (p.305) simultaneously while responding to each item. The scale employed in this study required participants to consider their membership in the average or the superior reasoning style group in relation to each item. A sample of the collective self-esteem scale used for the superior reasoning style group can be seen in Appendix 2.

Intergroup Evaluation. Following Crocker and Luhtanen (1990) intergroup evaluations were measured using 16 adjectives, half of which were positive and half of which were negative. The adjectives were related to reasoning style. They were, bright, uncreative, clever, ineffective, slow, gifted, effective, dull, creative, incompetent, unable, competent, able, intelligent, stupid, ungifted. Subjects rated the superior reasoning style group (see appendix 3a) and the average reasoning style group (see appendix 3b) on each set of adjectives, using a 7-point scale (1 = not at all, 7= extremely). The negative items of the scale were reverse scored. The adjectives were presented in the same random order to all subjects. The order participants were asked to rate the superior and the average reasoning style group was also random.

Ingroup Bias. A measure of ingroup bias was calculated by subtracting outgroup evaluation scores from ingroup evaluation scores.

Design

The design consisted of one independent variable and two dependent variables. The independent variable was status. Status was a between-subjects factor with two levels (high vs. low), and was ostensibly manipulated by personal feedback. The dependent variables were collective self-esteem and ingroup bias. To test corollary two of the self-esteem hypothesis, collective self-esteem was also treated as an independent variable.

Procedure

Six to ten participants took part in each experimental session. They were told that the purpose of the experiment was to complete the validation of tests designed to measure different styles of reasoning. Participants were told that the tests were designed to categorize people according to their reasoning style. It was explained that University students could be divided into two groups of superior and average reasoning style, according to the types of strategy they employed in problem solving tasks. They were given the test of "reasoning style" and were told that they would be separated into two groups according to their performance on this test. Subjects waited until their tests were scored. After a short delay, half of the subjects were informed that they had superior reasoning style and the other half were told that they had average reasoning style. In fact, group assignment was purely random. The two groups were separated and sat at different tables. Thus, subjects believed that they shared category membership with the physical group they were with. Participants then completed the collective self-esteem scale. Finally they were asked to complete ingroup and outgroup evaluation scales in a random order. No interaction was permitted throughout the experiment. At the end all participants were debriefed as to the

real aim of the experiment and were shown that their assignment to groups had been completely random and that the tests remained unmarked.

Results

Reliability of measures

An analysis of the internal consistency of the collective self-esteem scale revealed that it was internally consistent (Cronbach's alpha = .86). Cronbach's alpha of the ingroup evaluation scale was .90 and Cronbach's alpha of the outgroup evaluation scale was .92. Thus, all measures have high internal consistency.

The effect of status on collective self-esteem¹

In line with our predictions, a t-test revealed that high status participants had higher collective self-esteem ($M = 64.73, SD = 12.66$) than low status participants ($M = 59.46, SD = 9.14, t(50) = 1.72, p < .05, 1$ -tailed).

The effect of status on ingroup evaluations, outgroup evaluations and ingroup bias

T-tests revealed that high status participants did not evaluate the ingroup more positively than low status participants ($t(50) = 1.52, p > .05$). Low status participants evaluated the outgroup more positively than the high status participants ($t(50) = -3.017, p < .004$). High status

¹ Crocker and Luhtanen (1990) report results pertaining to the private subscale of the collective self-esteem scale. Here results from the entire scale are reported, however findings from this study relating to the private subscale do not differ significantly from those employing the total scale.

participants showed more ingroup bias in comparison to low status participants ($t(50) = 6.25, p < .001$). The mean evaluation scores of high and low status participants can be seen in Table 1.

Table 1

Mean evaluation scores of high and low status participants

| | HIGH STATUS | | | LOW STATUS | | |
|---------------------|-------------|----------|-----------|------------|----------|-----------|
| | <i>n</i> | <i>M</i> | <i>SD</i> | <i>n</i> | <i>M</i> | <i>SD</i> |
| INGROUP EVALUATION | 26 | 83.12 | 11.63 | 26 | 78.08 | 12.17 |
| OUTGROUP EVALUATION | | 74.88 | 13.00 | | 85.46 | 12.27 |
| INGROUP BIAS | | 8.23 | 8.18 | | -7.38 | 9.76 |

Note: The higher the score the more positive the evaluation

Relationships between the variables

Pearson correlation coefficients were used to examine the relationships between the variables for the high and low status participants. The results of these correlations can be seen in Table 2.

Table 2

Correlations between variables for high and low status participants

| | High Status (<i>n</i> = 26) | Collective Self-Esteem | Ingroup Evaluation | Outgroup Evaluation | Ingroup Bias |
|--------------------------------|---------------------------------|---------------------------|-----------------------|------------------------|-----------------|
| Low Status (<i>n</i> = 26) | | | | | |
| Collective Self-esteem | | | .44* | .14 | .39* |
| Ingroup Evaluation | | -.006 | | .78** | .17 |
| Outgroup Evaluation | | -.37 | .68** | | -.47* |
| Ingroup Bias | | .45* | .39* | -.40* | |

Note: **p* < .05, ***p* < .01

As shown in Table 2, when participants were told that they belonged to the high status group, higher collective self-esteem was significantly associated with ingroup bias. Examination of the

ingroup and outgroup ratings revealed this was primarily attributable to the positive correlation between collective self-esteem and ratings of the ingroup. When participants were told that belonged to the low status group, higher collective self-esteem was again significantly associated with ingroup bias, but examination of the ingroup and outgroup ratings revealed that this was primarily attributable to the negative correlation between collective self-esteem and outgroup evaluations.

Effect of collective self-esteem and group status on ingroup bias.

Following Crocker et al. (1987), a hierarchical multiple regression analysis was conducted to test whether collective self-esteem interacted with status to predict ingroup bias. Group status was treated as a dummy variable and the collective self-esteem score was centered to avoid multicollinearity between the main effects of status and collective self-esteem and the interaction term status x collective self-esteem. The B weights and other statistics from this hierarchical regression can be seen in Table 3.

Table 3

Prediction of ingroup bias as a function of status and collective self-esteem

| Blocks | Predictors | <i>B</i> | <i>SE</i> | β | <i>df</i> | <i>F</i> for block | <i>R</i> ² Change |
|--------|-----------------|----------|-----------|---------|-----------|-----------------------|---------------------------------|
| 1 | Status | 13.7 | 2.38 | 0.58*** | | | |
| | CSE | 0.34 | 0.10 | 0.32** | | | |
| | | | | | 2,49 | 27.9*** | 0.53 |
| 2 | CSE x Status | 0.23 | 0.22 | 0.17 | | | |
| | | | | | 3,48 | 1.07 | 0.01 |

Note: ***p* < 0.01, ****p* < 0.001

As shown in Table 3, status had a substantial effect on ingroup bias when the effects of collective self-esteem were accounted for. High status participants showed more ingroup bias ($M = 8.23$) in comparison to low status participants ($M = -7.38$). Collective self-esteem affected bias independently of status. Collective self-esteem was positively associated with ingroup bias. The two-way interaction between status x collective self-esteem was not significant.

Ratings of superior and average groups

Because of the different patterns of correlations between ratings of ingroup and outgroup as a function of status, it was decided to examine these as separate variables within a 2 (Low vs. High CSE) x 2 (Low vs. High Own Group Status) x 2 (Superior vs. Average Target Status)

ANOVA. Following Crocker and Luhtanen (1990), it can be predicted that participants high in collective self-esteem would alter their ratings of targets as a function of status in a manner that enhanced their ingroup, whereas low CSE participants would not. For ratings of the ingroup, the main effects of status and CSE were non-significant, but there was a nearly significant interaction of status and CSE ($F(1,48) = 3.90, p < .054$). For ratings of the outgroup, the main effect of status was significant ($F(1,48) = 6.55, p < .05$), as was the status x self-esteem interaction ($F(1,48) = 4.84, p < .05$). Further analysis, (Table 4) was conducted to compare the evaluations of superior and average groups as a function of collective self-esteem and status.

Table 4

Ratings of superior and average groups as a function of collective self-esteem and performance feedback

| | Collective | | Self-Esteem | |
|----------|--------------------|---------------------|-------------|--------------------|
| | High | | Low | |
| | Superior | Average | Superior | Average |
| | performance | performance | Performance | performance |
| Superior | | | | |
| target | 86.47 ^a | 74.00 ^{ab} | 77.20 | 88.61 ^b |
| Average | | | | |
| Target | 76.58 | 70.28 | 78.37 | 78.50 |

Note: Means within columns with different subscripts differ significantly at $p < 0.05$

Examination of orthogonal contrasts revealed a significant difference in ratings of the superior group between those with high self-esteem who were allocated to the high status group and

those who were allocated to the low status group (Means 86.47 & 74.00, $t(48) = 2.47, p < .05$; see superscript "a"). However, ratings of the average group did not differ as a function of status. Orthogonal contrasts of outgroup ratings revealed a significant difference between high versus low self-esteem participants assigned to the low status group, such that those with low self-esteem rated the superior group much more positively than those with high self-esteem (means 88.61, 74.00, $t(48) = -3.36, p < .05$; see superscript "b").

Paired t-tests were conducted in order to compare the ingroup and outgroup evaluations in each cell. High collective self-esteem participants who were allocated to the superior group rated the superior group significantly more highly than the average group ($t(19) = 5.15, p < .001$), whereas those with high collective self-esteem who were allocated to the average group did not differ in their ratings of superior and average groups. Conversely, low collective self-esteem participants allocated to the superior group did not differ in their ratings of the superior and average groups. Those allocated to the average group did differ in their ratings such that they rated the superior group significantly more highly ($t(18) = -4.21, p < .001$).

Discussion

As predicted, collective self-esteem was affected by status. High status participants had higher collective self-esteem than low status participants. Contrary to corollary two of the self-esteem hypothesis, participants with high collective self-esteem showed more bias than participants with low collective self-esteem. Participants who experience high collective self-esteem in the superior group acknowledge their group's superiority whereas those with low collective self-esteem do not acknowledge the superiority of the superior group. Those who experience high

collective self-esteem in the average group do not recognize the relative inferiority of their own group, whereas those with low collective self-esteem do.

The effect of status manipulation on collective self-esteem

As predicted, collective self-esteem was affected by status. High status participants had a higher collective self-esteem score than low status participants. This is consistent with both social comparison theory (Festinger, 1954) and social identity theory (Tajfel & Turner, 1986). These findings attest to the validity and impact of the status manipulation, suggesting that it was meaningful and relevant to the participants.

The effect of status manipulations on ingroup bias

Both status and collective self-esteem had separate effects on ingroup bias. Group status was the most powerful predictor of ingroup bias. High status participants showed more ingroup bias in comparison to low status participants. This is consistent with the findings of Finchilescu (1986) and Sachdev and Bourhis (1987). It is also consistent with the findings of a developmental study by Yee and Brown (1988) which indicated that children as young as age 3 are responsive to group status when they make intergroup comparisons. Yee and Brown (1988) found that ingroup favouritism characterised the intergroup evaluations of high status groups. These findings seem to work against the self-esteem hypothesis which would predict that low status groups have the greatest motivation to enhance their social identities and thus, should be particularly likely to manifest pronounced ingroup favouritism. Social identity theorists have long made an effort to address this inconsistency with the social identity theory through postulates concerning the effects of status legitimacy and stability.

Turner and Brown (1978) crossed a manipulation of intergroup status with orthogonal manipulations of status legitimacy and stability. While they generally found ingroup and outgroup favouritism among subjects from, respectively high and low status groups, there were several interesting exceptions. Amongst high status groups, ingroup favouritism was eliminated when status was illegitimate and stable, or legitimate and unstable. Outgroup favouritism of the low status groups was eliminated when status was illegitimate and unstable.

The findings of this study are consistent with Mullen et al.'s (1992) suggestions that most of the studies finding more ingroup bias among higher status ingroups have involved more particular, transitory, task specific conceptualisations of status (e.g. superior scores on some laboratory task). On the other hand, most of the studies showing ingroup bias among lower status ingroups have used global status cues.

One possible reason for finding more ingroup bias among higher status ingroups, is the relatedness of measures of the ingroup bias measure to the status differentials. As discussed in chapter two, Tajfel and Turner (1979) argued that low status group members acknowledge superiority of high status group members on the status related dimensions of evaluation. Thus, low status group members will show outgroup favouritism rather than ingroup favouritism towards high status outgroups. Conversely, high status groups compare themselves favorably to low status groups. Thus, on the evaluation dimensions that are consequently perceived in favor of the high status groups, high status group members will discriminate against low status outgroups. Sachdev and Bourhis (1987) also found that participants tend to reproduce the experimental status differentials if the dependent measures are strongly related to the status

dimension. High status participants tend to confirm their superiority while low status participants acknowledge their inferiority.

Collective self-esteem and ingroup bias

Contrary to the second corollary of the self-esteem hypothesis, participants with high collective self-esteem showed more ingroup bias than participants with low collective self-esteem. The findings of Crocker and Luhtanen's (1990) study and this study are consistent with the prediction that high self-esteem individuals engage in ingroup-enhancing strategies. Crocker et al. (1993) also suggest that ingroup ratings reveal enhancement motives because the qualities of the ingroup are emphasised. Outgroup ratings would reveal protection motives because they emphasise that others are worse off. In this study, collective self-esteem was positively correlated with evaluation of the ingroup only in the high status groups. Thus, people who feel positively about themselves try to enhance their group's image.

Ratings of superior and average reasoning style groups

The findings from the present study reveal an interesting pattern of ratings of the ingroup and outgroup as a function of self-esteem. Those with high collective self-esteem who are allocated to the superior group recognize their enhanced status and their ratings reflect the true status of the groups. Those with low collective self-esteem who are allocated to the superior group appear unable to acknowledge their enhanced status and do not rate the superior group significantly more positively than the average group. Those with high collective self-esteem who are allocated to the average group react in a similar manner, but conversely, they do not acknowledge the higher status of the superior group. Those with low collective self-esteem who

are allocated to the average group do rate the superior group significantly more positively than the average group. Thus, we find that those who experience high collective self-esteem in the superior group acknowledge their group's superiority whereas those with low collective self-esteem do not acknowledge the superiority of the same group. Those who experience high collective self-esteem in the average group do not recognize the relative inferiority of their own group, whereas those with low collective self-esteem do.

These findings are in partial support of Crocker and Luhtanen (1990) who found that high collective self-esteem participants, whose group succeeded, rated above average scorers higher than did those whose group failed. Those with high collective self-esteem whose group failed showed higher ratings of below average scorers than did those whose group succeeded. In contrast to the findings of this study, Crocker and Luhtanen (1990) found that subjects who were low in collective self-esteem did not significantly alter their ratings as a function of their own group's performance. Crocker and Luhtanen (1990) argue that their findings are consistent with the idea that those high in self-esteem engage in self-enhancing social comparisons following threat.

Taken together the findings of this study and those by Crocker and Luhtanen (1990) and Crocker et al. (1987) do seem to provide evidence for self-enhancing biases amongst those high in collective self-esteem. The present study also shows that those low in collective self-esteem show realistic patterns of ratings in the face of average performance and do not adjust ratings in the light of superior performance. This is partly consistent with research showing that non-depressed people tend to show enhancement biases for their own performance whereas

depressed people tend to show realistic interpretations of performance outcomes (e.g. Alloy & Abramson, 1979).

Clearly the findings of this study are interesting in the context of social identity theory. Following the procedure of examining group ratings separately for self-esteem and status, rather than equating status with self-esteem, provides a much clearer picture of the processes relating to collective self-esteem and group evaluation. Contrary to the second corollary of the self-esteem hypothesis (Abrams & Hogg, 1988), it was found that those with high self-esteem show most ingroup bias. However, it must be noted that the measures of evaluation in this study were related to status differentials.

Crocker, Blaine and Luhtanen (1993) argue that people high in collective self-esteem will interpret performance feedback in a manner that will create a positive distortion, whereas those that have low collective self-esteem will not show such a processing bias. The present study indicates that this may be the case, but may also provide evidence that those low in collective self-esteem are unable or unwilling to interpret positive feedback in a manner which enhances the ingroup.

CHAPTER 4**Study Two: The Effect of Status, Personal and Collective Self-Esteem on Ingroup Bias**

In the previous study, both status and collective self-esteem affected ingroup bias. High status participants showed more ingroup bias in comparison to low status participants. Contrary to the second corollary of the self-esteem hypothesis, but consistent with Crocker and Luhtanen (1990), participants with high collective self-esteem showed more ingroup bias in both high and low status groups. The findings from the previous study also revealed an interesting pattern of ratings of the ingroup and outgroup as a function of self-esteem. Those in the superior group, who had high collective self-esteem, acknowledged their group's superiority whereas those with low collective self-esteem did not acknowledge the superiority of the same group. Those who experienced high collective self-esteem and were allocated to the average group did not recognize the relative inferiority of their own group, whereas those with low collective self-esteem did. However, an important point that has to be noted is that the measures of evaluation in the previous study were related to status differentials.

Tajfel and Turner (1979) argue that low status group members acknowledge superiority of high status group members on the status-related dimension of comparison. Thus, low status group members will show outgroup favouritism rather than ingroup favouritism towards high status outgroups. Conversely, high status groups compare themselves favorably with low status groups. Thus, on the comparison dimensions that are consequently perceived in favor of the high status groups, social identity theory predicts that high status group members will discriminate against low status outgroups.

Sachdev and Bourhis (1987) also found that participants tend to reproduce the experimental status differentials if the dependent measures are strongly related to the status dimension. Thus, high status participants tend to confirm their superiority and show ingroup favouritism, while low status participants acknowledge their inferiority and show outgroup favouritism.

Study two will replicate study one but will employ measures of evaluation that are not related to status differentials. Blanz, Mummendey and Otten (1995) argue that one of the factors that affects the degree of ingroup bias is the relatedness of the ingroup bias measure to status differentials. When the relatedness of the measures of evaluation to status differentials is lowered, low status groups try to compensate for their inferiority by showing strong ingroup bias. This phenomenon is called social creativity. According to Tajfel and Turner (1979), social creativity is the process where groups establish new group characteristics or dimensions of intergroup comparison in an attempt to institute positive distinctiveness for the ingroup.

Condor, Brown and Williams (1987) conducted an experiment in which groups worked on a laboratory task to generate ideas for recruiting students to their university under an instructional set emphasizing task issues such as efficiency and productivity. Participants were then asked to watch a video of another group engaged in the same task and then made ingroup and outgroup ratings on task-oriented dimensions such as the group's competence and social-emotional dimensions such as the group's friendliness and warmth. They found much greater ingroup favoritism on the task-oriented dimensions, than on the social-emotional dimensions.

Hinkle and Crook (1987) replicated Condor et al.'s (1987) study and found that significantly greater levels of ingroup favoritism occurred on the social-emotional dimensions than on the task-oriented dimensions. Hinkle and Crook (1987) did not present the outgroup via video but asked subjects to think of an average group of university students working on the same task and rated this “imagined” outgroup. Thus, the vision of an average outgroup threatened their own group. This interpretation supports the view that Hinkle and Crook's (1987) subjects are engaging in a social creativity process. In Hinkle and Crook's (1987) study if the outgroup's task performance is imagined to be quite good relative to ingroup's performance, subjects shift to the less important social-emotional dimensions to manifest ingroup favoritism in an attempt to offset the unfavourable intergroup comparison on the task-oriented dimensions.

Taylor and Hinkle (1998) conducted an experiment similar to those reported above but incorporating a more concrete manipulation of outgroup status. Outgroup status was manipulated by providing subjects with the list of some of the lowest or highest creative recruitment ideas generated by the other group. Participants were then asked to evaluate the outgroup on both task-oriented and social-emotional dimensions of the intergroup comparison. In the below-average outgroup condition, greater ingroup favoritism was exhibited on the task-oriented dimensions than on the social-emotional comparison dimensions. In the above-average outgroup condition, a social creativity effect was obtained where greater ingroup favouritism was exhibited on the social-emotional dimensions rather than on the task-oriented dimensions. Taylor and Hinkle's (1998) experiment demonstrates that low ingroup status causes greater ingroup favoritism on new comparison dimensions than on the original dimensions upon which the ingroup does not serve well. Thus, according to Blanz et al. (1995) and the findings of

Hinkle and colleagues' (1987/1998), low status participants respond to a negative social identity with ingroup bias on comparison dimensions that are not related to status differentials.

Personal self-esteem was also measured in the present study. According to social identity theory ingroup bias is moderated not by personal but by collective self-esteem. Branscombe and Wann (1994) also argued that measures of personal self-esteem are at the "wrong level of abstraction" to account for behaviour at the intergroup level. However, Long and Spears (1997) argue that it is important to test the role of personal and collective self-esteem in an integrated fashion, to see how these factors combine and interact to predict intergroup behaviour. Unlike Crocker and her colleagues, Long and Spears (1997) argue that personal and collective self-esteem would not have similar effects on intergroup behaviour because collective self-esteem is matched to the level of categorisation whereas personal self-esteem is not. Long and Spears (1997) argue that ingroup bias is not a universal feature of intergroup relations but a response to threats to identity. People who have low identity-specific collective self-esteem are likely to be threatened by a particular social categorisation and one strategy to compensate for this is by displaying ingroup bias. People who are high on identity-specific collective self-esteem on the other hand, should be secure in their identity and should not need to display ingroup bias.

Unlike the case for collective self-esteem, Long and Spears (1997) have argued that social categorisation is likely to be threatening for people high in personal self-esteem. Long and Spears (1997), note that "immersion in a group for someone who has a strong sense of personal regard will be threatening because this is the wrong level of abstraction for them to display their

positive image, and is thus unlikely to satisfy a need to shine or stand out in terms of their personal worth" (p.306).

Putting personal and collective self-esteem together, Long and Spears (1997) have argued that participants with low collective self-esteem and high personal self-esteem would show more ingroup bias. This analysis is also consistent with Hogg and Abrams' (1993) arguments that ingroup bias may be related to individual's attempts to resolve uncertainty produced by social categorisation. Thus, it is people with high personal and low collective self-esteem who are more uncertain of their positions and attempt to resolve this uncertainty by showing ingroup bias. A typology of the combined effects of personal and collective self-esteem outlined by Long and Spears (1997) can be seen in Figure 1.

| | | <u>Personal self-esteem</u> | |
|-------------------------------|------|-----------------------------|---------------|
| | | High | Low |
| <u>Collective self-esteem</u> | High | Satisfied (1) | Flattered (2) |
| | Low | Disaffected (3) | Defeatist (4) |

Figure 1: A typology of the combined effects of personal and collective self-esteem (Long & Spears, 1997)

People in quadrants (1), (2) and (4) of personal and collective self-esteem combinations should experienced less threat compared to people in quadrant (3). People with high CSE / high PSE are satisfied because collective self-esteem is consistent with personal self-esteem; high CSE /

low PSE are flattered because their group raises them above their perceived personal worth, and people who are low CSE / low PSE are defeatist in the sense that their group membership offers them no more and no less than their personal self-worth (Long & Spears, 1997).

In the previous chapter, the majority of studies described focused on the relationship between collective self-esteem and bias. In this chapter, studies that examine the effect of both personal and collective self-esteem on intergroup behaviour independently and in an integrated fashion will be described. As discussed in the previous chapter, the hypothesis that self-esteem is a predictor of ingroup bias has been examined in different ways. Some studies have experimentally manipulated self-esteem by providing either positive or negative feedback on task performance and others have measured self-esteem and related it to subsequent behaviour.

Studies that *manipulated* self-esteem

Hogg and Sunderland (1991) manipulated participants' personal self-esteem by providing either positive or negative feedback at an individual level on a word association task, such that half of the participants felt that they had failed and half that they had succeeded. The experience of failure or success was expected to temporarily depress or elevate the individual's sense of self-worth. In support of corollary two, lower self-esteem subjects exhibited significantly greater discrimination than those who had higher self-esteem.

Meindl and Lerner (1984) manipulated the personal self-esteem of English speaking Canadians to form two conditions. In the low self-esteem condition, participants were asked to fetch a chair, which was located in a way, so that the participant would be unable to get it without



causing an accident. In the high self-esteem conditions, the participants obtained the chair without causing an accident. In all conditions, participants were asked to indicate the extent to which they agreed with aggressive and benevolent attitude positions concerning Quebec's relationship with the rest of Canada. Meindl and Lerner (1984) predicted that participants who experienced a personal failure would show both ingroup and outgroup favouritism in the process of self-enhancement because any group that is in a position to favour an outgroup is regarded as superior to that outgroup. Consistent with their predictions, they found that participants in the low self-esteem condition showed both ingroup and outgroup favouritism supporting the view that ingroup and outgroup favouritism are reactions to lowered self-esteem.

Hunter, Platow, Bell, Kypri and Lewis (1997, Expt.2) categorised participants using the minimal group paradigm and then measured their global and personal self-esteem. Participants then completed a standard intergroup point-distribution task. There was no support of the second corollary of self-esteem hypothesis.

Crocker, Thomson, McGraw and Ingerman (1987) conducted a study which examined the effects of need for self-enhancement on ingroup favouritism with two ingroup outgroup distinctions: when the group boundaries were determined arbitrarily and when the group boundaries had evaluative implications for the self. When the group boundaries were determined arbitrarily, all subjects showed ingroup favouritism, while low personal self-esteem subjects were more negative overall in their ratings than others, they did not show greater ingroup favouritism. When group boundaries had evaluative implications for the self, high personal self-esteem subjects showed ingroup favouritism consistent with evidence provided by

Taylor and Brown (1988) indicating that high self-esteem and non-depressed individuals engage in a variety of self-serving illusions and biases.

In order to address whether these results would generalise to naturally occurring groups, Crocker et al. (1987) conducted a field study of ingroup favouritism in campus sororities which was also described in chapter two. According to Crocker et al. (1987), membership of a low status sorority should constitute a threat to the self-concept. Subjects in Crocker et al.'s (1987) study were from two high status, and two, low status sororities. Participants showed ingroup favouritism by rating ingroup members more positively than outgroup members. Lower global personal self-esteem motivated ingroup favouritism only for those who were in higher status groups. In lower status groups, it was the higher personal self-esteem individuals who displayed greater ingroup favouritism. Consequently, this evidence provides only limited support for corollary two.

In partial replication of Crocker et al. (1987, Exp.1), Brockner and Chen (1996) found that American participants with high global personal self-esteem showed greater discrimination following negative feedback than those with low self-esteem. This interaction between high global personal and low specific personal self-esteem was not found significant for participants from the People's Republic of China, suggesting it to be specific to certain cultures.

Crocker and Luhtanen's (1990) findings, which were discussed in the previous chapter, do not provide support for the second corollary of self-esteem hypothesis. Consistent with their predictions, participants high in collective self-esteem varied their ratings of above and below

average scorers on the test in an ingroup enhancing fashion. Participants with low collective self-esteem did not significantly alter their ratings of above average and below average scorers as a function of their group's performance. These results could not be explained by differences in personal self-esteem.

Sidanius, Pratto and Mitchell (1994) conducted a minimal group experiment in which participants were randomly divided but told that divided on the basis of their performance on dot-estimation task. Participants were then asked to evaluate the ingroup and the outgroup. Pretest global personal self-esteem was measured prior to categorisation. It was found that the higher the subjects' level of self-esteem, the greater the ingroup bias. Again, these results do not support the second corollary of the self-esteem hypothesis.

Seta and Seta (1996) conducted a study where participants were provided success or failure feedback on a task about their individual performance as well as that of their own group and an outgroup. Personal self-esteem was also measured. They were then asked to evaluate both groups. Participants with high personal self-esteem exaggerated the difference between their evaluative ratings of the ingroup and the outgroup in the condition where the ingroup succeeded and the outgroup failed. In contrast, low self-esteem group members showed favouritism towards the unsuccessful outgroup over their own successful ingroup under these conditions.

Studies that *measured* self-esteem

Crocker and Schwartz (1985) divided subjects into highest and lowest tertiles on the basis of their pretest Rosenberg self-esteem scores, and then divided them into minimal groups and

allowed them to rate the personality of ingroup and outgroup members. The results of this study, discussed in chapter two, indicate that low personal self-esteem individuals seem to have a generally negative view of themselves, their ingroup, outgroups and perhaps the world but they do not show more ingroup favouritism than individuals with high self-esteem. This finding is again not consistent with the second corollary of the self-esteem hypothesis - that low self-esteem subjects attempt to enhance themselves through ingroup favouritism.

In direct opposition to corollary two, Abrams (1982) found that pretest levels of global personal self-esteem monitored several weeks prior to the studies, were actually positively correlated with intergroup discrimination.

Smith and Tyler (1997, Expt.2) found that pretest global personal self-esteem correlated negatively with negative ratings of both ingroup and outgroup members of campus sororities. This evidence converges with that provided by Crocker et al. (1987) and Crocker and Luhtanen's (1990) 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.

Smith and Tyler (1997, Expt.2) also found that pretest global collective self-esteem showed significant positive correlations with positive ratings of the ingroup but not with positive ratings of the outgroup or negative ratings of either ingroup or outgroup. This evidence only suggests that people with high collective 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 two.

Long, Spears and Manstead (1993) conducted a study with Dutch students to test the role of personal and collective self-esteem as determinants of ingroup bias in a real intergroup context. Participants performed a task and were then asked to evaluate the product of this task that their ingroup produced (same nationality students) and another group (different nationality students) produced. The relationship between the ingroup and the outgroup was also manipulated by varying the salient outgroup. Long et al. (1993) predicted that subjects with high collective self-esteem would differentiate more when the outgroup was seen as having a more competitive relationship with the group (high level of threat) but that intergroup discrimination would also result from high personal self-esteem. Long et al. (1993) found that personal and collective self-esteem influence intergroup differentiation both independently and interactively. Whereas high personal self-esteem led to greater positive differentiation, low collective had this effect, and a combination of high personal and low collective self-esteem produced the most consistent pattern of ingroup differentiation.

Long and Spears (1998) conducted a similar study in an attempt to replicate the findings of Long et al.'s (1993) study. Long and Spears (1998) found that high personal self-esteem participants differentiated at the intergroup level, rating the ingroup solution as significantly higher than the outgroup. Thus, as in Long et al.'s (1993) study, high personal self-esteem was a predictor of ingroup bias. In terms of collective self-esteem, Long and Spears (1998) found that participants with low collective self-esteem showed ingroup favouritism. Consistent with Long

et al.'s (1993) study participants with high personal and low collective self-esteem favoured most the ingroup. Overall the findings from Long and Spears (1993, 1998) provide support for a modified version of the second corollary of the self-esteem hypothesis and illustrate the opposing effects of personal and collective self-esteem.

Consistent with work conducted by Long and Spears, the present study is concerned with investigating the independent and interactive effects of personal and collective self-esteem on ingroup bias.

Aim of this study

The present study examines the effect of status, personal and collective self-esteem on ingroup bias, (operationalised as the difference between the mean ingroup and outgroup evaluation) taking into consideration the methodological shortcomings associated with research in this area discussed in chapter two and three. This study was designed methodologically similarly to study one but ingroup bias in this study was measured using evaluative adjectives unrelated to status differentials. Furthermore, participants in this study were allocated into groups based on their score on a general health test.

As discussed in the previous chapter, in the real world, people are assigned into groups according to their performance or their status. Within the education system people frequently receive individual feedback, which determines their membership of educational groups. Similar processes continue to operate throughout the life span in terms of job and promotion opportunities. In an attempt to make assignment into groups as similar as possible to the

assignment into groups in the real world, participants in this study were randomly assigned into two groups, but were told that assignment was on the basis of their score on a test of general health. Therefore, their identity was based on a characteristic with some evaluative connotations – “adaptive general health” and “unadaptive general health”. In order to increase the coherence of the group, the members of each group were asked to work together on a task. Personal self-esteem and collective self-esteem deriving from the specific social category implicated in the intergroup situation were then measured. Personal self-esteem was measured using Rosenberg's self-esteem inventory. Crocker and Luhatnen's (1992) collective self-esteem scale was adapted to measure specific collective self-esteem. Participants were required to consider their membership in the adaptive or unadaptive general health group and respond to each item.

First, the effect of group status on personal and collective self-esteem was examined. It was predicted that assignment to a group with unadaptive psychological health would result in low specific collective self-esteem.

Following social identity theory, it was predicted that low status participants would show more ingroup bias than high status participants. In line with Long et al. (1993), it was predicted that participants with high personal self-esteem would show more ingroup bias than participants with low personal self-esteem. Participants with low collective self-esteem however, would show more ingroup bias than participants with high collective self-esteem. Further, it was expected that the two-way interaction between personal and collective self-esteem would be significant such that participants with high personal and low collective self-esteem would show most ingroup bias.

Method

Participants

One hundred and fifty-six University students participated who received partial course credit for their participation. Ninety-five of them were females and sixty-one males. They were run in groups of 6 to 10 and were told that the purpose of the experiment was to validate a test of general health. All the participants were asked after the experiment had ended whether they had suspected the real aim of the experiment. Four subjects' data were discarded because of suspicion regarding the deception in the study. So, the final number of participants was one hundred and fifty-two. Ninety-two of them were females and sixty males.

Measures

General Health Questionnaire (GHQ-28, Goldberg & Hiller, 1979). This is a well-established measure of psychological well-being. In this study, it was presented as a measure of general health.

The Rosenberg self-esteem inventory (Rosenberg, 1965). This is a well-validated measure of global evaluation of the self. The scale consists of 10 items to which subjects indicate their agreement on a 4 - point scale ranging from strongly agree to strongly disagree. Examples of items are "I feel that I have a number of good qualities" and "I feel I do not have much to be proud of". Rosenberg (1965) reported test-retest reliability greater than .80.

Collective self-esteem scale (Luhtanen & Crocker, 1992). This scale was modified to measure specific self-esteem derived from the specific identity implicated in the intergroup situation.

Participants were required to consider their membership in the adaptive or unadaptive general health group in relation to each item. A sample of this for the adaptive general health group can be seen in Appendix 4.

Intergroup evaluation. Participants were asked to rate their group and the outgroup on 8 adjectives, half of which were positive and half of which were negative. The adjectives were related to personality traits. They were, stable, pessimistic, hostile, friendly, unsociable, changeable, sociable and optimistic. Subjects rated the adaptive general health group (see appendix 5a) and the unadaptive general health group (see appendix 5b) on each set of adjectives, using a 7-point scale (1 = not at all, 7= extremely). The negative items of the scale were reverse scored. The adjectives were presented in the same random order to all subjects.

Ingroup Bias. A measure on ingroup bias was calculated by subtracting outgroup evaluation scores from ingroup evaluation scores.

Design

The design consisted of one independent variable and three dependent variables. The independent variable was status. Status was a between-subjects factor with two levels (high vs. low), and was ostensibly manipulated by feedback. The first dependent variable was personal self-esteem, the second dependent variable was collective self-esteem and the third dependent variable was ingroup bias. To test corollary two of the self-esteem hypothesis, personal and collective self-esteem were also treated as independent variables.

Procedure

After subjects arrived in the experimental room, they were asked to complete the General Health Questionnaire (Goldberg & Hiller, 1979). After they had filled it in, they were told the following:

“You have just completed a new test designed to assess general health among respondents in educational settings. As this is a newly validated questionnaire, we would like your help in assessing its criterion validity. This test was designed to be objective in the sense that it does not require the person administering it to make subjective assessments about the respondents. After this test you will be asked to discuss the results with others who have scored similarly, tell us what you thought of the test, and if you feel that the results accurately reflect general health.”

The last instruction was given in order to increase the credibility of the study and also increase the coherence of the group by working together on a task. In fact, however, group assignment was purely random. After the participants were divided into groups, they were allocated to different rooms and discussed with members of their group what they thought of the test. Following this, participants were asked to complete the Rosenberg self-esteem inventory, the collective self-esteem scale, and the ingroup and outgroup. The order that participants were asked to complete the ingroup and the outgroup evaluation scale was random. At the end of the experiment, participants were debriefed about the real aim of the experiment. Careful debriefing was required concerning their assignment into groups and all participants were shown that their assignment to groups had been completely random and that the tests remained unmarked.

Results

Reliability of measures

An analysis of the internal consistency of the personal and collective self-esteem scales revealed that both were internally consistent (Cronbach's alphas = .83, and = .86 respectively). Cronbach's alpha of the ingroup evaluation scale was .74 and Cronbach's alpha of the outgroup evaluation scale was .78.

The effect of status on personal and collective self-esteem

Two ANOVAs were conducted to test the effect of status on personal and collective self-esteem. Status did not have a significant effect on personal self-esteem ($F(1, 146) = .04, p > .05$) but the effect of status on collective self-esteem was significant ($F(1, 146) = 13.86, p < .001$). In line with prediction, high status participants had higher collective self-esteem ($M = 66.86$) than low status participants ($M = 58.74$).

Relationships between variables for high and low status groups

Pearson correlation coefficients were used to examine the relationships between the variables in the high and low status groups. The results of these correlation coefficients can be seen in Table 1.

Table 1

Correlations between variables in the high and low status groups

| High Status ($n = 82$) | Personal | Collective | Ingroup | Outgroup | Ingroup |
|--------------------------|-------------|-------------|------------|------------|---------|
| Low Status ($n = 66$) | Self-Esteem | Self-Esteem | Evaluation | Evaluation | Bias |
| Personal | | .24** | .20 | .14 | .04 |
| Self-Esteem | | | | | |
| Collective | -.05 | | .14 | .02 | .12 |
| Self-Esteem | | | | | |
| Ingroup | .32** | -.19 | | .61** | .27* |
| Evaluation | | | | | |
| Outgroup | -.003 | -.23 | .66** | | -.61** |
| Evaluation | | | | | |
| Ingroup | .40** | -.02 | .50** | -.32* | |
| Bias | | | | | |

Note: * $p < .05$, ** $p < .01$

As shown in Table 1, in the high status condition, personal self-esteem was significantly associated with collective self-esteem. In the low status condition, personal self-esteem was positively associated with positive evaluations of the ingroup and ingroup bias.

Ingroup bias as a function of status, personal and collective self-esteem

A multiple hierarchical regression analysis was conducted to test the main effects of status, personal and collective self-esteem and the two-way interactions between them. The three main effects were entered as the first set of predictors and the two-way interactions were entered in the second step. Group status was treated as dummy variable and scores on the continuous independent variables were centered in the regression analysis. The Beta weights and other statistics from these regressions can be seen in Table 2.

Table 2

Prediction of ingroup bias as a function of status, personal self-esteem and collective self-esteem

| Blocks | Predictor | <i>B</i> | <i>SE</i> | β | <i>df</i> | <i>F</i> for block | <i>R</i> ² Change |
|--------|--------------|----------|-----------|---------|-----------|--------------------|------------------------------|
| 1 | Status | 4.14 | 0.92 | .35** | 3,144 | 10.23*** | .18 |
| | PSE | .27 | .11 | .18* | | | |
| | CSE | .02 | .04 | .06 | | | |
| 2 | Status x PSE | -.37 | .23 | -.16 | 3,141 | 1.85 | .03 |
| | Status x CSE | .04 | .07 | .07 | | | |
| | PSE x CSE | -.01 | .009 | -.10 | | | |

Note: **p* < 0.05, ***p* < 0.01, ****p* < 0.001

Table 2 shows that status and personal self-esteem had a substantial effect on ingroup bias. Collective self-esteem did not have an effect on ingroup bias when the effects of status and personal self-esteem were accounted for. High status participants showed more ingroup bias ($M = 2.23$) than low status participants ($M = 0.20$). Personal self-esteem was positively associated with ingroup bias.

Discussion

Status had a significant effect on collective self-esteem but not on personal self-esteem. In line with prediction, high status participants had higher collective self-esteem than low status participants. Personal self-esteem was not affected by status but it was positively correlated with collective self-esteem in the high status condition. Status was a significant predictor of ingroup bias. Contrary to prediction, high status participants showed more ingroup bias than low status participants. In line with prediction, high personal self-esteem participants showed more ingroup bias than low personal self-esteem participants. Contrary to prediction, collective self-esteem was not related to ingroup bias and the two-way interaction between personal and collective self-esteem was not significant either.

The effect of status on personal and collective self-esteem

In line with prediction, status had an effect on collective self-esteem but not on personal self-esteem. High status participants had a higher collective self-esteem score than low status participants. Personal self-esteem was not affected by the status manipulation, which was ostensibly based on performance on a test of general health. This implies that participants

interpreted the feedback in terms of collective rather than personal identity. This might have happened because either participants did not want to interpret this manipulation personally “I personally have adaptive or unadaptive general health” or did not consider this categorisation important to affect their self-concept and therefore their personal self-esteem. Another possible reason of interpreting status manipulation strictly in group terms is that participants were asked to work together on a task after their assignment into groups in order to increase the coherence of the group. Completing the personal and collective self-esteem questionnaires immediately after this might have resulted in interpreting the status manipulation strictly in group terms.

The effect of status on ingroup bias

Status had a substantial effect on ingroup bias. Contrary to prediction, high status participants had a higher ingroup bias score than low status participants. These findings seem to work against the self - esteem hypothesis which would predict that low status groups have the greatest motivation to enhance their social identities and thus, should be particularly likely to manifest pronounced ingroup favouritism.

As discussed in the previous chapter, one possible reason for finding more ingroup bias among higher status ingroups in study one was the relatedness of measures of the ingroup bias measure to the status differentials. Taylor and Hinkle (1998) found that low ingroup status causes greater ingroup favoritism on new comparison dimensions than on the original dimensions upon which the ingroup does not serve well. Tajfel and Turner (1979) argued that low status group members acknowledge the superiority of the high status group members on the status related dimensions of evaluation. Thus, low status group members show outgroup favouritism rather than ingroup

favouritism towards high status outgroups. Conversely, high status reproduce the experimental status differentials when the status differentials relate to the status differentials and compare themselves favorably to low status groups. In this study, although the measures of evaluation were related to personality traits and not to status differentials, it was still the high status participants who showed more ingroup bias. One possible reason for this might be that high status groups may discriminate against low status groups on equity grounds, "My group is better, therefore, I evaluate it more positively than the outgroup".

According to Tajfel and Turner (1986), status differentials are very critical in understanding intergroup relationships. The focus on status differences, as the motivation for intergroup discrimination, raises many of the same issues as those related to self-esteem. Swann (1987) has argued that a positive relation between self-esteem and self-enhancement may be grounded in reality. Thus, when high status groups are asked to compare themselves with a low status group, they are likely to give answers, which reflect their self-evident superiority. From a self-consistency viewpoint, individuals are motivated to maintain a self-image that is consistent over time and situation. This is manifested as a preference for a continuous self-confirmation in social interaction. Thus, high status participants will be likely to self-enhance over time and situation even when the measures of evaluation are not related to status differentials in order to confirm their positive identity.

The findings of study two are also consistent with Mullen, Brown and Smith's (1992) findings that most of the studies finding more ingroup bias among higher status ingroups have involved more particular, transitory, task specific conceptualisations of status (e.g. superior scores on

some laboratory task). On the other hand, most of the studies showing ingroup bias among lower status ingroups have used global status cues.

The effect of personal self-esteem on bias

Personal self-esteem was not affected by the status manipulation but had an effect on ingroup bias. In line with prediction, personal self-esteem was positively associated with ingroup bias. This is consistent with Crocker et al. (1987) and Long et al.'s (1993) findings. Long and Spears (1997) argue that immersion in a group for someone who has high personal self-regard will be threatening because this is the wrong level of abstraction for them to display their positive image. In this study, in the high status condition, personal self-esteem was positively associated with ingroup evaluations but in the low status condition personal self-esteem was associated with both positive ingroup evaluations and ingroup bias. This probably means that it is not only immersion into groups that is threatening for participants with high personal self-esteem but immersion in a low status group. Thus, if people with high personal self-esteem are threatened by belonging to a poorly valued group, they attempt to compensate for this by displaying ingroup bias.

The effect of collective self-esteem on bias

Contrary to prediction, Branscombe and Wann (1994) and Long et al.'s (1993) findings collective self-esteem was not related to ingroup bias and the two-way interaction between collective and personal self-esteem was not significant either. This was probably because collective self-esteem in this study was derived from the groups created in the laboratory which may have been seen less threatening and important to identity compared to the more relevant

and involving national categories employed by Branscombe and Wann (1994) and Long et al. (1993). In this study, participants were assigned into groups based ostensibly on their scores in a general health test. Although, this may represent the reality of many groups and categorisations, the issue that groups were artificially created still remains.

CHAPTER 5**Study Three: Examination of Internal and Test-Retest Reliability of Luhtanen and Crocker's (1992) Collective Self-Esteem Scale**

In studies one and two, corollary two of the self-esteem hypothesis was tested in order to address controversies, and eliminate methodological issues associated with previous research in this area. In study one, where intergroup evaluations were related to status differentials, it was found that participants with high collective self-esteem showed more ingroup bias. Furthermore, those with collective self-esteem and in the superior group acknowledged their group's superiority, whereas those with low collective self-esteem did not acknowledge the superiority of the same group. Those who experienced high collective self-esteem in the average group did not recognize the relative inferiority of their own group, whereas those with low collective self-esteem did. In study two, where intergroup evaluations were not related to status differentials, the relationship between collective self-esteem and ingroup bias was not significant. This was probably because collective self-esteem in study two was derived from groups created in the laboratory which may have been seen as less threatening to identity compared to real groups.

The aim of study three is to examine the internal and test-retest reliability of Luhtanen and Crocker's (1992) collective self-esteem scale, in order to assess whether it can be used as two short measures of collective self-esteem that will enable appropriate examination of corollary one of the self-esteem hypothesis. Corollary one states that successful intergroup discrimination enhances social identity and thereby elevates self-esteem. This means that in order to test this corollary appropriately, self-esteem has to be measured before and after discrimination and test

whether discrimination leads to *changes* in self-esteem. Published studies on corollary one to date, have not examined *change* in self-esteem but measured self-esteem only *after* discrimination. This means that they tested whether ingroup bias affects self-esteem and not whether ingroup bias enhances self-esteem as suggested by corollary one. Some of these studies employed the minimal group paradigm and others employed real groups.

Studies employing the minimal group paradigm

Oakes and Turner (1980) conducted the first study that tested corollary one of the self-esteem hypothesis. Using the minimal group paradigm, one group of participants was given the opportunity to discriminate between the ingroup and the outgroup by differentially awarding points to each, while the other group read a magazine. When personal self-esteem was measured, those who had been able to engage in intergroup discrimination displayed higher levels of self-esteem than control subjects.

Turner and Spriggs (1982) conducted a minimal group experiment, in which participants were instructed to be either cooperative or competitive, and were either categorised according to their preferences for artists or were not categorised. Participants who were categorised according to their preferences for artists were asked to allocate points between ingroup and outgroup members. Participants who were not categorised were asked to allocate points between themselves and another person. Personal self-esteem was measured after allocation of points in all conditions. Turner and Spriggs (1982) found that self-esteem was higher under competitive conditions than under cooperative conditions as well as under individual conditions than under group conditions.

Hogg and Turner (1985) categorised participants as members of two minimal groups on a random basis and then asked them to complete an intergroup point-allocation task. Participants were then asked to complete personal self-esteem measures. Hogg and Turner (1985) found that intergroup discrimination was not related to personal self-esteem.

Hogg, Turner, Nascimento-Schulze and Spriggs (1986) as discussed in chapter two, used the minimal group paradigm, and divided participants into two groups either explicitly or implicitly. Participants were then asked to complete an intergroup allocation task. Hogg et al. (1986) found that participants, who discriminated more, reported higher levels of personal self-esteem independent of whether they were categorised implicitly or explicitly. Therefore, category salience was not a significant factor in determining self-esteem.

Vickers, Abrams and Hogg (1988) categorised participants as members of two minimal groups on a random basis and then asked them to complete an intergroup point-allocation task. Personal self-esteem was measured after the intergroup point-allocation task. Vickers, Abrams and Hogg (1988) found that participants who engaged in intergroup discrimination reported lower personal self-esteem. This is in direct opposition to corollary one. Hogg and Morkans (1989) found a slight tendency for posttest global personal self-esteem 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 one.

As discussed in chapter two, Chin and McClintock (1993) proposed that individuals can be divided into those who possess either prosocial or competitive social value orientations. During

interpersonal point-distribution pro-social individuals tend to minimize the difference between allocations made to the self and others, whereas competitive individuals tend to maximize the difference. Consequently, they argue that increments in self-esteem following discrimination may be attributed to a consistency between intergroup behaviour and a competitive interpersonal social value orientation. In a test of these predictions, they classified individuals according to pretest data into prosocial and competitive. Participants were then categorised randomly into two groups and completed an intergroup point-distribution task. Chin and McClintock (1993) found that competitive participants showed more discrimination than prosocial participants, supporting their hypothesis that interpersonal social value orientation influences intergroup behaviour.

Mullin and Hogg (1995) found that minimal group members who had been categorized on an explicitly random basis reported higher levels of global personal self-esteem after completing an intergroup point-distribution task than uncategorized participants who had completed an intergroup point-distribution task.

Vanbeselare (1996) measured the personal self-esteem of high, low and neutral status group members before and after they had evaluated group performances on a line length estimation task. Consistent with corollary one, intergroup discrimination correlated significantly with the posttest self-esteem.

Gagnon and Bourhis (1996) categorised participants randomly before asking them to complete an intergroup point-allocation task. Ingroup identification and specific collective self-esteem

were then measured. According to corollary one, discrimination was positively correlated with self-esteem. This correlation was significant only when participants identified with the ingroup.

Real group studies

Julian, Bishop and Fiedler (1966) found that military groups who were encouraged to compare themselves with others showed higher subsequent self-esteem than did those who did not engage in such intergroup comparisons.

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 outgroups use, and desire for close contact with the outgroup. Significant correlations were found between self-esteem and intergroup differentiation only for some political parties, suggesting that the results may only apply to certain types of supporters or that political parties have different norms in terms of intergroup behaviour. These findings provide only limited support for corollary one.

Hunter, Stringer and Coleman (1993) asked Protestant and Catholic school children to make attributions about the cause of an actor's behaviour in a series of vignettes. A 2 (actor's religion: ingroup vs. outgroup) X 2 (actor's behaviour: positive vs. negative) X 2 (participant's religion: Protestant vs. Catholic) mixed design was employed. Personal self-esteem was measured immediately after these attributions. Contrary to corollary one, self-esteem was not significantly correlated with attributional differentiation either across or within groups.

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 self-esteem. Contrary to corollary one, no significant differences were found between the self-esteem of participants who discriminated and the self-esteem of those who did not discriminate.

Taken together these studies, reveal little support for corollary one of the self-esteem hypothesis. However, the majority of these studies compared the self-esteem levels of people who were or were not given the opportunity to discriminate against an outgroup. This is problematic because salience of group identity would be higher among the participants who are given the opportunity to discriminate, and this alone might elevate self-esteem. Branscombe and Wann (1994) argue that when conducting studies to test corollary one of the self-esteem hypothesis, all participants should have the opportunity to engage in discrimination. Hence, differential salience of the identity as an explanation of any differences in levels of subsequent self-esteem will be eliminated.

The second problem is that these studies do not test corollary one of the self-esteem hypothesis appropriately. As discussed at the beginning of this chapter, corollary one of the self-esteem hypothesis states that successful intergroup discrimination enhances social identity and thereby elevates self-esteem. This means that in order to test this corollary, self-esteem has to be measured before and after discrimination. Although this point was originally noted by Hogg and Abrams (1988), the majority of studies conducted in this area did not take this point into consideration. Furthermore, the majority of studies testing corollary one measured personal

rather than collective self-esteem. As discussed in chapter two, it is collective and not personal self-esteem that should be measured to test the self-esteem hypothesis appropriately.

Luhtanen and Crocker's (1992) scale is the only scale currently used to assess collective self-esteem in a manner consistent with social identity theory. Therefore, in order to test the first corollary of the self-esteem hypothesis, this scale has to be administered before and after discrimination. However, it is inadvisable to ask participants to complete the same measure of self-esteem twice as this might cause complaints of boredom and "demand" characteristics. In a study conducted by Branscombe and Wann (1994) to test corollary one and corollary two of the self-esteem hypothesis simultaneously, the two items of the private subscale of Luhtanen and Crocker's (1992) collective self-esteem scale were administered before discrimination and the other two items of the same subscale were administered after discrimination. Cronbach's standardised reliability coefficient of the first two items that were given before discrimination was 0.63 and Cronbach's standardised reliability coefficient of the other two items that were given after discrimination was 0.59. There are two problems with Branscombe and Wann's (1994) study. The first is the small size of the subscale they used. This subscale consisted only of four items from which the first two were given before discrimination and the other two after discrimination. Employing a two-item measure of pretest and a two-item measure of posttest self-esteem can be problematic, as these short measures can be fairly insensitive. The second problem is that, Branscombe and Wann's (1994) pretest and posttest collective self-esteem measures tapped global self-esteem and not specific collective self-esteem derived from the particular identity under consideration. As discussed above, esteem based on the social

category under investigation is the appropriate measure for testing the first corollary of the self-esteem hypothesis.

In an attempt to provide a measure that will enable appropriate testing of corollary one of the self-esteem hypothesis, the present study was conducted. The aim of study three was to adapt Luhtanen and Crocker's (1992) scale to measure specific collective self-esteem and then split this scale into two parts and examine whether these two parts have acceptable internal and test-retest reliability.

Aim of the present study

The aim of study three is to modify the Luhtanen and Crocker's (1992) collective self-esteem scale to measure collective self-esteem deriving from the particular membership into consideration and then split this scale into two parts and examine whether these parts have acceptable internal and test-retest reliability.

First, Luhtanen and Crocker's (1992) collective self-esteem scale was adapted to measure collective self-esteem relating specifically to gender. Then this scale was split into two parts. The first part consisted of the first two items of the membership, private, public and importance to self-concept subscale. The second part consisted of the other two items of the membership, private, public and importance to self-concept subscales. Participants were male and female pupils from a school in Kent. Half of them were given the first part of the collective self-esteem scale and the other half were asked to complete the other part of the scale.

Method

Participants

Fifty-two female and forty-eight male pupils from a Grammar school in Kent participated in the study. Their age ranged from 16-17 years and the mean was 16.8 years.

Measures

Collective self-esteem scale (Luhtanen & Crocker, 1992). As discussed in chapter two, this scale consists of four subscales that assess various aspects of collective self-esteem. These are, membership esteem (evaluations of oneself as a group member of the social group that one belongs), public collective self-esteem (how others evaluate one's social groups), private collective self-esteem (measures attitude towards the group and the person's membership of it) and importance to self-concept (how important one's membership in the social group are to one's social group). Each subscale consists of four items. The collective self-esteem scale, and each of its subscales has high internal consistency (alphas $> .83$) and acceptable test re-test reliability ($r = .68$ for the total scale) over a six week interval (Luhtanen & Crocker, 1992).

This scale was modified to measure collective self-esteem relating specifically to gender and was then split into two parts. The first part consisted of the first two items of the membership, private, public and importance to self-concept subscales. The second part consisted the other two items of the membership, private, public and importance to self-concept subscales. Therefore each part of the specific collective self-esteem scale consisted of eight items. A sample of the first part of the specific collective self-esteem scale can be seen in Appendix 6a

and a sample of the second part of the specific collective self-esteem scale can be seen in Appendix 6b.

Design

This was between subjects design. Half of the participants were asked to complete the first part of the specific collective self-esteem scale and the other half completed the other part of this scale.

Procedure

Pupils were asked to complete one part of the specific collective self-esteem scale.

Results and Discussion

An analysis of the internal consistency of both parts of the specific collective self-esteem scale revealed that they were both internally consistent. Cronbach's alpha of the first part of the scale was 0.73 and Cronbach's alpha of the second part of the scale was 0.70. The mean difference between the first part ($M = 43.72$) and the second part ($M = 43.50$) of the specific collective self-esteem scale was not significant ($t(49) = 0.60, p > .05$). The correlation between the two parts of the scale was ($r = .81, p < .001$). This means that these two parts of the specific collective self-esteem scale have acceptable internal and test-retest reliability and therefore, can be used as two separate measures. Thus, in order to test corollary one of the self-esteem hypothesis, one scale can be given before intergroup evaluations and the other after intergroup

evaluations. This will enable appropriate testing of corollary one and is the aim of the next study.

CHAPTER 6**Study Four: The Relationship between Collective Self-Esteem and Intergroup Behaviour
Employing Real groups Based on Gender**

The aim of the current chapter is to describe a study that considers a form of methodology that enables appropriate testing of corollary one and also tests corollary two of the self-esteem hypothesis simultaneously. Abrams and Hogg (1988) noted that much of the research into the first corollary of the self-esteem hypothesis compares the self-esteem levels of people who were or were not given the opportunity to discriminate against an outgroup. However, the first corollary of the self-esteem hypothesis states that successful intergroup discrimination enhances social identity and thereby elevates self-esteem. This means that in order to test this corollary, self-esteem has to be measured before and after discrimination and examine whether the process of discrimination leads to changes in self-esteem.

Rubin and Hewstone (1998) also argue that in order to test corollary one of the self-esteem hypothesis appropriately, self-esteem has to be measured before and after discrimination. This is because positive correlations between discrimination and posttest self-esteem could mean that either discrimination increases self-esteem or that it has no effect on self-esteem and that people with high pretest self-esteem discriminate more than people with low pretest self-esteem. By measuring self-esteem before and after discrimination you can clarify whether it is discrimination or pretest self-esteem that affects posttest self-esteem.

It is only studies that attempted to test both corollaries of the self-esteem hypothesis simultaneously that measured self-esteem before and after intergroup evaluation and could examine whether the process of discrimination leads to changes in self-esteem. Within the literature, there are a small number of studies that have attempted to test both corollaries simultaneously. Some of them were conducted in the laboratory and others were real group studies.

Laboratory studies

Lemyre and Smith (1985) tested both corollaries of the self-esteem hypothesis using a minimal group paradigm. Their main objective was to determine whether discrimination against an outgroup increases self-esteem. Pretest and posttest global personal self-esteem were measured before and after discrimination. They predicted that participants who discriminated more would show the highest self-esteem. In line with their predictions, they found that participants who discriminated more showed higher posttest global personal self-esteem. Contrary to corollary two, they found no significant relationship between pretest self-esteem and subsequent discrimination.

Hogg and Sunderland (1991) manipulated subjects' personal self-esteem by providing either positive or negative feedback on a word association task to produce success and failure conditions. Minimal group members (categorised on an explicitly random basis) and uncategorised participants then completed an intergroup point-distribution task. Participants in the control and individual conditions distributed points in special matrix booklets between individuals with similar and different code numbers to themselves, while subjects in the group

condition distributed points between members of their own and members of the other group. Global personal self-esteem was measured immediately before and after this task using a between-subjects design. In support of corollary two, categorised participants who received negative feedback about their performance on their word association task showed significantly greater discrimination than those who received positive feedback. However, contrary to corollary one, greater discrimination was not associated with greater increase in self-esteem.

Hogg and Morkans (1989) have conducted a study very similar methodologically to the one conducted by Hogg and Sunderland (1991). Personal self-esteem was again manipulated. In contrast to Hogg and Sunderland's (1991) study, Hogg and Morkans (1989) found that personal self-esteem did not have an effect on discrimination. They found that participants in the failure conditions reported lower self-esteem than those in the success conditions. However, this difference was not accompanied by different levels of discrimination and therefore, cannot be taken as evidence in support of corollary one.

Hogg Turner, Nascimento-Schulze and Spriggs (1986, experiment 2) in their minimal group experiment, pretested participants' global personal self-esteem and posttested personal self-esteem one week after. Contrary to corollary two, participants with low self-esteem did not differ significantly in the discrimination levels of those with high self-esteem. Participants with low pretest self-esteem reported significantly higher posttest self-esteem than participants with high pretest self-esteem. However, this increase on self-esteem was not mediated by greater intergroup discrimination. Thus, there was no support for either corollary of the self-esteem hypothesis.

Real Groups

Meindl and Lerner (1984) as discussed in chapter four, manipulated the specific personal self-esteem of English speaking Canadians. They predicted that participants who experience a personal failure will show both ingroup and outgroup favouritism in the process of self-enhancement because any group that is in a position to favour an outgroup is regarded as superior to that outgroup. According to their predictions, they found that participants in the low self-esteem condition showed both ingroup and outgroup favouritism supporting the view that ingroup and outgroup favouritism are reactions to lowered self-esteem. In their second experiment, they also included a measure of posttest personal self-esteem. Contrary to self-esteem hypothesis, aggressive or benevolent attitudes did not predict self-esteem.

Wagner, Lampen and Syllwasschy (1986) tested the self-esteem hypothesis, in an experiment that extended the minimal group paradigm to one further outgroup as a second comparison group. They played an audio tape recording of a debate about television to undergraduate law students who were told that the discussion ability was of medium standard. They created three conditions. In the low status condition, participants were told that the discussion ability of law students was found to be worse than that of economic students. In the neutral condition, participants were informed that previous research has compared the discussion abilities of different departments but the findings were not mentioned to them. In the control condition, no mention of comparisons between different departments was made. Participants in the low status and control conditions were asked to evaluate the discussion ability of medical students while participants in the control conditions were asked to evaluate the discussion ability of students without being informed of their departmental affiliation. After these different conditions of

ingroup status had been established, participants were divided into two further experimental conditions. Half of the participants in each condition completed two self-esteem scales before they evaluated the outgroup and the other half after the outgroup evaluation. Wagner et al. (1986) found support for corollary two but not for corollary one. Pretest self-esteem was negatively correlated with outgroup evaluation across conditions but no differences occurred from pretest to posttest self-esteem measures.

Branscombe and Wann (1994) tested Crocker, Blaine and Luhtanen's (1993) prediction that people with high collective self-esteem are more likely to enhance the ingroup (self-enhancement motive) whereas people with low collective self-esteem should be more likely to derogate the outgroup (self-protection motive). Branscombe and Wann (1994) tested both corollaries of the self-esteem hypothesis and predicted that under group-identity threatening conditions, derogation would occur for defensive self-protective strategies. Hence, those whose collective self-esteem have been lowered most by the threat, should display the highest levels of outgroup derogation as means of defending their social identity, especially when the threatened identity was an important one. In the non-threat condition, assuming that social comparison presented to subjects was sufficiently favourable, self-enhancement motives should be elicited. In their research, Branscombe and Wann (1994) used a natural social categorisation for their American student participants that already had a clear history of relevant and competitive social comparison (US vs. Soviet Union). American participants watched a film clip of boxing between an American and a Soviet Union 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. Following the film clip,

participants were provided with the opportunity to derogate a variety of outgroups including the Russians. Pretest and posttest global collective self-esteem was measured immediately before and after outgroup derogation. The findings of their study confirmed the prediction that low self-esteem results in greater derogation but level of self-esteem did not predict outgroup derogation in the non-threat condition. They also found that higher amounts of derogation of the threat-relevant outgroup in the identity-threatened condition elevated subsequent collective self-esteem. Derogation of threat-irrelevant outgroups did not have this positive esteem consequence. In the no-threat condition, amount of derogation directed towards either type of group did not significantly influence subsequent self-esteem.

Hunter, Platow, Howard and Stringer (1996) asked Protestant and Catholic Northern Irish children to rate members of each religious group on a series of evaluative traits. Pretest and posttest specific and global personal self-esteem were measured using and within-subject design. Participants tended to show an increase in specific aspects of the personal self-esteem. However, this increase was not evident using global self-esteem scales. This supports the researchers' hypothesis that only specific aspects of self-esteem can change following discrimination. However, the self-esteem changes were reported only among Catholic children. This is particularly worrying because the Protestant children discriminated more than the Catholic children and so according to corollary one, it would be expected to report a greater increase in self-esteem. Another problem with this study is also the fact that participants in the control group who were not given the opportunity to discriminate reported a decrease in self-esteem. This reduction is not surprising since pretest self-esteem was measured three weeks

before the main experiment and many extraneous variables could have affected self-esteem either during pretest measurement or immediately before discrimination.

Hunter, Platow, Bell, Kypri and Lewis (1997), in two separate experiments comprising men and women tested both corollaries of the self-esteem hypothesis using realistic groups (based on gender). Men and women presented with positive and negative feedback evaluated the ingroup and outgroup on dimensions important and unimportant to the ingroup. Women displayed outgroup bias on dimensions unimportant to their ingroup (i.e. physical ability) with respect to the evaluations of failure. Women subsequently manifested a decrease in physical self-esteem. Men displayed ingroup bias on dimensions unimportant to their ingroup (i.e. verbal ability) and following positive feedback, on dimensions important to their ingroup (i.e. physical ability). Men subsequently manifested an increase in verbal and physical self-esteem. Global self-esteem was unaffected in each study. These findings suggest that the relative display of bias can affect domain-specific self-esteem. No support was found for the second corollary of the self-esteem hypothesis that low or threatened self-esteem can enhance bias on evaluative dimensions important to the ingroup.

Verkuyten (1997) tested Crocker, Blaine and Luhtanen's (1993) prediction that people with high collective self-esteem are more likely to enhance the ingroup (self-enhancement motive) whereas people with low collective self-esteem should be more likely to derogate the outgroup (self-protection motive). Verkuyten (1997) measured the pretest specific collective self-esteem of 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 self-

esteem was then measured. Verkuyten (1997) found support for Crocker, Blaine and Luhtanen's (1993) predictions. However, there was no support for either corollary of the self-esteem hypothesis.

In line with Hogg and Abrams (1990), the evidence in support of the self-esteem hypothesis is not overwhelming. One possible reason for this is that there are some methodological shortcomings associated with research that attempted to test both corollaries of the self-esteem hypothesis simultaneously. Although all these studies measured self-esteem before and after discrimination and tested whether the process of discrimination leads to changes in self-esteem, the majority of them did not measure collective but personal self-esteem and examined whether discrimination leads to changes in personal self-esteem. As discussed in chapter two and five, it is collective and not personal self-esteem that should be measured to test the self-esteem hypothesis appropriately. Tajfel and Turner (1986) argue that social identity can be positive or negative depending on individual's evaluations of the groups that one belongs and not depending on personal achievements within groups.

Verkuyten (1997) measured collective self-esteem before discrimination and personal self-esteem after discrimination. Hunter et al. (1997) measured personal self-esteem before intergroup evaluation and personal and collective self-esteem after intergroup evaluation. In order to test the self-esteem hypothesis appropriately, collective self-esteem should be measured before and after discrimination and test whether discrimination leads to changes in collective self-esteem.

It is only Branscombe and Wann (1994) who measured collective self-esteem before and after discrimination. However, Branscombe and Wann (1994) administered the two items of the private subscale of Luhtanen and Crocker's (1992) collective self-esteem scale before discrimination and the other two items of the same subscale after discrimination. As discussed in chapter five, employing a two-item measure of pretest and a two-item measure of posttest collective self-esteem can be problematic as short measures can be fairly insensitive. Another problem with Branscombe and Wann's (1994) study is that they measured global collective self-esteem rather than specific collective self-esteem derived from the particular identity under consideration. As discussed in chapter two and five, esteem based on the social category under investigation is the appropriate measure for testing the first corollary of the self-esteem hypothesis. Furthermore, Branscombe and Wann (1994) measured outgroup derogation and not ingroup bias operationalised as the difference between mean ingroup and mean outgroup evaluation scores. According to Turner (1982), social identity theory posits a need for a positive and distinctive identity that can be achieved by positive distinctiveness of one's groups in comparison with other groups. Thus, positive discrepancies between the ingroup and the outgroup provide ingroup members with positive social identity, while negative discrepancies between the ingroup and the outgroup provide ingroup members with negative social identity. Therefore, in order to test the self-esteem hypothesis appropriately, intergroup discriminations should be operationalised as favouring the ingroup relative to the outgroup.

Branscombe and Wann (1994) found support for Crocker, Blaine and Luhtanen's (1993) prediction. According to Crocker et al. (1993), people with low collective self-esteem should derogate the outgroup more than people with high self-esteem, because people with low self-

esteem are primarily concerned with self-protection. Crocker et al. (1993) argue that protection motives are revealed by outgroup ratings. Consequently, in an attempt to protect themselves, people with low self-esteem are more likely to derogate the outgroup than favour the ingroup. Furthermore, concerns with plausibility or believability do not allow people with low self-esteem to use a strategy of self-enhancement where the self is directly implicated. As discussed in chapter two, this argument was also supported by Brown, Collins and Schmidt's (1988) study.

Verkuyten (1997) also tested Crocker, Blaine and Luhtanen's (1993) prediction that people with high collective self-esteem are more likely to enhance the ingroup (self-enhancement motive) and people with low collective self-esteem should be more likely to derogate the outgroup (self-protection motive). In line with Crocker et al. (1993), Verkuyten (1997) found that low self-esteem individuals derogated the outgroup more than high self-esteem individuals and high self-esteem individuals favoured the ingroup more than low self-esteem individuals.

Aim of this study

The present study aims to test both corollaries of the self-esteem hypothesis simultaneously using real social categories based on gender. An additional aim of this study is to test Crocker et al.'s (1993) predictions that low collective self-esteem individuals should derogate the outgroup more than high collective self-esteem individuals and that high self-esteem individuals should favour the ingroup more than low self-esteem individuals.

In an attempt to overcome the methodological shortcomings of previous research discussed above, collective self-esteem relating specifically to gender was measured before and after

intergroup evaluations. The two parts of Luhtanen and Crocker's (1992) collective self-esteem scale, that were tested for internal and test-retest reliability in study three, were employed.

Intergroup evaluation was measured using evaluative adjectives related to academic ability because participants were told that the aim of this study was to test individual differences in academic ability. Unlike Branscombe and Wann (1994) and in line with social identity theory, ingroup bias was operationalised as the difference between mean ingroup and outgroup evaluation.

Female participants were expected to have lower collective self-esteem than males. This prediction was made because females can be considered to have lower status than males in the general social hierarchy (Crocker & Major, 1989; James & Saville-Smith, 1994) and therefore should have lower self-esteem. Men, worldwide, receive higher incomes than do women (Peterson & Runyan, 1993), even when job qualifications are identical (Stroh, Brett & Reilly, 1992).

Social psychological theories such as the "reflected appraisals" theory (Cooley, 1956) and the "self-fulfilling prophecies" theory (Merton, 1948) predict that disadvantaged groups in terms of economic opportunities and outcomes should have low self-esteem. According to the "reflected appraisals" theory (Cooley, 1956), the self-concept develops through interactions with others and is a reflection of those others' appraisals of oneself. According to this perspective, members of disadvantaged groups who are aware that they are regarded negatively by others should incorporate those negative attitudes into the self-concept and consequently should have low

self-esteem. Merton (1948) proposed that self-fulfilling prophecies occur when a perceiver acts on their initial beliefs about a target in such a way that those beliefs come to be confirmed by the behaviour of the target. According to this view, perceivers who hold negative stereotypes about disadvantaged groups may alter behaviour towards members of those groups so that the disadvantaged individuals come to behave and ultimately see themselves in a manner consistent with those negative stereotypes. Social comparison theory (Festinger, 1954) and social identity theory (Tajfel & Turner, 1986) are also compatible with the prediction that low status groups should have low self-esteem. Furthermore, Gecas and Scwalbe (1983) argued that members of disadvantaged groups should have low self-esteem because of limitations of their opportunities to control and manipulate the environment.

Females were expected to show more ingroup bias than males since females are considered to have lower status and self-esteem and therefore, according to the second corollary of the self-esteem hypothesis, should show more ingroup bias. Williams (1984) argues that there has been little interest in studying sex differences in intergroup behaviour and when in some studies gender differences had an effect on intergroup behaviour, they were normally not predicted. Williams (1984) suggested that enhancement of identity presupposes that group members have "agentic - self-orientated social styles". This means that the group members' primal concern should be achievement and status. When groups operate in a more "communal - socio-emotional" manner, then they are probably not concerned with the maintenance or enhancement of their identity (Williams, 1984). Bernard (1974) conducted a study to examine the ways in which academics define their professional identities. She found that men tended to use definitions of scholarly prestige and institutional power, i.e. agentic construction, whereas

women tended to use definitions that emphasised developing students, developing scholarship, i.e. communal construction. Williams (1984) argued that the association between masculinity and agency is one of the fundamental ways in which the power and status of men is perpetuated in the society and this type of style is the most appropriate for a “superior” group. Communality is a less attractive option and the association between communality and femininity can be seen as perpetuating women's "inferiority" (Williams, 1984). Thus, according to Williams (1984), since men have an agentic style and people with agentic styles are more concerned with the enhancement of identity, then men should show more ingroup bias. However, this argument contradicts the second corollary of the self-esteem hypothesis which states that participants with low self-esteem should show more ingroup bias because they are more in need to increase their self-esteem. Brown and Smith (1989) also found that women, who tend to have a more communal orientation, have been found to display intergroup discrimination in the same level with men. This led Brown and Smith (1989) to conclude that in agentic groups there is a concern for achievement and status comparisons (cognitive kind), in groups operating in a more communal manner there is a concern with more affective dimensions of comparisons such as friendliness and sociability.

Following the second corollary of the self-esteem hypothesis, it was predicted that participants with low collective self-esteem would show more ingroup bias than participants with high collective self-esteem. In line with the first corollary of the self-esteem hypothesis, it was predicted that there would be a positive increase in the collective self-esteem of participants who showed more ingroup bias. Following Crocker et al.'s (1993) predictions, it was predicted that low collective self-esteem individuals should derogate the outgroup more than high

collective self-esteem individuals and that high self-esteem individuals should favour the ingroup more than low self-esteem individuals.

Method

Participants

Eighty-one male and eighty-one female participants voluntarily participated in this study. They were students from all disciplines studying at the University of Kent at Canterbury. Their age ranged from 18 to 37 years and the mean was 22 years.

Measures

Collective self-esteem scale (Luhtanen & Crocker, 1992). The two parts of Luhtanen and Crocker's (1994) collective self-esteem scale modified to measure collective self-esteem relating specifically to gender were employed. As found in study three, these two parts of the collective self-esteem scale have acceptable internal and test-retest reliability. The first part consisted of the first two items of the membership, private, public and importance to self-concept subscales and was given before intergroup evaluations. The second part consisted the other two items of the membership, private, public and importance to self-concept subscales and was given after intergroup evaluations. Each part consisted of eight items. A sample of the first part of collective self-esteem scale can be seen in Appendix 6a and a sample of the second part of collective self-esteem scale can be seen in Appendix 6b.

Intergroup evaluation scale. This consisted of 16 adjectives related to academic ability because participants were told that the aim of this study was to test individual differences in academic ability. Half of them were positive and the other half were negative. They were, bright, uncreative, clever, ineffective, slow, gifted, effective, dull, creative, incompetent unable, competent, able, intelligent, stupid, ungifted. Participants rated males (see Appendix 7a) and females (see Appendix 7b) on each set of adjectives, using a 7-point scale (1 = not at all, 7= extremely) in a random order. The negative items of the scale were reverse scored. High scores indicate more positive evaluation of the ingroup and the outgroup.

Ingroup Bias. A measure on ingroup bias was calculated by subtracting outgroup evaluation scores from ingroup evaluation scores.

Design

The design consisted of two independent variables and two dependent variables. The first independent variable was gender. The second independent variable was pretest collective self-esteem. The dependent variables were ingroup bias and posttest collective self-esteem. To test corollary one, ingroup bias was also treated as an independent variable.

Procedure

The study was presented as a survey into gender and individual differences in academic ability. Participants were given a booklet with different questionnaires to complete and were asked to answer all the questions in the order that they were given to them. They were first asked to give some information about themselves (i.e. gender, age) and were then asked to complete the first

part of the collective self-esteem scale followed by the intergroup evaluation scales and the second part of the collective self-esteem scale. At the end all participants were thanked and debriefed as to the real aim of the study. They were told that this study had nothing to do with gender and individual differences in academic ability but the aim of it was to test whether people with low self-esteem discriminate more than people with high self-esteem and whether the process of discrimination leads to increases in self-esteem.

Results

Reliability of measures

Cronbach's alpha for the first part of the specific collective self-esteem scale was 0.68 and Cronbach's alpha for the second part of the specific collective self-esteem scale was 0.68. Cronbach's alpha for the ingroup evaluation scale was 0.87 and Cronbach's alpha for the outgroup evaluation scale was 0.89.

The effect of gender on collective self-esteem

An ANOVA was conducted to test the effect of gender on collective self-esteem. In this analysis, collective self-esteem was treated as a dependent variable. Gender had a significant effect on collective self-esteem ($F(1, 158) = 4.52, p < .05$). Females had higher collective self-esteem ($M = 41.51, SD = 5.311$) than males ($M = 39.48, SD = 6.69$).

Test of corollary two: the effect of gender and collective self-esteem on ingroup bias

A hierarchical multiple regression analysis was conducted to test whether ingroup bias could be predicted by gender and collective self-esteem. The main effects of gender and collective self-esteem were entered in the first step and the two-way interaction was entered in the second step. Gender was treated as dummy variable and the collective self-esteem score was centered in the regression analysis. The Beta weights and other statistics from these regressions can be seen in Table 1.

Table 1

Prediction of bias as a function of gender and collective self-esteem

| Blocks | Predictor | <i>B</i> | <i>SE</i> | β | <i>df</i> | <i>F</i> for Block | <i>R</i> ² Change |
|--------|------------------------|----------|-----------|---------|-----------|--------------------|------------------------------|
| 1 | Gender | -5.85 | 1.70 | -.27* | 2,146 | 6.56* | .08 |
| | CSE TIME 1 | .09 | .14 | .05 | | | |
| 2 | Gender X CSE TIME 1 | .15 | .28 | .07 | 1,145 | .29 | .002 |
| | | | | | | | |

Note: **p<0.01

As shown in Table 1, gender was the only significant predictor of bias. Females showed more ingroup bias ($M = 5.11$) than males ($M = .74$).

Test of corollary one: the effect of gender, pretest collective self-esteem and bias on posttest self-esteem

To test whether collective self-esteem at Time 2 could be predicted by gender, collective self-esteem at Time 1 and ingroup bias, a setwise hierarchical multiple regression procedure, analysis of partial variance (APV, Cohen & Cohen, 1983, p. 402-422) was conducted. For APV a covariate or set of covariates is entered into the regression equation in the first step of the procedure, followed by one or more sets of predictor variables. If the dependent variable is a time 2 postscore, the time 1 prescore is treated as a covariate, and is entered in step 1 of the procedure. APV can be used to predict residual change scores – change from prescore to postscore adjusted for prescore status. Thus, in this study, APV was used to predict collective self-esteem scores from Time 1 to Time 2. For this analysis, the dependent variable was CSE Time 2. Gender and CSE TIME 1 were entered as covariates in the first step of regression analysis, thereby creating the residual change scores. Ingroup bias was entered in the second step of regression. Gender was treated as dummy variable and CSE TIME 1 and ingroup bias scores were centered in the regression analysis. The Beta weights and other statistics from this regression can be seen in Table 2.

Table 2

Prediction of CSE TIME 2 as a function of gender and CSE TIME 1 and bias

| Blocks | Predictor | <i>B</i> | <i>SE</i> | β | <i>df</i> | <i>F</i> for block | <i>R</i> ² Change |
|--------|-----------|----------|-----------|---------|-----------|--------------------|------------------------------|
| 1 | Gender | -.57 | .89 | -.04 | 2,145 | 56.81** | .43 |
| | CSE TIME | .76 | .07 | .65** | | | |
| 2 | Bias | .01 | .04 | .03 | 1,144 | .16 | .001 |
| | | | | | | | |

Note: *** $p < 0.001$

As shown in Table 2, only CSE at Time 1 was a significant predictor of CSE at Time 2. Pretest collective self-esteem was positively associated with posttest collective self-esteem.

The effect of gender and pretest collective self-esteem on ingroup evaluations and outgroup evaluations

In an attempt to test Crocker et al.'s (1993) predictions that low collective self-esteem individuals should derogate the outgroup more than high collective self-esteem individuals and that high self-esteem individuals should favour the ingroup more than low self-esteem individuals another two regression analyses were conducted.

The first hierarchical multiple regression analysis was conducted to test whether ingroup evaluation could be predicted by gender and collective self-esteem. The main effects of gender and collective self-esteem were entered in the first step and the two-way interaction was entered in the second step. Gender was treated as dummy variable and the CSE TIME 1 score was centered in the regression analysis. The Beta weights and other statistics from these regressions can be seen in Table 3.

Table 3

Prediction of ingroup evaluation as a function of gender and collective self-esteem

| Blocks | Predictor | <i>B</i> | <i>SE</i> | β | <i>df</i> | <i>F</i> for Block | <i>R</i> ² Change |
|--------|------------------------|----------|-----------|---------|-----------|--------------------|------------------------------|
| 1 | Gender | -4.68 | 1.72 | -.20** | 2,146 | 15.51** | .17 |
| | CSE TIME 1 | .62 | .14 | .34*** | | | |
| 2 | Gender X CSE TIME 1 | .40 | .28 | .16 | 3,145 | 1.95 | .01 |
| | | | | | | | |

Note: ** $p < 0.01$, *** $p < 0.001$

As shown in Table 3, gender and CSE at Time 1 were significant predictors of ingroup evaluations. Females evaluated the ingroup more positively ($M = 79.87$) than males ($M = 75.19$). Pretest collective self-esteem was positively associated with ingroup evaluations.

Another hierarchical multiple regression analysis was conducted to test whether outgroup evaluation could be predicted by gender and collective self-esteem. Again, the main effects of gender and collective self-esteem were entered in the first step and the two-way interaction was entered in the second step. Gender was treated as dummy variable and the CSE TIME 1 score was centered in the regression analysis. The Beta weights and other statistics from these regressions can be seen in Table 4.

Table 4

Prediction of outgroup evaluation as a function of gender and collective self-esteem

| Blocks | Predictor | <i>B</i> | <i>SE</i> | β | <i>df</i> | <i>F</i> for Block | <i>R</i> ² Change |
|--------|------------------------|----------|-----------|---------|-----------|--------------------|------------------------------|
| 1 | Gender | 1.07 | 2.04 | .04 | | | |
| | CSE TIME 1 | .53 | .16 | .26** | | | |
| | | | | | 2,149 | 5.11** | .06 |
| 2 | Gender X CSE TIME 1 | .24 | .34 | .09 | | | |
| | | | | | 3,148 | .50 | .003 |

Note: ** $p < 0.01$

As shown in Table 4, CSE at Time 1 was the only significant predictor of bias. In line with prediction, pretest collective self-esteem was positively associated with outgroup evaluation. This means that participants with low collective self-esteem derogated the outgroup more than participants with high collective self-esteem.

Discussion

Contrary to prediction, females had higher collective self-esteem than males. In line with prediction females showed more ingroup bias than males. Contrary to corollary two, pretest collective self-esteem did not have an effect on ingroup bias when the effect of gender was accounted for. However, consistent with Crocker et al. (1993) and Verkuyten (1997), low collective self-esteem individuals derogated the outgroup more than high collective self-esteem individuals and that high self-esteem individuals favoured the ingroup more than low self-esteem individuals. Contrary to prediction and corollary one of the self-esteem hypothesis, there wasn't a positive increase in the collective self-esteem of participants who showed more ingroup bias.

The effect of gender on collective self-esteem

Contrary to prediction, females had higher collective self-esteem than males. Although men have held economic power over women for centuries, and men are represented as more prestigious in the media (Hogg & Abrams, 1988), females had higher collective self-esteem than males in this study. One possible reason for this is that the type of context that collective self-esteem was measured might have played a role. Milner (1984) argues that "in the context of British race relations, low self-esteem is not an automatic consequence of being black in a racist environment" (p.103). He further argued that whether the level of self-esteem of a low status group will be high or low depends on the specific context that it is tested and the age of the respondent. Thus, low status groups do not suffer from enduring low self-esteem but particular contexts may cause low self-esteem. Milner (1984) argues that if the self-esteem of black people is tested in inter-racial contexts in which blacks are believed to be low achievers, for example in

educational settings, then the self-esteem of black people may be lower. In this study self-esteem was tested in an educational setting where males are not considered better students than females. If self-esteem was tested in a company where males had higher status positions and had greater responsibility for the company, then females might have had lower collective self-esteem than males.

The effect of gender on ingroup bias

In line with prediction females showed more ingroup bias than males. This is not consistent with Williams (1988) and the findings of Brown and Smith's (1989) study. Brown and Smith (1989) found that women displayed intergroup discrimination in the same level with men. Brown and Smith (1989) concluded that in agentic groups there is a concern for achievement and status comparisons (cognitive kind), while in groups operating in a more communal manner there is a concern with more affective dimensions of comparisons such as friendliness and sociability. According to the findings of this study, females who are supposed to have a communal style (Williams, 1988) showed more ingroup bias on "cognitive kind" comparison dimensions (intergroup evaluation was measured with adjectives related to academic ability). Females are not stereotypically worse students than males. This means that females could show ingroup bias on comparison dimensions related to academic ability. Thus, it is not probably that females are concerned with more affective dimensions of comparisons such as friendliness and sociability but it is whether the type of intergroup evaluation can allow them to show ingroup bias. This could be further explained by Hunter et al.'s (1997) study. Hunter et al. (1997) found that males showed ingroup bias and females showed outgroup derogation. However, the measures of intergroup evaluation that were used by Hunter et al. (1997) were related to

physical ability and consequently, their findings may reflect the perception that males are superior in physical ability. The introduction of alternative evaluative dimensions, less implicated in consensual stereotypic differences, might have allowed females to make favourable intergroup comparisons. Thus, the type of intergroup evaluations seems to play an important role in determining the intergroup behaviour of group members. In this study, the measure of intergroup evaluation was related to academic ability and they are probably not consensual stereotypic gender differences related to academic ability. Males are considered better than females at some subjects and females are considered better than males at some others.

The effect of collective self-esteem on ingroup bias, ingroup evaluations and outgroup evaluations

Contrary to corollary two of the self-esteem hypothesis, pretest collective self-esteem did not have an effect on ingroup bias. However, consistent with Branscombe and Wann (1994) participants with low self-esteem derogated the outgroup more than high self-esteem participants.

Participants with high self-esteem favoured the ingroup more than participants with low self-esteem. These findings were also obtained by Verkuyten's (1997) study and support Crocker et al.'s (1993) prediction that low self-esteem individuals should derogate the outgroup more than high self-esteem individuals. This is because low self-esteem individuals are primarily concerned with their self-protection, whereas high self-esteem individuals are primarily concerned with their self-enhancement. Thus, this analysis suggests that people with high self-

esteem do not need to derogate the outgroup while people with low self-esteem cannot use a strategy of self-enhancement where the self is directly implicated such as favouring the ingroup.

The effect of ingroup bias on subsequent self-esteem

Contrary to prediction and corollary one, participants who showed more ingroup bias did not show increases in their collective self-esteem. One possible reason for this is probably the type of groups employed in this study. According to Hinkle and Brown (1990), the concept of outgroup relevance plays an important role in social identity theory. Tajfel and Turner (1979) have argued that the key to constructing positive identity resides in the group comparing itself favourably to relevant outgroups. Branscombe and Wann (1994) found that higher amounts of derogation of the threat-relevant outgroup elevated subsequent collective self-esteem. Derogation of threat-irrelevant outgroups did not have this positive esteem consequence. Thus, the type of outgroups probably plays an important role in evaluating the first corollary of the self-esteem hypothesis. Branscombe and Wann (1994) used two social groups that had a clear history of conflict (US vs. Soviet Union) in the high relevance outgroup condition, and groups which had no history of conflict (US vs. France, US vs. South Africa, US vs. China) in the low relevance outgroup condition. The two social categories employed in this study were based on gender (males vs. females). These two social categories do not have a history of conflict like Branscombe and Wann's (1994) groups.

The aim of this study was to test both corollaries of the self-esteem hypothesis and Crocker et al.'s (1993) predictions that individuals with low collective self-esteem should derogate the

outgroup more than high collective self-esteem individuals and high self-esteem individuals should favour the ingroup more than low self-esteem individuals.

Contrary to corollary two, pretest collective self-esteem did not have an effect on ingroup bias. However, participants with low self-esteem showed more outgroup derogation than participants with high self-esteem. This finding, which was also obtained by Branscombe and Wann (1994) and Verkuyten (1997), is very important in the context of social identity theory. It means that participants with low self-esteem should not be expected to use strategies of self-enhancement where the self is directly implicated. In line with prediction and Crocker et al.'s (1993) prediction, participants with high self-esteem favoured the ingroup more than participants with low self-esteem. Contrary to prediction and corollary one, participants who showed more ingroup bias did not show positive increases in their collective self-esteem. One possible reason suggested for this was that the groups used in this study, although they were real and meaningful, did not have a history of conflict like Branscombe and Wann's (1994) groups.

CHAPTER 7**Study Five: The Relationship between Collective Self-Esteem and Intergroup Behaviour
Employing Real Groups Based on Nationality**

Chapter six described a study that tested both corollaries of the self-esteem hypothesis and Crocker et al.'s (1993) predictions that low collective self-esteem individuals should derogate the outgroup more than high collective self-esteem individuals and high self-esteem individuals should favour the ingroup more than low self-esteem individuals.

Contrary to corollary two, pretest collective self-esteem did not have an effect on ingroup bias. However, consistent with Crocker et al. (1993) participants with low self-esteem showed more outgroup derogation than participants with high self-esteem and participants with high self-esteem favoured the ingroup more than participants with low self-esteem. Contrary to corollary one, there was not a significant increase in participants' collective self-esteem when they showed more ingroup bias. One possible reason suggested for this was that the groups used in study three (males vs. females), although were real and meaningful, did not have a history of conflict like Branscombe and Wann's (1994) groups. The aim of study five is to test whether the nature of the relationship between groups plays an important role in testing the self-esteem hypothesis.

Branscombe and Wann (1994) argue that the effect of outgroup derogation on subsequent self-esteem may depend on the particular outgroup that is targeted. This means that derogating an outgroup that directly represents a threat to one's social identity increases self-esteem.

Branscombe and Wann (1994) employed two social groups which had a clear history of relevant and competitive social comparison (US vs. Soviet Union) in the high threat outgroup condition, and two groups without a history of competitive social comparison (US vs. France or US vs. South Africa or US vs. China) in the low threat outgroup condition. Branscombe and Wann (1994) found that higher amounts of derogation of the threat-relevant and *not* threat-irrelevant outgroup elevated subsequent collective self-esteem.

In relation to whether the nature of outgroup plays an important role in predicting ingroup bias, Turner (1978) suggests that an important factor that should influence the degree of ingroup bias is the degree to which an outgroup is perceived as a relevant comparison (or comparable) group for the ingroup. Since ingroup bias arises from social comparisons, ingroup bias should be greater, the more comparable the outgroup is perceived to be. Festinger (1954) argues that the main criterion of comparability is similarity. He suggests that different status groups are basically non-comparable and that ingroup bias should be found in the relations between similar status groups. Furthermore, Turner (1978) has argued that an important factor affecting the comparability between the groups is the stability of status relations between the groups. When two groups perceive their relative superiority or inferiority as fixed, then their relationship is stable. On the other hand, when two groups perceive their status differences as changeable then their relationship is unstable. Turner (1978) argues that status differences between groups reduce comparability when perceived as stable, but enhance it when perceived as unstable. Thus, under some conditions, dissimilar groups will show more ingroup bias than similar groups.

Long Spears and Manstead (1993) also argued that a prerequisite for ingroup bias is that the ingroup perceives the outgroup as a competitive comparison group, so that some degree of social threat should exist between them, laying the foundations for competitive intergroup comparisons. Long et al. (1993) chose German or Swiss psychology students which had respectively a competitive or non-competitive relationship with the ingroup (Dutch psychology students). They predicted that participants with high collective self-esteem should show more ingroup bias, to the extent that the outgroup is seen as having a competitive relationship with the ingroup. They found that participants with low collective self-esteem showed more ingroup bias when the outgroup was perceived as having a competitive relationship with the ingroup. Contrary to Long et al. (1993), Branscombe and Wann (1994) found that participants with low collective self-esteem showed more ingroup bias in both conditions, when the outgroup was perceived as having a competitive relationship with the ingroup and when the outgroup did not have a competitive relationship with the ingroup.

Thus, Long et al. (1993) tested the second corollary of the self-esteem hypothesis and found that participants with low collective self-esteem showed more ingroup bias when the outgroup was perceived as having a competitive relationship with the ingroup. Branscombe and Wann (1994) tested both corollaries of self-esteem and found that higher amounts of derogation of the threat-relevant outgroup elevated subsequent collective self-esteem. In relation to corollary two, Branscombe and Wann (1994) found that participants with low collective self-esteem showed more ingroup bias in both conditions, when the outgroup was perceived as having a competitive relationship with the ingroup and when the outgroup did not have a competitive relationship with the ingroup. However Branscombe and Wann (1994) measured outgroup derogation and

not ingroup bias. Furthermore, Branscombe and Wann (1994) measured global collective self-esteem rather than specific collective self-esteem derived from the particular identity under consideration.

The aim of this study was to test both corollaries of the self-esteem hypothesis in the context of comparable groups with competitive relations and non-comparable groups with non-competitive relations. In an attempt to overcome the methodological shortcomings of previous research discussed above, specific collective self-esteem was measured before and after intergroup evaluations. The two parts of Luhtanen and Crocker's (1992) collective self-esteem scale that were also used in study three were employed. Intergroup evaluation was measured using evaluative adjectives related to academic competence. Unlike Branscombe and Wann (1994) and in line with social identity theory, ingroup bias was operationalised as the difference between mean ingroup and mean outgroup evaluation scores.

Comparability between the groups was manipulated by employing different outgroups. In the high comparability condition, the Greek students participants were told that their University was considering to increase its intake of Turkish students. Turks were employed as an outgroup in the high comparability condition because Greeks and Turks have a long history of conflict and negative intergroup attitudes. Furthermore, following Turner (1978), Turks are a comparable group for Greeks because the differences in status between them are unstable. Greece is a member of the European Union and Turkey has been trying for the last few years to also join the European Union. If Turkey becomes a member of the European Union, then the differences in status between Greeks and Turks will change. In the low comparability condition, the Greek

participants were told that the University was considering to increase its intake of American students. Americans were chosen as an outgroup in the low comparability condition, because Greeks do not have a history of competitive relations with Americans and the status differences between Greeks and Americans are stable.

An additional aim of this study was to test whether the supportive findings of Crocker et al.'s (1993) predictions, that low collective self-esteem individuals should derogate the outgroup more and high self-esteem individuals should favour the ingroup more, obtained in study four, would also be obtained in this study.

In line with Long et al. (1993), it was predicted that participants with low collective self-esteem would show more ingroup bias when the outgroup was more competitive. Following Branscombe and Wann (1994), it was predicted that higher amounts of ingroup bias would elevate subsequent collective self-esteem only in the high comparability condition.

In relation to Crocker et al.'s (1993) predictions, it was predicted that low collective self-esteem individuals should derogate the outgroup more than high collective self-esteem individuals and that high self-esteem individuals should favour the ingroup more than low self-esteem individuals.

Method

Participants

Fifty-six Greek students studying for degrees at the University of Kent at Canterbury voluntarily participated in the study, 30 were female and 26 were males. Their age ranged from 20 to 34 years and the mean was 24.5 years.

Measures

Collective self-esteem scale (Luhtanen & Crocker, 1992). The two parts of Luhtanen and Crocker's (1994) collective self-esteem scale modified to measure collective self-esteem relating specifically to nationality were employed. The first part consisted of the first two items of the membership, private, public and importance to self-concept subscales and was given before intergroup evaluations (see Appendix 8a). The second part consisted the other two items of the membership, private, public and importance to self-concept subscales and was given after intergroup evaluations (see Appendix 8b).

Intergroup evaluation scale. This consisted of eight adjectives related to academic competence. They were related to academic competence because this study was presented to participants as a survey to assess their views about university's decision to increase the number of students from other nationalities. Thus, participants were asked to express their opinions about the academic competence of students of their own nationality and students from other nationalities. The adjectives were, reliable, hardworking, unreliable, lazy, incompetent, competent, intelligent, stupid. Participants rated the ingroup (see Appendix 9a) and the outgroup

(see Appendix 9b and 9c) in a random order on each set of adjectives, using a 7-point scale (1 = not at all, 7= extremely). The negative items of the scale were reverse scored.

Ingroup Bias. A measure on ingroup bias was calculated by subtracting outgroup evaluation scores from ingroup evaluation scores.

Design

The design consisted of three independent variables and two dependent variables. The first independent variable was collective self-esteem before intergroup evaluations and will be called CSE TIME 1. The second independent variable was the type of outgroup (High competitive / Low competitive). Turkish students were chosen to be the high competitive outgroup and American students were chosen to be the low competitive outgroup for Greek students. Ingroup bias was treated as both a dependent and independent variable. To test the second corollary of the self-esteem hypothesis ingroup bias was treated as a dependent variable. To test the first corollary of the self-esteem hypothesis, ingroup bias was treated as an independent variable. Collective self-esteem after intergroup evaluations will be called CSE TIME 2 and is a dependent variable.

Procedure

Participants were given a booklet with different questionnaires to complete and were asked to answer all the questions in the order that were given to them. In the first page of the booklet,

participants were informed about the aim of the study. The study was presented as a survey², which aimed to find out students' opinions about university's decision to increase the number of overseas students. Participants were given the following information.

"British Universities are facing a funding crisis. In an attempt to increase their income, all Universities are considering increasing the participation of students from outside the UK. The University of Kent has employed the Department of Psychology to conduct a survey to assess your views and opinions about increasing participation, as well as finding out about you and your nationality. Your views will be greatly appreciated and will help the University to reach to a decision as to whether to increase the number of overseas students or not."

Participants were then asked to give information about themselves (i.e. gender, age, and nationality). In the third page of the booklet, participants were asked to complete the first part of the collective self-esteem scale. In the fourth page of the booklet, participants were given the following information.

"The University is currently considering proposals to increase its student numbers by inviting students from countries previously under-represented at Kent. It is currently in negotiation with the American / Turkish Department of Education in an attempt to bring more American / Turkish students to Kent. At the present time there are only a handful of American / Turkish students studying for degrees at the University. The proposal under discussion is to provide

² This study was conducted in the year that British Universities were facing a funding crisis and decided that students should pay registration fees.

places for 300 American / Turkish students in 1998 -1999 and to increase this number by 100 students each year until 2002. American / Turkish students are well placed to benefit from the educational facilities at Kent - during the early years of this scheme it is anticipated that the students will require additional support in adapting to the English educational system. The University expects to invest both money and staff time to support this. In addition to academic support, it is envisaged that some additional accommodation and canteen arrangements would be necessary, these can be achieved by re-arranging the present facilities. All American / Turkish students would be guaranteed special accommodation and meal arrangements for the duration of their degree".

Half of the participants were informed that the university is planning to increase the number of Turkish students and the other half were informed that the university is planning to increase the number of American students. Participants were then given the measures of intergroup evaluation. Participants, who were told that the university intends to increase the number of American students, were asked to evaluate the ingroup and American students. Participants, who were told that the university intends to increase the number of Turkish students, were asked to evaluate the ingroup and Turkish students. The order that participants were asked to evaluate the ingroup and the outgroup was random. Following the measures of intergroup evaluation, participants were asked to complete the second part of the collective self-esteem scale. At the end, participants were told that all the information given to them was false, and that this study was not a survey to assess their views about the university's decision to increase the number of overseas students. It was explained to them that the real aim of the study was to test the relationship between self-esteem and intergroup behaviour. Participants that expressed

interest about the aim of the study were given further information about social identity theory and the self-esteem hypothesis.

Results

Reliability of measures

An analysis of the internal consistency of the collective self-esteem scale at Time 1 and Time 2 revealed that they were both internally consistent. Cronbach's alpha of the collective self-esteem scale at Time 1 was 0.70 and Cronbach's alpha of the collective self-esteem scale at Time 2 was 0.69. Cronbach's alpha of the ingroup evaluation scale was 0.84 and Cronbach's alpha of the outgroup evaluation scale was .88.

Test of corollary two: the effect of type of outgroup and collective self-esteem on ingroup bias

A hierarchical multiple regression analysis was conducted to test whether ingroup bias could be predicted by the type of outgroup and collective self-esteem. The main effects of the type of outgroup and collective self-esteem were entered in the first step of regression analysis and the two-way interaction was entered in the second step. Type of outgroup was treated as dummy variable and the score on CSE at time 1 was centered in the regression analysis. The Beta weights and other statistics from these regressions can be seen in Table 1.

Table 1

Prediction of bias as a function of type of outgroup and collective self-esteem

| Blocks | Predictor | <i>B</i> | <i>SE</i> | β | <i>df</i> | <i>F</i> for Block | <i>R</i> ² Change |
|--------|-------------------------------------|----------|-----------|---------|-----------|--------------------|------------------------------|
| 1 | CSE TIME 1 | -.16 | .23 | -.09 | | | |
| | | | | | 1,54 | .46 | .009 |
| 2 | Type of Outgroup | -.06 | 2.94 | -.003 | | | |
| | | | | | 1,53 | .001 | .001 |
| 3 | CSE TIME 1 X Type of Outgroup | .12 | .49 | .05 | | | |
| | | | | | 1,52 | .06 | .001 |

As shown in Table 1, neither type of outgroup, nor collective self-esteem at Time 1 were significant predictors of ingroup bias.

Test of corollary one: the effect of type of outgroup, pretest collective self-esteem and ingroup bias on posttest collective self-esteem

To test whether collective self-esteem at Time 2 could be predicted by type of outgroup, collective self-esteem at Time 1 and ingroup bias, a setwise hierarchical multiple regression procedure, analysis of partial variance (APV) was conducted. This procedure was described in chapter six. The prescore measure, CSE at TIME 1 was entered as a covariate on the first step of regression analysis, followed by the entry of the two independent variables, type of outgroup and ingroup bias. The two-way interaction between type of outgroup and ingroup bias was entered in the third step of regression. Type of outgroup was treated as a dummy variable and scores on the continuous independent variables were centered in the regression analysis. The Beta weights and other statistics from these regressions can be seen in Table 2.

Table 2

Prediction of CSE TIME 2 as a function of CSE TIME 1, type of outgroup and bias

| Blocks | Predictor | <i>B</i> | <i>SE</i> | β | <i>df</i> | <i>F</i> for block | <i>R</i> ² Change |
|--------|---------------------------------|----------|-----------|---------|-----------|--------------------|------------------------------|
| 1 | CSE TIME | .52 | .09 | .58** | | | |
| | | | | | 1,54 | 27.65** | .34 |
| 2 | Type of Outgroup | -.96 | 1.14 | -.08 | | | |
| | Ingroup Bias | .16 | .05 | .30** | | | |
| | | | | | 2,52 | 4.67** | .10 |
| 3 | Type of Outgroup X Ingroup Bias | .09 | .10 | .12 | | | |
| | | | | | 1,51 | .73 | .008 |

Note: **p<0.01, ***p<0.001

As shown in Table 2, CSE at Time 1 and ingroup bias were significant predictors of CSE at Time 2. Pretest collective self-esteem was positively associated with posttest collective self-esteem. Ingroup bias was positively associated with collective self-esteem change from Time 1 to Time 2.

The effect of type of outgroup and pretest collective self-esteem on ingroup evaluations and outgroup evaluations

In an attempt to test Crocker et al.'s (1993) predictions that low collective self-esteem individuals should derogate the outgroup more than high collective self-esteem individuals and that high self-esteem individuals should favour the ingroup more than low self-esteem individuals another two regression analyses were conducted.

The first hierarchical multiple regression analysis was conducted to test whether ingroup evaluation could be predicted by type of outgroup and collective self-esteem. The main effects of type of outgroup and collective self-esteem were entered in the first step of regression analysis and the two-way interaction was entered in the second step. Type of outgroup was treated as dummy variable and the score on the continuous independent variable was centered in the regression analysis. The Beta weights and other statistics from these regressions can be seen in Table 3.

Table 3

Prediction of ingroup evaluation as a function of type of outgroup and collective self-esteem

| Blocks | Predictor | <i>B</i> | <i>SE</i> | β | <i>df</i> | <i>F</i> for Block | <i>R</i> ² Change |
|--------|-------------------------------------|----------|-----------|---------|-----------|--------------------|------------------------------|
| 1 | CSE TIME 1 | .36 | .15 | .30* | | | |
| | | | | | 1.54 | 5.46* | .09 |
| 2 | Type of Outgroup | -1.83 | 1.95 | -.12 | | | |
| | | | | | 1,53 | .90 | .01 |
| 3 | CSE TIME 1 X Type of Outgroup | .13 | .32 | .08 | | | |
| | | | | | 1,52 | .16 | .003 |

Note: * $p < 0.05$

As shown in Table 3, CSE at Time 1 was a significant predictor of ingroup evaluations. Pretest collective self-esteem was positively associated with posttest collective self-esteem.

Another hierarchical multiple regression analysis was conducted to test whether outgroup evaluation could be predicted by type of outgroup and collective self-esteem. Again, the main effect of collective self-esteem was entered in the first step of regression analysis, the main effect of type of outgroup was entered in the second step and the two-way interaction was

entered in the third step. Type of outgroup was treated as dummy variable and the score on the continuous independent variable was centered in the regression analysis. The Beta weights and other statistics from these regressions can be seen in Table 4.

Table 4

Prediction of outgroup evaluation as a function of collective self-esteem and type of outgroup

| Blocks | Predictor | <i>B</i> | <i>SE</i> | β | <i>df</i> | <i>F</i> for Block | <i>R</i> ² Change |
|--------|-------------------------------------|----------|-----------|---------|-----------|--------------------|------------------------------|
| 1 | CSE TIME 1 | .52 | .18 | .37** | | | |
| | | | | | 1,54 | 8.43** | .13 |
| 2 | Type of Outgroup | -1.76 | 2.24 | -.10 | | | |
| | | | | | 1,53 | .43 | .01 |
| 3 | CSE TIME 1 X Type of Outgroup | .009 | .37 | .005 | | | |
| | | | | | 1,52 | .001 | .001 |

Note: ** $p < 0.01$

As shown in Table 4, CSE at Time 1 was the only significant predictor of outgroup evaluation. In line with prediction, collective self-esteem was positively associated with outgroup

evaluations. This means that participants with low collective self-esteem derogated the outgroup more than participants with high collective self-esteem.

Discussion

The aim of the present study was to test both corollaries of the self-esteem hypothesis using groups with a history of competitive social comparison and groups without a history of competitive social comparison. It was predicted that the extent that the self-esteem hypothesis would be supported would depend on the degree of competitiveness between the groups. In line with Long et al. (1993), it was predicted that participants with low collective self-esteem would show more ingroup bias when the outgroup was more competitive. Contrary to prediction, participants with low collective self-esteem did not show more ingroup bias when the outgroup was more competitive. However, participants with low collective self-esteem derogated more the outgroup regardless of the nature of the outgroup. Following, Branscombe and Wann (1994), it was predicted that higher amounts of ingroup bias would elevate subsequent collective self-esteem only in the high competitive outgroup condition. This prediction was not supported, but higher amounts of ingroup bias elevated subsequent collective self-esteem regardless of the nature of the outgroup. Crocker et al.'s (1993) predictions were supported, low collective self-esteem individuals derogated the outgroup more than high collective self-esteem individuals and high self-esteem individuals favoured the ingroup more than low self-esteem individuals.

The effect of collective self-esteem and type of outgroup on ingroup bias

Contrary to prediction, the two-way interaction between collective self-esteem and type of outgroup was not significant. Participants with low collective self-esteem did not show more ingroup bias when the outgroup was more competitive. The main effect of type of outgroup on ingroup bias was not significant either. Greeks did not show more ingroup bias when Turks were presented as an outgroup. One possible reason for this, is that whilst it might be true that Turks form a more comparable and competitive outgroup than the Americans do at an international level, it seems possible that in the context of this study (educational context), both Turkish and American students form comparable and competitive outgroups. Thus, the context of intergroup comparisons seems to play an important role in testing the effect of the type of outgroup on ingroup bias.

Contrary to corollary two, and consistent with the findings of study four, the main effect of self-esteem on ingroup bias was not significant. Participants with low self-esteem did not show more ingroup bias. However, in line with prediction and the findings of the study four, participants with low collective self-esteem derogated the outgroup more than participants with high self-esteem. This probably means that the only discrimination strategy that people with low self-esteem can use is outgroup derogation and not ingroup bias. This is probably because people with low self-esteem believe that they do not have positive attributes. For them an evaluating situation between themselves and an outgroup is threatening and can be humiliating (Crocker et al. 1993). Thus, the only way to discriminate against an outgroup is to use a strategy where the self is not implicated in the intergroup comparisons and the only available strategy that allows this in study three and in this study is outgroup derogation. Furthermore, as discussed in chapter

two and chapter six, Crocker, Blaine and Luhtanen (1993) argue that low self-esteem people are concerned with self-protection and not self-enhancement. Crocker et al. (1993) suggest that ingroup ratings reveal enhancement motives, whereas outgroup ratings reveal protection motives. Thus, people with low self-esteem, should be more likely to derogate the outgroup rather than enhancing the ingroup.

Participants with high self-esteem favoured the ingroup more than participants with low self-esteem. This finding was also obtained by Verkuyten's (1997) study and the study four and supports Crocker et al.'s (1993) predictions that high self-esteem individuals favour the ingroup more than low self-esteem because high self-esteem individuals are primarily concerned with their self-enhancement while low self-esteem people are primarily concerned with self-protection.

The effect of collective self-esteem, type of outgroup and ingroup bias on subsequent collective self-esteem

Contrary to prediction, the two-way interaction between type of outgroup and ingroup bias on subsequent self-esteem was not significant. Higher amounts of ingroup bias did not elevate subsequent collective self-esteem in the high competitive outgroup condition. The main effect of the type of outgroup was not significant either. However, the main effect of ingroup bias on subsequent self-esteem was significant. In line with corollary one of the self-esteem hypothesis, higher amounts of ingroup bias elevated subsequent collective self-esteem.

A question rising now is why corollary one of the self-esteem hypothesis - higher amounts of ingroup bias elevate subsequent collective self-esteem - was supported in this study and not in study four? A possible reason is the groups employed in this study were perceived as more competitive and therefore ingroup bias elevated subsequent self-esteem. Another possibility is that participants in this study were told that their intergroup evaluations would have an important outcome - could influence the university's decision to increase the number of overseas students (American or Turkish) and provide special accommodation and canteen facilities for them. This was not the case in study four. Study four was simply presented as a survey aimed to test gender and individual differences in academic ability. This means that ingroup bias can enhance self-esteem only when intergroup evaluations would have a meaningful and important outcome for the participants (prevent or allow an outgroup to have access to important resources).

The *minimal position* would be that the mere division of people into groups induces ingroup favouritism because of individuals' need to establish a positively valued social identity. However, as discussed in chapter two, although the minimal group paradigm can explain ingroup bias under controlled condition, could not be used to explain phenomena in the real world where there are many other variables (e.g. sociostructural variables) involved.

Van Knippenberg (1978) argues that if competing between groups is understood as an effort to do better than other groups then the conclusion must be that division into groups induces competitive behaviours. Thus, one can argue that the introduction of an important outcome of a competition would increase the magnitude of competitive behaviours and therefore individuals'

self-esteem. This means that it is more possible that ingroup bias will increase participants' self-esteem under conditions of competition over a meaningful and important outcome rather than under conditions where the competition does not have an outcome. Thus, the nature of the relationship between collective self-esteem and intergroup behaviour needs further investigation since the generalizability of intergroup processes established in a laboratory setting to real groups is dubious. Reviews of the self-esteem hypothesis (Long & Spears, 1997; Rubin & Hewstone, 1998) have tended to focus criticism on issues relating to the measurement of self-esteem and the types of group in which it is measured. Research has not really addressed the issue of under what conditions intergroup discrimination might lead to increases in self-esteem.

CHAPTER 8**Study Six: Valence of Ingroup Bias and Increases in Self-Esteem**

To date, only Branscombe and Wann (1994) employed measures of collective self-esteem and found that intergroup discrimination increases subsequent self-esteem. However, as discussed in chapters six and seven, Branscombe and Wann (1994) employed measures of global rather than specific collective self-esteem and measured outgroup derogation and not ingroup bias. In study four, specific collective self-esteem and ingroup bias were measured. However, the findings of study four did not support corollary one of the self-esteem hypothesis; ingroup bias did not have an effect on subsequent self-esteem. The findings of study five supported corollary one of the self-esteem hypothesis; ingroup bias increased subsequent self-esteem. An important difference between study four and study five that can probably explain the different findings is that in study five, participants were told that their intergroup evaluations would have an important outcome - could influence the university's decision to increase the number of American / Turkish students and provide special accommodation and canteen facilities for them. In study four, intergroup evaluations would not have an outcome. This means that the type of context of intergroup evaluations plays an important role in testing corollary one of the self-esteem hypothesis.

Another important factor that might also play an important role in testing whether ingroup bias increases self-esteem is the form of ingroup bias. Research on the self-esteem hypothesis has not really addressed the issue of which forms of ingroup bias might lead to increases in self-esteem. Forms of ingroup bias have begun to be examined in research by Mummendey and her

colleagues (1992/1996/1998), though this work has focused on the level of bias observed rather than on the level of increase in self-esteem predicted by ingroup bias.

According to Mummendey and Otten (1998), social psychological research concerned with ingroup bias has primarily focused on group members' distribution of positive resources. There are many real life examples, however, which show people's willingness to allocate aversive stimuli to outgroup members. One example can be the wars of nations and races. To approach this issue in a more systematic way, Mummendey and Simon (1991) suggested a taxonomy of social discrimination. In a first step, they clarified the distinction between positive and negative behaviour quality or valence of behaviour involved in intergroup discrimination. They defined positive stimuli as those that an individual would like to approach, and negative stimuli as those that an individual would like to avoid. The second step was to differentiate between the two different modes of disadvantaging the outgroup in favour of the ingroup. The disadvantage might result from differential allocation or from differential removal of resources or stimuli. According to Mummendey and Otten (1998), this analysis ends up with a two-dimensional taxonomy and four types of social discrimination presented in Figure 1.

| Valence | Positive stimuli | Negative stimuli |
|------------------|---|---|
| Behaviour | | |
| Allocation | Direct discrimination Positive type IG > OG | Direct discrimination Negative type IG < OG |
| Removal | Indirect discrimination Positive type IG < OG | Indirect discrimination Negative type IG > OG |

Figure 1: Taxonomy of social discrimination (Mummendey & Simon, 1991)

If more positive or less negative stimuli are allocated to the ingroup relative to the outgroup, they call this direct discrimination in the positive or negative area; if less positive or more negative resources are taken away from the ingroup relative to the outgroup, they talk of indirect discrimination in the positive or negative area.

The majority of studies concerned with intergroup discrimination refer to the direct discrimination of the positive type (the ingroup gets more positive evaluations or resource points) than the outgroup. There is only one study that established differential removal of positive stimuli (Hewstone, Fincham & Jaspars, 1981). Results from this study, showed low scores of ingroup favouritism.

Following this taxonomy, Mummendey, Simon, Dietze, Haeger, Kessler et al. (1992) started a series of experiments which focused on the comparison of the direct discrimination of either the positive or the negative type. They wanted to test whether members of minimal groups, when distributing negative outcomes, show the same pattern of ingroup favouritism as minimal group members, who distributed positive outcomes.

Mummendey et al. (1992) conducted a minimal group experiment, where participants had to allocate varying duration of unpleasant tasks. Results indicated that participants did not show ingroup favouritism at all.

In a second experiment, Mummendey et al. (1992), implemented two factors in order to vary the participants' need for positive social identity, namely group size and group status, the idea being that minorities and low status groups should experience a greater need for positive and social identity. In this experiment, the negative stimulus was allocated to ingroup and other group and was operationalised as an unpleasant task. Groups with no need for positive social identity followed the "fairness strategy" in their allocations. Only participants in numerical minority or participants in an inferior status, showed significant ingroup bias.

On the basis of this evidence, Mummendey et al. (1992) advanced the hypothesis that there is positive-negative asymmetry in social discrimination. The idea is that the valence of stimuli in intergroup allocations determines the occurrence of social discrimination. On the whole, biases in favor of the ingroup should be weaker when located in the domain of negative resources. However, discrimination allocation of negative stimuli will occur as well, provided group

members are particularly motivated to achieve positive social identity. Thus, only under specific and more compelling circumstances do people tend to discriminate by the allocation of negative stimuli.

Otten, Mummendey and Blanz (1996) compared positive and negative outcome allocations in an identical experimental setting. They again manipulated relative group status and relative group size. In this study, for the positive area of intergroup behaviour, ingroup bias with strategies maximising ingroup profit or even maximising intergroup difference was significant. In the negative area, however, ingroup favouritism and outgroup discrimination were absent.

Otten et al. (1996) concluded that for ingroup favouritism and outgroup derogation to occur in the negative area, additional conditions are needed beyond the mere categorisation into laboratory groups. They called this: the aggravation hypothesis. According to this hypothesis, social discrimination in the negative area presupposes additional conditions which "aggravate" the achievement or maintenance of positive distinctiveness are necessary. Such variables are for example, inferior ingroup status and minority ingroup position.

According to Mummendey and Otten (1998), neither social identity theory, nor self-categorisation predicts any impact of valence on intergroup behaviour. Otten et al. (1996) argue that possible explanations for the effects of stimulus valence on intergroup outcome allocations are the three following accounts.

- 1) Normative account. According to Otten et al. (1996), there are more strict normative constraints inhibiting social discrimination in the negative domain. In everyday life there is general consensus that negative treatments should be avoided. Even if participants assign less money to outgroup members, they nevertheless give them something positive. In other words, ingroup favouritism in negative intergroup allocations may appear more antisocial than in distributions of positive stimuli.
- 2) Categorical account. Another possible explanation for the asymmetry in social discrimination could be derived from self-categorisation theory. Otten et al. (1996) argue that distributing negative resources or evaluating on negatively connotated dimensions weaken the intergroup categorisation and elicit a feeling of "common fate" for both groups. Accordingly, a higher-order categorisation as "one group of poor participants who are facing an unpleasant experiment might have arisen" (p.579). Therefore, Gaertner, Mann, Murrell, and Dovidio (1989) argue that the greater the extent to which the individuals feel like members of the same group, the lower the degree of bias.
- 3) Cognitive account. Peeters and Czapinski (1990) argue that different cognitive processes underlie decisions about positive and negative stimuli. Negative stimuli elicit more careful and systematic processing. Accordingly, evaluative judgements on negative dimensions as well as decisions about negative stimuli allocations can be expected to be less susceptible to ingroup bias under conditions which don't provide any information about objective differences to justify any differentiation between both groups on the comparison dimensions in question.

Thus, Otten and Mummendey (1998) argue that valence of resources or attributes seems to function as a moderator which is not taken into consideration in social identity theory / self-

categorization theory. According to social identity theory / self-categorisation theory, the positive distinctiveness can be created independently of the valence quality of resources to be distributed or the valence connotation of attributes to be assigned. Otten and Mummendey (1998) argue that if the striving for a positive social identity - based upon positive ingroup distinctiveness by a positive comparison outcome - is the central motive for ingroup bias, why should individuals pass up the opportunity to establish superiority on negatively framed evaluative dimensions? Otten et al. (1996) suggest that positive distinctiveness between ingroup and outgroup is not as effective in achieving positive social identity if it is realised through the allocation of negative rather than positive outcomes. In other words, people's identity is enhanced only when they establish superiority on positively framed evaluative dimensions.

Aim of this study

Reviews of the self-esteem hypothesis (Abrams & Hogg, 1988; Rubin & Hewstone, 1998) have tended to focus criticism on issues relating to the measurement of self-esteem and the types of group in which it is measured. They have not addressed the issue of positive-negative asymmetry in social discrimination when testing corollary one of the self-esteem hypothesis. According to Otten, Mummendey and Blanz (1996), positive social identity can be achieved through the allocation of positive outcomes to ingroup rather than the allocation of negative outcomes to outgroup.

Mummendey and colleagues (1992/1996/1998) used evaluations of groups on either positive or negative attributes or allocation of either money or unpleasant task and tested whether participants would show more ingroup bias in the positive or in the negative area. They found

that participants showed more ingroup bias in the positive area than in the negative area. Mummendey (1995) argues that additional conditions which "aggravate" the achievement of positive distinctiveness are necessary for ingroup bias to occur in the negative area. Otten et al. (1996) ran a study in different settings manipulating relative group size and group status and found that for ingroup bias to occur in the negative area, the ingroup had to be inferior and preferably in a minority position.

The aim of the present study is to link the positive-negative asymmetry in social discrimination to corollary one of the self-esteem hypothesis and test whether increases in self-esteem are achieved through intergroup evaluations on positive or negative attributes in the context of real groups. The type of relationship between the groups was also manipulated in this study. Otten et al. (1996) argue that besides relative group status and relative group size, the presence or absence of conflict between groups could also be analysed with respect to the aggravating effects on the positive-negative asymmetry. Thus, ingroup bias is likely to occur and enhance self-esteem even in the negative area only when groups have a history of conflict, because hostile outgroups threaten more people's identity.

The type of relationship between the groups was manipulated in this study by employing different type of outgroups. Participants were English students and this study was presented again as a survey aimed to find out students' opinions about the university's decision to increase the number of overseas students. Thus, a friendly non-European nationality for English students should be used in the "friendly outgroup condition" and an unfriendly non-European nationality should be used in the "unfriendly outgroup condition". A pilot study was conducted with

English students to find out which non-European nationalities they would like their university to recruit most. The nationality which was rated most favorably by the participants was used in the "friendly outgroup condition" and the nationality which was rated least favourably was used in the "unfriendly outgroup condition".

Collective self-esteem relating specifically to English nationality was measured before and after intergroup evaluations. The two parts of Luhtanen and Crocker's (1992) collective self-esteem scale were employed. Intergroup evaluation was measured using positive and negative evaluative adjectives related to academic competence. Ingroup bias in the positive area was operationalised as the difference between mean ingroup and outgroup evaluation on positive evaluative adjectives. Ingroup bias in the negative area was operationalised as the difference between mean ingroup and outgroup evaluation on negative evaluative adjectives.

To sum up, the aim of the present study is to test whether ingroup bias through ingroup bias on positive or negative attributes leads to changes in self-esteem in the context of real groups with friendly and unfriendly relations.

In line with Mummendey and colleagues' (1992) theory of positive-negative asymmetry in intergroup discrimination and the aggravation hypothesis, it was predicted that there would be an increase in participants' self-esteem when they showed bias on the positive evaluative adjectives in the friendly outgroup condition. In other words, participant's self-esteem was expected to increase when they showed bias in the positive area when the outgroup was

friendly. When the outgroup was unfriendly, participants' self-esteem was expected to increase when they showed bias both in the positive and negative area.

Pilot study

Method

Thirty English students in the University of Kent at Canterbury voluntarily participated in the study. Their age ranged from 18 to 32 and the mean was 21.7 years. Participants were informed that British universities attempt to increase their income and they are considering to increase the participation of non-European students. The information that was given to them is the following.

"British Universities are facing a funding crisis. In an attempt to increase their income, all universities are considering recruiting students from outside Europe. The University has to prioritise the countries in which it should concentrate its recruitment efforts. The Department of Psychology was employed by the University to conduct a survey to find out which non-European nationalities, students would desire to have recruited."

After this information, participants were asked to rate on a 7-point how positively they felt about the recruitment of six different nationalities (Americans, Australians, Canadians, Iranians, Japanese, Indians). Then, they were asked information about themselves (i.e. gender, age, and nationality). Finally, participants were informed that the information that was given to them is false and that the university did not employ the psychology department to conduct a survey to

find out which non-European nationalities, students would desire to have recruited. The aim of this study was rather to find out which nationalities are considered as more friendly and which nationalities are considered unfriendly by English students. Participants were further told that this study was part of a bigger study aimed to test the relationship between ingroup bias and self-esteem. Further information was given to participants who expressed interest for the aim of the study.

Results

The means of desirability of recruitment of the six nationalities can be seen in Table 1 below.

Table 1

Mean desirability scores for each nationality

| NATIONALITY | <i>M</i> | <i>SD</i> |
|-------------|----------|-----------|
| Americans | 5.35 | 1.66 |
| Australians | 5.70* | 1.26 |
| Canadians | 5.40 | 1.76 |
| Iranians | 4.65* | 2.06 |
| Japanese | 5.50 | 1.54 |
| Indians | 5.65 | 1.53 |

Note: Means with stars (*) indicate that they are significantly different at $p < .05$.

Paired t-tests were conducted to test whether the mean scores of desirability of each nationality were significantly different from each other. As it can be seen by the means, participants did not want to show that they favoured some nationalities over some others. This is probably because participants did not consider some national groups friendlier than others or because of self-presentation concerns. They might have thought that discriminating against some groups is not an acceptable behavior and therefore should be equally friendly towards all nationalities. However, the only means that were significantly different were the mean desirability score of Australian students and the mean desirability score of Iranian students ($t(19) = 3.05, p < .05$). Thus, the most favourable nationality for English students was Australians and the least favourable nationality was Iranians. Australians were used in the friendly outgroup condition and Iranians were used in the unfriendly outgroup condition.

Main study

Method

Participants

Fifty-eight English students in the University of Kent at Canterbury voluntarily participated in the study, 45 were females and 13 were males. Their age ranged from 17 to 46 and the mean was 24.7 years.

Measures

Collective self-esteem scale (Luhtanen & Crocker, 1992). The two parts of Luhtanen and Crocker's (1992) collective self-esteem scale, modified to measure collective self-esteem

relating specifically to English nationality, were employed. The first part consisted of the first two items of the membership, private, public and importance to self-concept subscales and was given before intergroup evaluations. The second part consisted of the other two items of the membership, private, public and importance to self-concept subscales and was given after intergroup evaluations. A sample of the first and the second part of these measures can be seen in Appendix 8a and 8b respectively.

Intergroup evaluation scale with positive evaluative adjectives. This consisted of four positive adjectives related to academic competence. They were related to academic competence because this study was presented to participants as a survey to assess their views about university's decision to increase the number of students from other nationalities. Thus, participants were asked to express their opinions about the academic competence of students of their own group and students from other nationalities. The adjectives were, reliable, hardworking, competent, intelligent. Participants rated the ingroup (see Appendix 11a) and the outgroup (see Appendix 11b and 11c) on each set of adjectives, using a 7-point scale (1 = not at all, 7= extremely) in a random order.

Intergroup evaluation scale with negative evaluative adjectives. This consisted of four negative adjectives related to academic competence. The negative adjectives were unreliable, lazy, incompetent, and stupid. Participants were asked to rate the ingroup (see Appendix 12a) and the outgroup (see Appendix 12b and 12c) on each set of adjectives, using a 7-point scale (1 = not at all, 7= extremely) in a random order. These adjectives were reverse scored.

Ingroup Bias in the positive area. Ingroup bias in the positive area was calculated by subtracting outgroup evaluation scores from ingroup evaluation scores on the positive evaluative adjectives.

Ingroup Bias in the negative area. Ingroup bias in the negative area was calculated by subtracting outgroup evaluation scores from ingroup evaluation scores on the negative evaluative adjectives.

Design

The design consisted of four independent variables and one dependent variable. The first independent variable was collective self-esteem before intergroup evaluations and will be called CSE TIME 1. The second independent variable was the type of outgroup (Friendly / Unfriendly). Australian students were used in the friendly outgroup condition and Iranian students were used in the unfriendly outgroup condition. The third independent variable was ingroup bias in the positive area and the fourth independent variable was ingroup bias in the negative area. Collective self-esteem after intergroup evaluations was the dependent variable and will be called CSE TIME 2.

Procedure

Participants were given a booklet with different questionnaires to complete and were asked to answer all the questions in the order that were given to them. In the first page of the booklet,

participants were informed about the aim of the study. The study was presented as a survey³ aimed to find out students' opinions about university's decision to increase the number of overseas students. Participants were given the following information.

"British Universities are facing a funding crisis. In an attempt to increase their income, all Universities are considering increasing the participation of students from outside the UK. The University of Kent has employed the Department of Psychology to conduct a survey to assess your views and opinions about increasing participation, as well as finding out about you and your nationality. Your views will be greatly appreciated and will help the University to reach to a decision as to whether to increase the number of overseas students or not."

Participants were then asked to give information about themselves (i.e. gender, age, and nationality). In the third page of the booklet participants were asked to complete the first part of the collective self-esteem scale. In the fourth page of the booklet, participants were given the following information.

"The University is currently considering proposals to increase its student numbers by inviting students from countries previously under-represented at Kent. It is currently in negotiation with the Australian / Iranian Department of Education in an attempt to bring more Australian/ Iranian students to Kent. At the present time there are only a handful of Australian / Iranian students studying for degrees at the University. The proposal under discussion is to provide places for

³ This study was also conducted in the year that British Universities were facing a funding crisis and decided that students should pay registration fees.

300 Australian / Iranian students in 1998 -1999 and to increase this number by 100 students each year until 2002. Australian / Iranian students are well placed to benefit from the educational facilities at Kent - during the early years of this scheme it is anticipated that the students will require additional support in adapting to the English educational system. The University expects to invest both money and staff time to support this. In addition to academic support, it is envisaged that some additional accommodation and canteen arrangements would be necessary, these can be achieved by re-arranging the present facilities. All Australian / Iranian students would be guaranteed special accommodation and meal arrangements for the duration of their degree".

Half of the participants were informed that the university is planning to increase the number of Australian students and the other half were informed that the university is planning to increase the number of Iranian students. Participants were then given the measures of intergroup evaluation with the positive and negative adjectives in a random order. Participants who were told that the university intends to increase the number of Australian students had to evaluate the ingroup and Australian students. Participants who were told that the university intends to increase the number of Iranian students had to evaluate the ingroup and Iranian students. Following the measures of intergroup evaluation, participants were asked to complete the second part of the collective self-esteem scale. At the end, participants were informed that the information given to them was false, and that this study was not a survey to assess their views about the university's decision to increase the number of overseas students. They were further explained that the real aim of the study was to test the relationship between self-esteem and intergroup behaviour.

Results

Reliability of measures

An analysis of the internal consistency of the collective self-esteem scale at Time 1 and Time 2 revealed that they were both internally consistent. Cronbach's alpha of the collective self-esteem scale at Time 1 was 0.75 and Cronbach's alpha of the collective self-esteem scale at Time 2 was 0.74. Cronbach's alpha of the ingroup evaluation scale with the positive adjectives was .80 and Cronbach's alpha of the ingroup evaluation scale with the negative adjectives was .68. Cronbach's alpha of the outgroup evaluation scale with the positive adjectives was .73 and Cronbach's alpha of outgroup evaluation scale with the negative adjectives was .72.

The effect of pretest collective self-esteem, type of outgroup and ingroup bias on the positive adjectives on posttest collective self-esteem

To test whether collective self-esteem at Time 2 could be predicted by collective self-esteem at Time 1, type of outgroup and ingroup bias on the positive adjectives, an analysis of partial variance (APV) was conducted. This procedure was described in chapter six. In APV a set of covariates is entered into the regression analysis first, followed by entry of set or sets of independent variables. The prescore measure, CSE at TIME 1 was entered as a covariate in the first step of regression analysis followed by the entry of the two independent variables, type of outgroup and ingroup bias on the positive adjectives. The two-way interaction between type of outgroup and ingroup bias on the positive adjectives was entered in the third step of regression. Type of outgroup was treated as dummy variable and scores on the continuous independent variables were centered in the regression analysis. The Beta weights and other statistics from these regressions can be seen in Table 1.

Table 1

Prediction of CSE TIME 2 as a function of CSE TIME 1, type of outgroup and ingroup bias on the positive adjectives

| Blocks | Predictor | <i>B</i> | <i>SE</i> | β | <i>df</i> | <i>F</i> for block | <i>R</i> ² Change |
|--------|--|----------|-----------|---------|-----------|--------------------|------------------------------|
| 1 | CSE TIME 1 | .68 | .07 | .79** | | | |
| | | | | | 1,56 | 93.50** | .62 |
| 2 | Type of Outgroup | -.99 | .95 | -.08 | | | |
| | Bias on the Positive Adjectives | .62 | .19 | .24** | | | |
| | | | | | 2,54 | 6.84** | .07 |
| 3 | Type of Outgroup X Bias on the Positive Adjectives | .12 | .40 | .03 | | | |
| | | | | | 1,53 | .08 | .001 |

Note: **p < 0.01, ***p < 0.001

As shown in Table 1, CSE at Time 1 and ingroup bias on the positive adjectives were significant predictors of CSE at Time 2. Pretest collective self-esteem was positively associated with posttest collective self-esteem. Ingroup bias on the positive adjectives was positively associated with collective self-esteem change from Time 1 to Time 2.

The effect of pretest collective self-esteem, type of outgroup and bias on the negative adjectives of evaluation on posttest collective self-esteem

To test whether collective self-esteem at Time 2 could be predicted by collective self-esteem at Time 1, type of outgroup and ingroup bias on the negative adjectives, an analysis of partial variance (APV) was conducted again. The prescore measure, CSE at TIME 1 was entered as covariate in the first step of regression analysis followed by the entry of the two independent variables, type of outgroup and ingroup bias on the negative adjectives. The two-way interaction between type of outgroup and ingroup bias on the negative adjectives was entered in the third step of regression. Type of outgroup was treated as dummy variable and scores on the continuous independent variables were centered in the regression analysis. The Beta weights and other statistics from these regressions can be seen in Table 2.

Table 2

Prediction of CSE TIME 2 as a function of CSE TIME 1, type of outgroup and ingroup bias on the negative adjectives

| Blocks | Predictor | <i>B</i> | <i>SE</i> | β | <i>df</i> | <i>F</i> for block | <i>R</i> ² Change |
|--------|--|----------|-----------|---------|-----------|--------------------|------------------------------|
| 1 | CSE TIME 1 | .68 | .07 | .79** | | | |
| | | | | | 1,56 | 93.50** | .62 |
| 2 | Type of Outgroup | -1.76 | 1.05 | -.14 | | | |
| | Bias on the Negative Adjectives | | | | 2,54 | 1.47 | .02 |
| 3 | Type of Outgroup X Bias on the Negative Adjectives | .10 | .38 | .03 | | | |
| | | | | | 1,53 | .07 | .001 |

Note: *** $p < 0.001$

As shown in Table 2, CSE at Time 1 was the only significant predictor of CSE at Time 2. Pretest collective self-esteem was positively associated with posttest collective self-esteem.

Discussion

The aim of the present study was to test whether increases in self-esteem are achieved through ingroup bias on the positive evaluative adjectives or on the negative evaluative adjectives in the context of real groups with friendly and unfriendly relations. It was predicted that participants' self-esteem would increase when they showed bias in the positive area only when the outgroup was friendly. A pilot study was conducted to find out which non-European nationalities are considered friendly and which nationalities are considered unfriendly by English students. The most favourable nationality for English students was Australians and the least favourable nationality was Iranians. Australians were used in the friendly outgroup condition and Iranians were used in the unfriendly outgroup condition.

In line with Mummendey and colleagues (1992/1996/1998), ingroup bias on the positive evaluative adjectives predicted a change in self-esteem from time 1 to time 2. More specifically, participants who showed more ingroup bias on the positive adjectives had an increase in their self-esteem. However, the type of outgroup and its two-way interaction with self-esteem did not predict changes in self-esteem. Contrary to prediction, participants' self-esteem did not increase when they showed ingroup bias in the positive area only when the outgroup was friendly. Participants' self-esteem increased when they showed ingroup bias in the positive area regardless of the type of outgroup.

Mummendey and colleagues (1992/1996/1998) used evaluations of groups on either positive or negative attributes or allocation of either money or unpleasant task and tested whether participants would show more ingroup bias in the positive or in the negative area. This study

linked the positive-negative asymmetry in social discrimination to the first corollary of the self-esteem hypothesis and tested whether increases in self-esteem are achieved through the allocation of positive or negative outcomes in the context of real groups. The findings of this study support Otten, Mummendey and Blanz's (1996) argument that, positive social identity can be achieved through the allocation of positive rather than negative outcomes.

Thus, valence of resources or attributes seems to function as a moderator which is not taken into consideration in social identity theory / self-categorisation theory. According to social identity theory / self-categorisation theory, positive distinctiveness can be created independently of the valence quality of resources to be distributed or the valence connotation of attributes to be assigned. However, according to the findings of Mummendey and colleagues' (1992/1996/1998) studies and this study, this is not the case. Positive self-esteem or positive social identity is achieved only through the allocation of positive rather than negative outcomes. Thus, the answer to the question, why do individuals pass up the opportunity to establish superiority on negatively framed evaluative dimensions, may be, because establishing superiority on negatively framed evaluative dimensions does not enhance self-esteem or social identity.

Otten, Mummendey and Blanz (1996) suggest that besides relative group status and relative group size, many other variables could be analysed with respect to the aggravating effects on the positive-negative asymmetry. One of these variables is the presence or absence of conflict between groups. Ingroup bias is likely to occur and enhance self-esteem in the negative area when groups have a history of conflict because hostile outgroups threaten more people's identity. On the basis of the pilot study described in this study, Australians were chosen as a

friendly outgroup and Iranians were chosen as an unfriendly outgroup for the English participants. However, the type of outgroup and its interaction with bias did not play an important role in predicting changes in self-esteem. Contrary to prediction, participants' self-esteem did not increase when they showed bias in the negative area when the outgroup was unfriendly. One possible reason for this is that negative evaluation of an outgroup is not an "acceptable" behaviour especially in the academic setting that this study was conducted and therefore ingroup bias on negative adjectives did not increase collective self-esteem even when the outgroup was considered unfriendly.

As discussed in the results section of the pilot study described in this study, participants did not want to show that they favoured more some nationalities over some others. This is probably again because negative evaluation of outgroups is not an acceptable behaviour in an academic setting, and therefore, participants wanted to show that they were equally friendly towards all nationalities. Kelly (1988) has argued that some settings such as political settings allow for more discrimination against outgroups while others such as occupational settings do not allow for discrimination. In an educational setting, fairness and not discrimination is probably the most appropriate behaviour. Another possible reason is that none of the nationalities that were presented to the student participants were particularly friendly or unfriendly to them. As a result of this, they were all rated equally.

The findings of this study throw new light on the positive-negative asymmetry and on the first corollary of the self-esteem hypothesis. Reviews of the self-esteem hypothesis (Abrams & Hogg, 1988; Rubin & Hewstone, 1998) have tended to focus criticism on issues relating to the

measurement of self-esteem and the types of group in which it is measured. However, they have not addressed the issue of which forms of intergroup discrimination might lead to increases in self-esteem. Mummendey and her colleagues' (1992/1996/1998) work on forms of discrimination has focused on the level of discrimination observed rather than their relationship with collective self-esteem. The results reported in the present study raise many questions for further research, which might throw new light on the corollary one of the self-esteem hypothesis.

CHAPTER 9

Conclusions

The aim of this thesis was to explore ways of testing social identity theory's "self-esteem hypothesis" (Abrams & Hogg, 1988). As a result of the failure to find conclusive support for either corollary of the self-esteem hypothesis, Abrams and Hogg (1988) argued that self-esteem has been over implicated in intergroup relations and have began to emphasize some of other important factors involved in intergroup behaviour. However, Hunter et al. (1996) argue that before rejecting the role of self-esteem in intergroup relations, it is important to note that there are a number of methodological shortcomings associated with the research conducted in this area. Although there are other factors that are important in the development of hostility between groups, the failure to take into consideration these methodological shortcomings was the cause of not finding consistent relations between self-esteem and intergroup relations.

The aim of this thesis was to attempt to test the self-esteem hypothesis appropriately, examining the methodological shortcomings associated with research in this area. The most important criticism of research into the self-esteem hypothesis is that the majority of studies have employed measures of self-esteem deriving from personal, rather than social identity. Social identity theory distinguishes between personal and social identity and predicts that intergroup discrimination is moderated not by personal but by collective self-esteem. Another important criticism is the distinction between global and specific collective self-esteem. Abrams and Hogg (1988) have argued for specificity of analyses applied to intergroup discrimination and suggested that the specific social identity implicated in the intergroup situation under

consideration would be a more appropriate focus for measurement of collective self-esteem. Most of the studies that have attempted to assess the relationship between self-esteem and discrimination have used the minimal group paradigm. However, theorists such as Crocker and Luhtanen (1990) who have been critical of the minimal group paradigm have found that self-esteem and intergroup discrimination may only be associated under those conditions where the relationships between groups are meaningful and contain evaluative connotations. Furthermore, the results of the minimal group paradigm could not be used to explain phenomena in the real world where there are many other variables (e.g. sociostructural variables) except psychological aspects that are involved. The classic minimal group studies employed groups of equal status. Of course, it is difficult to find groups with equal status in the real world. Another important factor contributing to the controversial findings of the studies that tested the self-esteem hypothesis is the different ways of operationalising intergroup discrimination. According to Wills' (1981) downward social comparison theory, it is the derogation of the outgroup relative to the ingroup that enhances self-esteem. Thus, individuals in need of self-enhancement should derogate outgroups relative to their ingroups to enhance themselves. However, Brewer (1979) argues that self-enhancement occurs mainly via ingroup favouritism, that is favouring the ingroup over the outgroup, rather than derogating the outgroup relative to the ingroup as Wills (1981) suggested. According to Turner (1982), social identity theory posits a need for a positive and distinctive identity that can be achieved by positive distinctiveness of one's groups in comparison with other groups. Thus, positive discrepancies between the ingroup and the outgroup provide ingroup members with positive social identity, while negative discrepancies between the ingroup and the outgroup provide ingroup members with negative social identity.

Therefore, in order to test the self-esteem hypothesis appropriately, intergroup discriminations should be operationalised as favouring the ingroup *relative* to the outgroup.

Summary of studies of this thesis

The aim of study one of this thesis was to test the second corollary of the self-esteem hypothesis taking into consideration the criticisms discussed above. It was decided to test the second corollary first since much of the recent controversy and debate concerning the self-esteem hypothesis has centered on this corollary. The groups employed in this study were created in the laboratory but had meaningful group boundaries unlike most of the studies that used the minimal group paradigm. In the real world, people are assigned into groups based on their performance on certain tasks. Within the education system, people frequently receive individual feedback which determines their membership of educational groups. Similar processes continue to operate throughout the life span in terms of job and promotion opportunities. In an attempt to make assignment into groups in this study as similar as possible to the assignment into groups in the real world, participants were randomly assigned into groups but were told that assignment was on the basis of their score on a test of reasoning styles. Ingroup bias was operationalised as the difference between mean ingroup and mean outgroup evaluation. Following social identity theory, it was predicted that status would be related to collective self-esteem, such that those in the high status group would have higher collective self-esteem than those in the low status group. Then social identity theory's prediction was tested - that the low status group and participants with low self-esteem would show more ingroup bias than the high status group and participants with high self-esteem. Predictions drawn from Crocker and Luhtanen's (1990) findings were also tested - that those high in collective self-esteem would be more likely to

enhance the ingroup by altering their evaluations of superior and average scorers as a function of status. Further predictions drawn from Crocker and Luhtanen's (1990) findings were tested - that those low in collective self-esteem would not show such self-enhancing bias. In line with prediction, collective self-esteem was affected by status. High status participants had a higher collective self-esteem score than low status participants. Both status and collective self-esteem had separate effects on ingroup bias. Group status was the most powerful predictor of ingroup bias. High status participants showed more ingroup bias in comparison to low status participants. This is consistent with the findings of Finchilescu (1986) and Sachdev and Bourhis (1987) but seems to work against the self - esteem hypothesis which would predict that low status groups have the greatest motivation to enhance their social identities and thus, should be particularly likely to manifest pronounced ingroup favouritism. An important factor that might have affected the occurrence and the degree of ingroup bias in this study is the relatedness of the ingroup bias measure to the status differentials. Thus, in study one, participants tended to reproduce the experimental status differentials since the measure of ingroup bias was related to the status differentials. High status participants confirmed their superiority while low status participants acknowledged their inferiority. The findings of this study revealed also an interesting pattern of ratings of the ingroup and outgroup as a function of self-esteem. Those who experienced high collective self-esteem and were allocated to the superior group acknowledged their group's superiority whereas those with low collective self-esteem did not acknowledge the superiority of the same group. Those who experienced high collective self-esteem and were allocated to the average group did not recognize the relative inferiority of their own group, whereas those with low collective self-esteem did. Crocker, Blaine and Luhtanen (1993) argue that people high in collective self-esteem will interpret performance feedback in a

manner that will create a positive distortion, whereas those that have low collective self-esteem will not show such a processing bias. Study one indicated that this may be the case, but may also provide evidence that those low in collective self-esteem are unable or unwilling to interpret positive feedback in a manner which enhances the ingroup. Clearly these findings are interesting in the context of social identity theory. Following the procedure of examining group ratings separately for self-esteem and status provides a much clearer picture of the processes relating to collective self-esteem and group evaluation.

The aim of study two was to test whether the relatedness of measures of evaluation to status differentials plays an important role in evaluating the second corollary of the self-esteem hypothesis. Personal self-esteem was also measured in this study. Long et al. (1993) found that participants with low collective and high personal self-esteem showed more ingroup bias. The findings from Long et al. (1993) provide support for a modified version of the second corollary of the self-esteem hypothesis and illustrate the opposing effects of personal and collective self-esteem. Study two was designed methodologically similarly to study one but ingroup bias in study two was measured using evaluative adjectives unrelated to status differentials. The aim of study two was to examine the effect of status, personal and specific collective self-esteem on ingroup bias. Participants were randomly assigned into two groups, but were told that assignment was on the basis of their score on a test of general health. Therefore, their assignment into groups was based on a characteristic with some evaluative connotations – "adaptive general health" and "unadaptive general health" like in the real world. It was expected that assignment to group with unadaptive general health would be threatening to identity and therefore should result in low specific collective self-esteem. Following social identity theory, it

was predicted that low status participants would show more ingroup bias than high status participants. In line with Long et al. (1993), it was predicted that participants with high personal self-esteem would show more ingroup bias than participants with low personal self-esteem. Participants with low collective self-esteem however, would show more ingroup bias than participants with high collective self-esteem. Further, it was expected that the two-way interaction between personal and collective self-esteem would be significant such that participants with high personal and low collective self-esteem would show most ingroup bias. Status had an effect on collective self-esteem but not on personal self-esteem. High status participants had a higher collective self-esteem score than low status participants. Status had a substantial effect on ingroup bias. Contrary to prediction, high status participants had a higher ingroup bias score than low status participants. One possible reason for finding more ingroup bias among higher status even when the measures of evaluation were not related to status differentials is that high status groups may discriminate against low status groups on equity grounds. Thus, when high status groups are asked to compare themselves with a low status group, they are likely to give answers, which reflect their self-evident superiority. In line with prediction, personal self-esteem was positively associated with ingroup bias. This is consistent with Crocker et al. (1987) and Long et al.'s (1993) findings. Contrary to prediction and Long et al.'s (1993) findings collective self-esteem was not related to ingroup bias and the two way-interaction between personal and collective self-esteem was not significant either. This was probably because collective self-esteem in study two was derived from group memberships created in the laboratory and may have been seen as less threatening compared to the more relevant and involving national categories employed by Long et al. (1993).

The aim of study three was to examine the internal and test-retest reliability of Luhtanen and Crocker's (1992) collective self-esteem scale in order to assess whether it can be used as two short measures of collective self-esteem. The majority of studies conducted to test corollary one of the self-esteem hypothesis compare the self-esteem levels of people who were or were not given the opportunity to discriminate against an outgroup. This is problematic because salience of group identity would be higher among the participants who are given the opportunity to discriminate, and this alone might elevate self-esteem. Furthermore, studies conducted to test corollary one of the self-esteem hypothesis measured self-esteem only after discrimination instead of testing self-esteem before and after discrimination. The first corollary of the self-esteem hypothesis states that successful intergroup discrimination enhances social identity and thereby elevates self-esteem. This means that in order to test this corollary appropriately, self-esteem has to be measured before and after discrimination. In a study conducted by Branscombe and Wann (1994) to test both corollaries of the self-esteem hypothesis, the two items of the private subscale of Luhtanen and Crocker's (1992) collective self-esteem scale were administered before discrimination and the other two items of the same subscale were administered after discrimination. There are two problems with Branscombe and Wann's (1994) study. The first is the small size of the subscale they used. This subscale consisted only of four items from which the first two were given before discrimination and the other two after discrimination. Employing a two-item measure of pretest and a two-item measure of posttest self-esteem can be problematic, as these short measures can be insensitive. The second problem is that Branscombe and Wann's (1994) pretest and posttest collective self-esteem measures tapped global self-esteem and not specific collective self-esteem derived from the particular identity under consideration. In an attempt to provide a measure that will enable appropriate

testing of corollary one of the self-esteem hypothesis, study three was conducted. Study three modified Luhtanen and Crocker's (1992) collective self-esteem scale to measure collective self-esteem deriving from the particular membership into consideration and then split this scale into two parts and examined whether these parts have acceptable internal and test-retest reliability. The first part consisted of the first two items of the membership, private, public and importance to self-concept subscale. The second part consisted of the other two items of the membership, private, public and importance to self-concept subscales. Both parts of the collective self-esteem scale had acceptable internal and test-retest reliability. This means that these two parts of the specific collective self-esteem scale could be used as two separate measures.

The aim of study four was to test both corollaries of the self-esteem hypothesis simultaneously using real social categories based on gender. In line with Hogg and Abrams (1990), the evidence in support of the self-esteem hypothesis is not overwhelming. Only Branscombe and Wann's study (1994) found support for both corollaries. Although Branscombe and Wann's (1994) study offered some hope in resolving conflicting empirical findings, some issues still remained unresolved. Branscombe and Wann (1994) measured global collective self-esteem (Luhtanen & Crocker, 1992) rather than measuring the social identity implicated in the intergroup situation. Furthermore, Branscombe and Wann (1994) measured outgroup derogation and not ingroup bias operationalised as the difference between mean ingroup and mean outgroup evaluation scores. An additional aim of study four was to test Crocker et al.'s (1993) predictions that low collective self-esteem individuals should derogate the outgroup more than high collective self-esteem individuals and high self-esteem individuals should favour the ingroup more than low self-esteem individuals. Collective self-esteem relating specifically to

gender was measured before and after intergroup evaluations. The two parts of Luhtanen and Crocker's (1992) collective self-esteem scale were employed. Intergroup evaluation was measured using evaluative adjectives related to academic ability. Unlike Branscombe and Wann (1994) and in line with social identity theory, ingroup bias was operationalised as the difference between mean ingroup and outgroup evaluation. Female participants were expected to have lower collective self-esteem than males. Females were also expected to show more bias than males since females are considered to have lower status and self-esteem and therefore, according to the second corollary of the self-esteem hypothesis, should show more ingroup bias. Following the second corollary of the self-esteem hypothesis, it was predicted that participants with low collective self-esteem would show more ingroup bias than participants with high collective self-esteem. In line with the first corollary of the self-esteem hypothesis, it was predicted that there would be a positive increase in the collective self-esteem of participants who showed more ingroup bias. Following Crocker et al.'s (1993) predictions, it was predicted that low self-esteem individuals should derogate the outgroup more than high self-esteem individuals and that high self-esteem individuals should favour the ingroup more than low self-esteem individuals. Contrary to prediction, females had higher collective self-esteem than males. In line with prediction females showed more ingroup bias than males. Contrary to corollary two of the self-esteem hypothesis, pretest collective self-esteem did not have an effect on ingroup bias. However, consistent with Branscombe and Wann (1994) participants with low self-esteem derogated the outgroup more than high self-esteem participants. Participants with high self-esteem favoured the ingroup more than participants with low self-esteem. These findings support Crocker et al.'s (1993) prediction that low self-esteem individuals should derogate the outgroup more than high self-esteem individuals. This is because low self-esteem

individuals are primarily concerned with their self-protection, whereas high self-esteem individuals are primarily concerned with their self-enhancement. Thus, this analysis suggests that people with high self-esteem do not need to derogate the outgroup while people with low self-esteem cannot use a strategy of self-enhancement where the self is directly implicated such as favouring the ingroup.

The aim of study five was to test both corollaries of the self-esteem hypothesis in the context of comparable groups with competitive relations and non-comparable groups with non-competitive relations. Specific collective self-esteem was measured before and after intergroup evaluations. The two parts of Luhtanen and Crocker's (1990) collective self-esteem scale were employed. Intergroup evaluation was measured using evaluative adjectives related to academic competence. Unlike Branscombe and Wann (1994) and in line with social identity theory, ingroup bias was operationalised as the difference between mean ingroup and mean outgroup evaluation scores. Comparability between the groups was manipulated by employing different outgroups. In the high comparability condition, the Greek participants were told that the University was considering to increase its intake of Turkish students. In the low comparability condition, the Greek participants were told that the University was considering to increase its intake of American students. Participants were told that their evaluations would influence University's decision to increase the number of overseas students (Turkish or American students). An additional aim of this study was to test whether the supportive findings of Crocker et al's (1993) predictions, that low collective self-esteem individuals should derogate the outgroup more and high self-esteem individuals should favour the ingroup more, obtained in study four, would also be obtained in study five. In line with Long et al. (1993), it was predicted

that participants with low collective self-esteem would show more ingroup bias when the outgroup was more competitive. Following Branscombe and Wann (1994), it was predicted that higher amounts of ingroup bias would elevate subsequent collective self-esteem only in the high competitive outgroup condition. In relation to Crocker et al.'s (1993) predictions, it was predicted that low collective self-esteem individuals should derogate the outgroup more than high collective self-esteem individuals and that high self-esteem individuals should favour the ingroup more than low self-esteem individuals. Contrary to prediction, the two-way interaction between collective self-esteem and type of outgroup was not significant. Participants with low collective self-esteem did not show more ingroup bias when the outgroup was more competitive. Contrary to corollary two, and consistent with the findings of study four, the main effect of self-esteem on ingroup bias was not significant. Participants with low self-esteem did not show more ingroup bias. However, in line with prediction and the findings of study four, participants with low collective self-esteem derogated the outgroup more than participants with high self-esteem. This is probably because people with low self-esteem believe that they do not have positive attributes. For them an evaluating situation between themselves and an outgroup is threatening and can be humiliating (Crocker et al., 1993). Thus, the only way to discriminate against an outgroup is to use a strategy where the self is not implicated in the intergroup comparisons and the only available strategy that allows this in studies three and four is outgroup derogation. Furthermore, as Crocker, Blaine and Luhtanen (1993) argue that low self-esteem people are concerned with self-protection and not self-enhancement. Participants with high self-esteem favoured the ingroup more than participants with low self-esteem. This findings supports Crocker et al.'s (1993) prediction that high self-esteem individuals favour the ingroup more than low self-esteem because high self-esteem individuals are primarily concerned with

their self-enhancement while low self-esteem people are primarily concerned with their self-protection. Contrary to prediction, the two-way interaction between type of outgroup and ingroup bias on subsequent self-esteem was not significant. Higher amounts of ingroup bias did not elevate subsequent collective self-esteem in the high competitive outgroup condition. However, the main effect of ingroup bias on subsequent self-esteem was significant. In line with corollary one of the self-esteem hypothesis, higher amounts of ingroup bias elevated subsequent collective self-esteem. A possible reason for finding that higher amounts of ingroup bias elevated subsequent collective self-esteem in study five and not in study four is probably the fact that intergroup evaluations in study five would have an important outcome - could influence university's decision to increase the number of American / Turkish students and provide special accommodation and canteen facilities for them. This was not the case in study four. Study four was simply presented as a survey aimed to test gender and individual differences in academic ability. Thus, the context of intergroup evaluations seems to play an important role in testing corollary one of the self-esteem hypothesis. Reviews of the self-esteem hypothesis (Hogg & Abrams, 1997; Rubin & Hewstone, 1998) have tended to focus criticism on issues relating to the measurement of self-esteem and the types of group in which it is measured. Research has not really addressed the issue of under which contexts of intergroup comparisons would ingroup bias lead to increases in self-esteem.

Reviews of the self-esteem hypothesis (Long & Spears, 1997; Rubin & Hewstone, 1998) did not also address the issue of positive-negative asymmetry in social discrimination when testing corollary one of the self-esteem hypothesis. According to Otten, Mummendey and Blanz (1996), positive social identity can be achieved through the allocation of positive outcomes to

ingroup rather than the allocation of negative outcomes to outgroup. Mummendey and colleagues (1992/1996/1998) found that participants showed more ingroup bias in the positive area than in the negative area. The aim of study six was to link the positive-negative asymmetry in social discrimination to corollary one of the self-esteem hypothesis and test whether increases in self-esteem are achieved through ingroup bias on positive or negative attributes in the context of real groups. The type of relationship between the groups was also manipulated in this study. Otten et al. (1996) argue that besides relative group status and relative group size, the presence or absence of conflict between groups could also be analysed with respect to the aggravating effects on the positive-negative asymmetry. Thus, ingroup bias is likely to occur and enhance self-esteem even in the negative area only when groups have a history of conflict, because hostile outgroups threaten more people's identity. The type of relationship between the groups was manipulated in this study by employing different types of outgroups. A pilot study was conducted to test which nationalities are considered as friendly and which nationalities are considered as unfriendly by English students. On the basis of the pilot study, Australians were chosen as a friendly outgroup and Iranians were chosen as unfriendly outgroup for the English students participants. Collective self-esteem relating specifically to English nationality was measured before and after intergroup evaluations employing the two parts of Luhtanen and Crocker's (1992) collective self-esteem scale. Intergroup evaluation was measured using positive and negative evaluative adjectives related to academic competence. Ingroup bias in the positive area was operationalised as the difference between mean ingroup and outgroup evaluation on positive evaluative adjectives. Ingroup bias in the negative area was operationalised as the difference between mean ingroup and outgroup evaluation on negative evaluative adjectives. In line with Mummendey and colleagues' (1992) theory of positive-

negative asymmetry in intergroup discrimination and the aggravation hypothesis, it was predicted that there would be an increase in participants' self-esteem when they showed ingroup bias on the positive attributes in the friendly outgroup condition. In other words, participant's self-esteem was expected to increase when they showed bias in the positive area when the outgroup was friendly. When the outgroup was unfriendly, participants' self-esteem was expected to increase even in the negative area. In line with Mummendey and colleagues (1992/1996/1998), ingroup bias on the positive evaluative adjectives predicted a change in self-esteem. More specifically, participants who showed more ingroup bias on the positive adjectives had an increase in their self-esteem. However, the type of outgroup and its two-way interaction with self-esteem did not predict changes in self-esteem. Participants' self-esteem increased when they showed ingroup bias in the positive area regardless of the type of outgroup. The findings of study six support Otten, Mummendey and Blanz's (1996) argument that positive social identity can be achieved through the allocation of positive rather than negative outcomes. Thus, valence of resources or attributes seems to function as a moderator which is not taken into consideration in social identity theory / self-categorisation theory. According to the findings of study six, positive self-esteem or positive social identity is achieved only through the allocation of positive rather than negative outcomes. The findings of study six raise many questions for further research, which might throw new light on corollary one of the self-esteem hypothesis.

The findings of studies described in this thesis reveal that there is support for corollary one and corollary two of the self-esteem hypothesis but only under certain conditions. These conditions are discussed below.

Findings of this thesis in relation to corollary one

In study one, there was no support for corollary two of the self-esteem hypothesis when the measures of intergroup evaluations were related to status differentials in the context of artificially created groups. When participants were told that they belonged to the high status group, higher collective self-esteem was significantly associated with ingroup bias. When participants were told that they belonged to the low status group, higher collective self-esteem was again significantly associated with ingroup bias, but examination of the ingroup and outgroup ratings revealed this was primarily attributable to the negative correlation between collective self-esteem and outgroup evaluations. This supports Brown, Collins and Schmidt's (1988) arguments that individuals may prefer to "think as well of themselves as they can get away with". Thus, they show ingroup bias by favouring the ingroup over the outgroup when this is grounded in social reality. However, when they cannot do this, they show ingroup bias in an indirect way, by derogating the outgroup. Another important finding was that these processes were shown only by those with high collective self-esteem when the measures of intergroup evaluations were related to status differentials. Thus, it was found that those who experience high collective self-esteem in the superior group acknowledge their group's superiority whereas those with low collective self-esteem did not acknowledge the superiority of the same group. Those who experience high collective self-esteem in the average group did not recognize the relative inferiority of their own group, whereas those with low collective self-esteem did. This means that either participants with low collective self-esteem show realistic patterns of ratings in the face of average performance or that those low in collective self-esteem are unable or unwilling to interpret positive feedback in a manner which enhances the ingroup. The first explanation is consistent with research showing that non-depressed people tend to show

enhancement biases for their own performance whereas depressed people tend to show realistic interpretations of performance outcomes (e.g. Alloy & Abramson, 1979). The second explanation is consistent with Brown, Collins and Schmidt's (1988) arguments that individuals prefer to "think as well of themselves as they can get away with". Thus, when what they can get away with is limited by self-perception, then they are unable or unwilling to interpret positive feedback in a manner which enhances the ingroup.

In study two, when the measures of intergroup evaluation were not related to status differentials, there was no support for corollary two either. This was probably because collective self-esteem in this study was derived from groups created in the laboratory and therefore may have been seen as less threatening or important compared to real groups. In study two, participants were assigned into groups based ostensibly on their scores in a general health test. Although, this may represent the reality of many groups and categorisations, the issue that groups were artificially created still remains.

When the second corollary of the self-esteem hypothesis was tested in the context of real groups, there was support for it when intergroup discrimination was operationalised as outgroup derogation and not as ingroup bias (favouring the ingroup over the outgroup). Participants with low self-esteem derogated the outgroup more than participants with high self-esteem and participants with high self-esteem favoured the ingroup more than participants with low self-esteem. This is probably because people with low self-esteem believe that they do not have positive attributes. Thus, the only way to enhance themselves is to use a strategy where the self is not implicated in the intergroup comparisons and one strategy that allows them to do this is

outgroup derogation. This supports Brown, Collins and Schmidt (1988) and Crocker, Blaine and Luhtanen' s (1993) prediction that both high and low self-esteem individuals are motivated to enhance themselves, but they use different enhancement strategies. Brown et al. (1988) found that people with high self-esteem tend to engage in direct forms of self-enhancement, whereas those with low self-esteem tend to self-enhance indirectly. Direct self-enhancement occurs when individuals exhibit esteem enhancing biases that explicit center around the self, whereas indirect self-enhancement occurs when individuals exhibit esteem enhancing biases that involve other members of the social world. Crocker, Blaine and Luhtanen (1993) argued that people with low self-esteem are primarily concerned with self-protection and avoiding humiliation. On the other hand people with high self-esteem are sure about themselves and are primarily concerned with self-enhancement. Crocker, Blaine and Luhtanen (1993) suggest that ingroup ratings reveal enhancement motives, whereas outgroup ratings reveal protection motives. Thus, people with high self-esteem, because are concerned with enhancing themselves or the ingroup should be more likely to rate the ingroup positively rather than derogating the outgroup. People with low self-esteem, on the other hand, because are concerned with protecting themselves or the ingroup, should be more likely to derogate the outgroup than enhancing the ingroup.

Findings of this thesis in relation to corollary one of the self-esteem hypothesis

There was support for corollary one of the self-esteem hypothesis under certain conditions. Participants' self-esteem increased following ingroup bias when they were told that their intergroup evaluations would have an important outcome - could influence the university's decision to increase the number of overseas students and provide special accommodation and

canteen facilities for them. This means that ingroup bias can enhance self-esteem only when intergroup evaluations would have a meaningful and important outcome for the group.

Van Knippenberg (1978) argues that if competing between groups is understood as an effort to do better than other groups then the conclusion must be that division into groups induces competitive behaviours. Thus, one can argue that the introduction of an important outcome of a competition would increase the magnitude of competitive behaviours and therefore individuals' self-esteem. This means that it is more possible that ingroup bias will increase participants' self-esteem under conditions of competition over an important outcome rather than under conditions where the competition does not have an outcome or it has an outcome but is not meaningful and important for the groups.

In study six, there was also support for corollary one of the self-esteem hypothesis when the measures of intergroup evaluation were positive and not negative evaluative adjectives. Participants' self-esteem increased only when they showed ingroup bias on the positive evaluative adjectives of intergroup evaluation. This finding supports Otten, Mummendey and Blanz's (1996) argument that, positive social identity can be achieved through the allocation of positive rather than negative outcomes. Thus, valence of stimuli in intergroup evaluations seems to play an important role in testing corollary of the self-esteem hypothesis.

Implications of the findings of this thesis

The self-esteem hypothesis is one the most controversial issues of social identity theory in terms of the diverse findings obtained from studies conducted in this area. The empirical evidence

remains equivocal for either corollary. The controversial findings regarding the self-esteem have lead some researchers to argue that self-esteem has been overimplicated in social identity theory's analysis and have tended to include other motivational processes in its place. It was argued in this thesis that the lack of firm empirical support for the self-esteem hypothesis may be due to misunderstandings related to design, measurement of self-esteem and type of groups. This thesis clarified and took into consideration these issues. The most important criticism of research into the self-esteem hypothesis is that the majority of studies have employed measures of self-esteem deriving from personal, rather than social identity. The studies conducted in this thesis focused on collective self-esteem and compared the effects of group behaviour on personal versus collective self-esteem. Another important criticism is the distinction between global and specific collective self-esteem. Abrams and Hogg (1988) have argued that the specific social identity implicated in the intergroup situation under would be a more appropriate focus for measurement of collective self-esteem. Collective self-esteem deriving from the specific social identity implicated in the intergroup situation, rather than global collective self-esteem relating to membership of all one's groups was measured in all the studies of this thesis. Most of the studies that have attempted to assess the relationship between self-esteem and discrimination have used the minimal group paradigm. However, theorists such as Crocker and Luhtanen (1990) who have been critical of the minimal group paradigm have found that self-esteem and intergroup discrimination may only be associated under those conditions where the relationships between groups are meaningful and contain evaluative connotations. In the real world, people are assigned into groups according to their performance on some tasks or their status. In an attempt to make assignment into groups as similar as possible to the assignment into groups in the real world, in the laboratory studies of this thesis, participants were randomly

assigned into two groups, but were told that assignment had a real and meaningful basis. Another important factor contributing to the controversial findings of the studies that tested the self-esteem hypothesis is the different ways of operationalising intergroup discrimination. According to Turner (1982), positive discrepancies between the ingroup and the outgroup provide ingroup members with positive social identity, while negative discrepancies between the ingroup and the outgroup provide ingroup members with negative social identity. In line with social identity theory, intergroup discriminations in this thesis was operationalised as favouring the ingroup relative to the outgroup.

The findings of this thesis throw new light on the self-esteem hypothesis. It seems that even when the methodological shortcomings of previous research in this area related to design and measurement of self-esteem are taken into consideration, there are additional factors that seem to play an important role in the evaluation of the self-esteem hypothesis.

In relation to corollary two, the relatedness of measures of intergroup evaluation to status differentials in contexts where groups are artificially created plays an important role. Participants reproduce the experimental status differentials if the dependent measures are strongly related to the status dimension. High status participants tend to confirm their superiority while low status participants acknowledge their inferiority. On other dimensions of evaluation, which are irrelevant to the nature of the status difference between groups, the type of groups that participants derive their self-esteem from plays an important role. There was not support for corollary two of the self-esteem hypothesis when participants derived their self-esteem from groups created in the laboratory. Groups created in the laboratory may not be seen

as important to the identity of the participants compared to real groups. When real groups are employed, a factor that plays an important role in testing corollary two of the self-esteem hypothesis is the operationalisation of intergroup discrimination. There is support for corollary two only when intergroup discrimination is operationalised as outgroup derogation and not as ingroup bias. This is probably because people with low self-esteem believe that they do not have positive attributes. Thus, the only way to enhance themselves is to use a strategy where the self is not implicated in the intergroup comparisons and one strategy that allows them to do this is outgroup derogation.

In relation to corollary one, there are two factors that play an important role. The first is the type of context of intergroup evaluations and the second is the valence of attributes of intergroup discrimination. There is support for corollary one of the self-esteem hypothesis when intergroup evaluations have a meaningful and important outcome for the groups. In study five, there was an increase in participants' self-esteem when they were told that their intergroup evaluations would determine whether an outgroup would receive or not access to important resources. There is also support for corollary one of the self-esteem hypothesis when people establish superiority on positively framed evaluative dimensions. Establishing superiority on negatively framed evaluative dimensions does not seem to enhance self-esteem. In study six, there was support for corollary one of the self-esteem hypothesis when ingroup bias was operationalised as favouring the ingroup over the outgroup only on the positive, and not on the negative, evaluative adjectives of intergroup evaluation. Thus, valence of attributes of intergroup evaluations seems to function as a moderator in the relationship between ingroup bias and self-esteem which is not taken into consideration in social identity theory / self-categorisation theory.

Suggestions for future research

Research on the self-esteem hypothesis has not really addressed the issue of which forms of ingroup bias might lead to increases in self-esteem. As discussed in chapter eight forms of ingroup bias have begun to be examined in research by Mummendey and her colleagues, though this work has focused on the level of bias observed rather than on the level of increase in self-esteem predicted by the form of ingroup bias. Mummendey and Simon (1991) suggested a taxonomy of social discrimination. In a first step, they clarified the distinction between positive and negative behaviour quality or the valence of behaviour involved in intergroup discrimination. The second step was to differentiate between the two different modes of disadvantaging the outgroup in favour of the ingroup. The disadvantage might result from differential allocation or from differential removal of resources or stimuli. This thesis examined whether the valence of behaviour played an important role in predicting increase in self-esteem. Future research could also examine whether the mode of discrimination plays an important role in predicting increase in self-esteem.

Rubin and Hewstone (1998) argue that the self-esteem hypothesis should ideally be tested in the minimal group paradigm in order to avoid the confounding effects of normative discrimination. However, research involving real groups plays an important role in providing ecological validity for social identity theory. Rubin and Hewstone (1998) argue that discrimination that occurs between two groups that have a long history of conflict is considered normative because it is prescribed by intergroup relations, and it is therefore, possible that this type of discrimination not to be linked to identity-contingent self-esteem. They also argue that the self-esteem hypothesis only applies to competitive discrimination. However, Rubin and Hewstone

(1998) also add that most cases of intergroup conflict are likely to contain both forms of discrimination (competitive and normative) and it is difficult to say 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. Rubin and Hewstone (1998) argue that future real group experiments should be designed to maximise the perception of relevant status hierarchies as being insecure and amenable to social change, thus competitive discrimination would occur alongside normative discrimination. However, the issue here is how can you distinguish normative from competitive discrimination. This is an issue for future research.

Another important issue related to the self-esteem hypothesis is that although specific measures of collective self-esteem are the appropriate measures to test the self-esteem hypothesis, sometimes, they capture constructs such as impression management. Impression management refers to conscious deceiving in test responses in order to create a favourable impression. Greenwald and Banaji (1995) discuss the possibility of implicit measures of self-esteem. Farnham, Greenwald and Banaji (1999) developed an implicit measure of personal self-esteem. They developed a computer program that allowed subjects to provide information about themselves such as first and last names, hometown and telephone number. In the first step, participants were asked to categorise words such as joy, vomit, agony, peace, death, sunrise, warmth, corpse, gold, and slime as being either pleasant or unpleasant. In the second step, participants practiced categorising words such as self, other, they, them, I, mine, it, me, their, and myself as being "me" or "not-me". Finally participants were asked to match the "me" or "not

"me" words with the pleasant or unpleasant words. Implicit self-esteem was calculated by measuring the difference in reaction times between two conditions, when participants categorised the "me" words with pleasant words and when participants categorised the "me" words with unpleasant words. This measure of self-esteem is very useful and provides a potential avenue of appropriate testing of self-esteem where impression management concerns are avoided. However, it is a measure of implicit personal self-esteem. An implicit measure of specific collective self-esteem would probably be ideal to test the self-esteem hypothesis.

Similarly, Greenwald, McGhee and Schwartz (1998) developed an IAT (Implicit Association Test) to measure intergroup attitudes in an implicit way. This test was based on the assumption that it is easier to classify together strongly associated attribute-concept pairs than weakly associated attribute-concept pairs. Ease of classifying is measured by the response times and errors in performing such categorisations. Greenwald et al. (1998) assessed Korean and Japanese subjects' attitudes towards one another. They found that both groups found it easier to associate pleasant words with names of their own group than pleasant words with names from the outgroup. The IAT found greater differences in attitudes towards Japanese and Koreans than did the explicit measures of intergroup discrimination. Employing implicit measures of ingroup bias to test the self-esteem hypothesis may be another issue for future research.

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APPENDICES

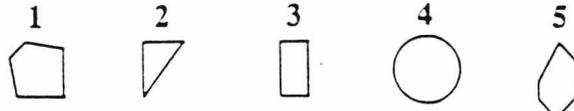
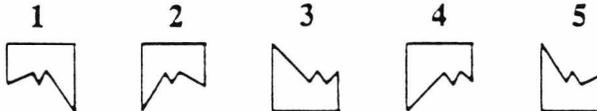
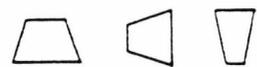
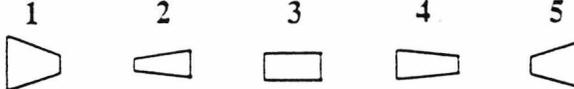
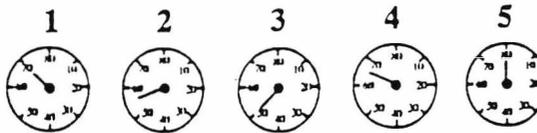
APPENDIX 1

The AH5 Group Test of General Intelligence (Heim, 1968)

REASONING STYLE TEST

| | |
|----|---|
| 1 | Which one of the five words on the right bears a similar relation to each of the two words on the left? Order. Immediate Plan. Instruct. Tidiness Direct. Command. |
| 2 | Write down the number of the word which would come in the middle, if the following words were arranged in order of magnitude: Street. Continent. Room. Country. Universe. Town. County. Planet. House. |
| 3 | <i>Overeating</i> is to <i>stomach-ache</i> as <i>negligence</i> is to . . . drunkenness accident, caution, Christmas, laxative. |
| 4 | How many members are omitted in the following series? 3, 6, 6, 12, 12, 12, . . . 48, 48, 96, 96, 96, 96, 96, 96, 96, |
| 5 | Which one of the five words on the right bears a similar relation to each of the two words on the left? General. Easygoing. Particular. Brigadier. Specific. Universal. Pedantic. |
| 6 | Add the smallest to the largest: 0·771473, 0·482976, 0·662943, 0·218527, 0·229415, 0·219134, 0·768254. |
| 7 | <i>Mountain</i> is to <i>molehill</i> as <i>valley</i> is to . . . hollow, chasm, hill, plain, mound. |
| 8 | The third member of this series is omitted. What is it? 0·1, 0·7, . . . 34·3, 240·1. |
| 9 | Which one of the five words on the right bears a similar relation to each of the two words on the left? Class. Shape. Rank. Grade. Analyse. Size. Form. |
| 10 | Here are five classes. Write down the number of the class which contains two, and two only, of the other four classes: Terriers. Mammals. "Scotties". Dogs. Canines. |
| 11 | <i>Sniff</i> is to <i>handkerchief</i> as <i>shiver</i> is to . . . blow, fire, catarrh, burn, sneeze. |
| 12 | How many members of the following series are missing? 1, 2, 5, 6, 7, 11, 12, . . . 20, 21, 22, 23. |
| 13 | Which one of the five words on the right bears a similar relation to each of the two words on the left? Stream. Tolerate. Brook. Contribute. Bear. Support. Pour. |
| 14 | Working from the left, divide the fourth whole number by the fifth fraction: 8, 6, $\frac{7}{7}$, 3, 9, $\frac{7}{9}$, $\frac{1}{8}$, 1, $\frac{17}{17}$, $\frac{4}{9}$. |
| 15 | <i>Wood-cutter</i> is to <i>timber merchant</i> as <i>farmer</i> is to . . . lumberer, goat-herd, forester, greengrocer, labourer. |
| 16 | Give the next but one member of the series: 2·7, 4·79, 6·88, 8·97, . . . |
| 17 | Which one of the five words on the right bears a similar relation to each of the two words on the left? Accept. Rise. Refuse. Assent. Fall. Ascent. Decline. |
| 18 | Write down the number of the word that would come sixth if the following words were arranged in order, with the longest period on the extreme left: Week. Year. Hour. Decade. Minute. Day. Century. Second. Month. |

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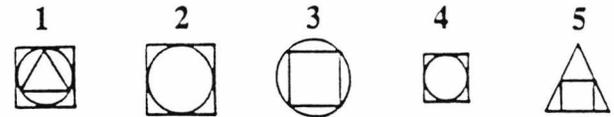
| | |
|----|---|
| 19 | <p>The figure on the left is the reflection in the mirror AB. of a clock which is 25 minutes slow. Which one of the clocks on the right shows the real time?</p>   |
| 20 | <p>The two figures on the left have a feature in common. One, and one only, of the figures on the right has this feature. Which is it?</p>   |
| 21 | <p>is to as is to</p>   |
| 22 | <p>Which one of the following comes next?</p>   |
| 23 | <p>Which one of the figures on the right can be made by joining the dots on the left?</p>   |
| 24 | <p>The two figures on the left have a feature in common. One, and one only, of the figures on the right lacks this feature. Which is it?</p>   |
| 25 | <p>is to as is to</p>   |
| 26 | <p>Which one of the following comes next but one?</p>   |
| 27 | <p>Which one of the figures on the right cannot be made by joining the dots on the left?</p>   |

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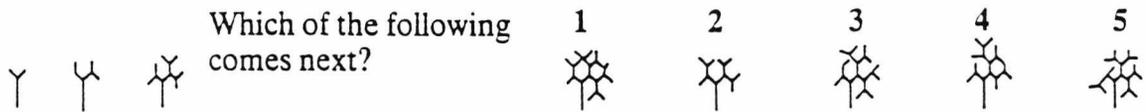
28 The two figures on the left have a feature in common. One, and one only, of the figures on the right has this feature. Which is it?



29 is to as is to



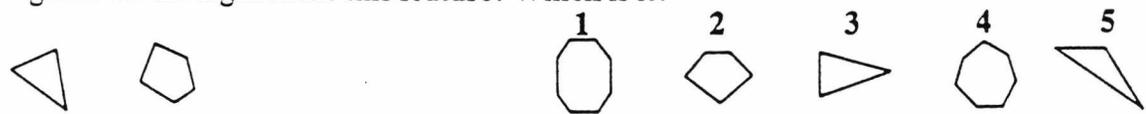
30 Which of the following comes next?



31 How many of the letters on the right can be constructed using any or all of the three figures on the left, in any position?



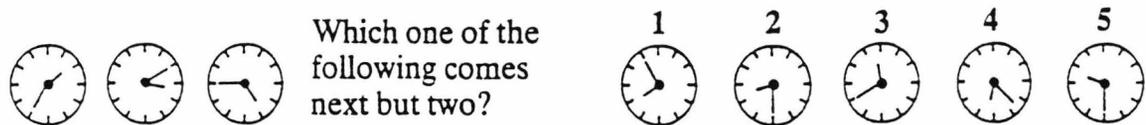
32 The two figures on the left have a feature in common. One and one only, of the figures on the right lacks this feature. Which is it?



33 is to as is to



34 Which one of the following comes next but two?



35 The clock on the left is a mirror image of a clock which is hung upside-down. It gains five minutes a day. Assuming that it was put right exactly three days ago, which of the clocks on the right shows the correct time?



36 The two figures on the left have a feature in common. One, and one only, of the figures on the right has this feature. Which is it?



APPENDIX 2

**Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) used for the
Superior Reasoning Style Group**

Instructions

We are all members of different groups of people. In our experiment you are assigned to the superior reasoning style group because you scored high on the reasoning style test. We would like you to consider your membership in this particular group and respond to the following statements on the basis of how you feel about this group and your membership in it.

There are no right or wrong answers to any of these statements. We are interested in your honest reactions and opinions. Please read each statement carefully and respond by using the following scale.

1) I am a worthy member of this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

2) I feel I don't have much to offer to this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

3) I am a cooperative participant in this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

4) I feel that I am a useless member of this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

5) I regret that I belong to this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

6) I am glad to be a member of this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

7) I feel that this group of which I am a member is not worthwhile.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

8) I feel good about this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

9) This group is considered good by others.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

10) Most people consider this group to be more ineffective than other similar groups.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

11) Others respect this group that I am a member of.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

12) Others think that the group I belong to is unworthy.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

13) My membership in this group has nothing to do with the way I feel about myself.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

14) The group that I belong to is an important reflection of who I am.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

15) The group that I belong to is unimportant to my sense of what kind of a person I am.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

16) Belonging to this group is an important part of my self image.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

APPENDIX 3a

Evaluation Scale of the Superior Reasoning Style Group

Instructions

We would like you to rate the superior reasoning style group on the 16 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | <i>Extremely</i> | | |
|-----------------|-------------------|---|---|---|------------------|---|---|
| 1) Bright | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Uncreative | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Clever | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Ineffective | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5) Slow | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6) Gifted | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) Effective | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8) Dull | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9) Creative | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10) Incompetent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11) Unable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12) Competent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13) Able | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14) Intelligent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15) Stupid | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16) Ungifted | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 3b

Evaluation Scale of the Average Reasoning Style Group

Instructions

We would like you to rate the average reasoning style group on the 16 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | <i>Extremely</i> | | |
|-----------------|-------------------|---|---|---|------------------|---|---|
| 1) Bright | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Uncreative | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Clever | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Ineffective | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5) Slow | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6) Gifted | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) Effective | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8) Dull | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9) Creative | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10) Incompetent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11) Unable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12) Competent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13) Able | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14) Intelligent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15) Stupid | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16) Ungifted | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 4

**Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) used for the
Adaptive General Health Group**

Instructions

We are all members of different groups of people. In our experiment you are assigned to the adaptive general health group because you scored high on the general health questionnaire. We would like you to consider your membership in this particular group and respond to the following statements on the basis of how you feel about this group and your membership in it.

There are no right or wrong answers to any of these statements. We are interested in your honest reactions and opinions. Please read each statement carefully and respond by using the following scale.

1) I am a worthy member of this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

2) I feel I don't have much to offer to this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

3) I am a cooperative participant in this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

4) I feel that I am a useless member of this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

5) I regret that I belong to this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

6) I am glad to be a member of this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

7) I feel that this group of which I am a member is not worthwhile.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

8) I feel good about this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

9) This group is considered good by others.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

10) Most people consider this group to be more ineffective than other similar groups.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

11) Others respect this group that I am a member of.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

12). Others think that the group I belong to is unworthy.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

13) My membership in this group has nothing to do with the way I feel about myself.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

14) The group that I belong to is an important reflection of who I am.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

15) The group that I belong to is unimportant to my sense of what kind of a person I am.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

16) Belonging to this group is an important part of my self image.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

APPENDIX 5a

Evaluation Scale of the Adaptive General Health Group

Instructions

We would like you to rate the adaptive general health group on the 8 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | <i>Extremely</i> | | |
|----------------|-------------------|---|---|---|------------------|---|---|
| 1) Stable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Pessimistic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Hostile | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Friendly | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5) Unsociable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6) Changeable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) Sociable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8) Optimistic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 5b

Evaluation Scale of the Unadaptive General Health Group

Instructions

We would like you to rate the unadaptive general health group on the 8 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | <i>Extremely</i> | | |
|----------------|-------------------|---|---|---|------------------|---|---|
| 1) Stable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Pessimistic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Hostile | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Friendly | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5) Unsociable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6) Changeable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) Sociable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8) Optimistic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 6a

**Part A of the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) used
for Females**

Instructions

We are all members of different groups. One of the groups that we belong to is related to our gender. We belong either to the group of males or females. We would like you to consider your membership to be in the group of females and respond to the following statements on the basis of how you feel about this group and your membership to it. There are no right or wrong answers to any of these statements. We are interested in your honest reactions and opinions. Please read each statement carefully and respond by using the following scale.

1) I am a worthy member of this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

2) I feel I don't have much to offer to this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

3) I regret that I belong to this group .

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

4) I am glad to be a member of this group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

5) My group is considered good by others.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

6) Most people consider my group, on the average, to be more ineffective than other groups.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

7) My membership in this group has nothing to do with the way I feel about myself.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

8) This group is an important reflection of who I am.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

APPENDIX 6b

**Part B of the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) used
for Females**

Instructions

We are all members of different groups. One of the groups that we belong to is related to our gender. We belong either to the group of males or females. We would like you to consider your membership to be in the group of females and respond to the following statements on the basis of how you feel about this group and your membership to it. There are no right or wrong answers to any of these statements. We are interested in your honest reactions and opinions. Please read each statement carefully and respond by using the following scale.

1) I like to co-operate with members of my group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

2) I feel that I am a useless member of my group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

3) I feel that this group of which I am a member is not worthwhile.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

4) I feel good about my group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

5) Others respect this group that I am a member of.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

6) Others think that this group is unworthy.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

7) This group that I belong to is unimportant to my sense of what kind of person I am.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

8) Belonging to this group is an important part of my self image.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

APPENDIX 7a

Evaluation Scale of Males

Instructions

We would like you to rate males on the 16 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | <i>Extremely</i> | | |
|-----------------|-------------------|---|---|---|------------------|---|---|
| 1) Bright | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Uncreative | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Clever | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Ineffective | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5) Slow | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6) Gifted | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) Effective | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8) Dull | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9) Creative | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10) Incompetent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11) Unable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12) Competent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13) Able | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14) Intelligent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15) Stupid | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16) Ungifted | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 7b

Evaluation Scale of Females

Instructions

We would like you to rate females on the 16 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | <i>Extremely</i> | | |
|-----------------|-------------------|---|---|---|------------------|---|---|
| 1) Bright | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Uncreative | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Clever | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Ineffective | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5) Slow | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6) Gifted | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) Effective | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8) Dull | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9) Creative | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10) Incompetent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11) Unable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12) Competent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13) Able | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14) Intelligent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15) Stupid | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16) Ungifted | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 8a

Part A of Collective Self-Esteem Scale (Luhtanen & Crocker 1992) used to measure collective self-esteem related specifically to nationality

Instructions

We are all members of different groups. One of the groups that we belong to is related to our nationality. We would like you to consider your membership into your national group and respond to the following statements on the basis of how you feel about this group and your membership to it.

There are no right or wrong answers to any of these statements. We are interested in your honest reactions and opinions. Please read each statement carefully and respond by using the following scale.

1) I am a worthy member of my national group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

2) I feel I don't have much to offer to my national group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

3) I regret that I belong to this particular national group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

4) I am glad to be a member of my national group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

5) My national group is considered good by others.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

6) Most people consider my national group, on the average, to be more ineffective than other national groups.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

7) My membership in my national group has nothing to do with the way I feel about myself.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

8) The national group that I belong to is an important reflection of who I am.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

APPENDIX 8b

Part B of Collective Self-Esteem Scale (Luhtanen & Crocker 1992) used to measure collective self-esteem related specifically to nationality

Instructions

We are all members of different groups. One of the groups that we belong to is related to our nationality. We would like you to consider your membership into the national group that you belong to and respond to the following statements on the basis of how you feel about this group and your membership to it.

There are no right or wrong answers to any of these statements. We are interested in your honest reactions and opinions. Please read each statement carefully and respond by using the following scale.

1) I like to co-operate with members of my national group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

2) I feel that I am a useless member of my national group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

3) I feel that the national group of which I am a member is not worthwhile.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

4) I feel good about my national group.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

5) Others respect this national group that I am a member of.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

6) Others think that the national group I belong to is unworthy.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

7) The national group that I belong to is unimportant to my sense of what kind of person I am.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

8) Belonging to this national group is an important part of my self image.

| | | | | | | |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| strongly disagree | disagree | disagree somewhat | neutral | agree somewhat | agree | strongly agree |
|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|

APPENDIX 9a

Evaluation scale of Greek Students

Instructions

We would like you to rate Greek students on the 8 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | <i>Extremely</i> | | |
|----------------|-------------------|---|---|---|------------------|---|---|
| 1) Reliable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Hardworking | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Unreliable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Lazy | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5) Incompetent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6) Competent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) Intelligent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8) Stupid | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 9b

Evaluation Scale of American Students

Instructions

We would like you to rate American students on the 8 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | <i>Extremely</i> | | |
|----------------|-------------------|---|---|---|------------------|---|---|
| 1) Reliable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Hardworking | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Unreliable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Lazy | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5) Incompetent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6) Competent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) Intelligent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8) Stupid | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 9c

Evaluation Scale of Turkish Students

Instructions

We would like you to rate Turkish students on the 8 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | <i>Extremely</i> | | |
|----------------|-------------------|---|---|---|------------------|---|---|
| 1) Reliable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Hardworking | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Unreliable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Lazy | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5) Incompetent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6) Competent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) Intelligent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8) Stupid | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 10a

Evaluation Scale of English Students on Positive Adjectives

Instructions

We would like you to rate English students on the 4 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | <i>Extremely</i> | | |
|----------------|-------------------|---|---|---|------------------|---|---|
| 1) Reliable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Hardworking | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Competent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Intelligent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 10b

Evaluation Scale of Australian Students on Positive Adjectives

Instructions

We would like you to rate Australian students on the 4 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | <i>Extremely</i> | | |
|----------------|-------------------|---|---|---|------------------|---|---|
| 1) Reliable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Hardworking | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Competent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Intelligent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 10c

Evaluation Scale of Iranian Students on Positive Adjectives

Instructions

We would like you to rate Iranian students on the 4 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | <i>Extremely</i> | | | |
|----------------|-------------------|---|---|------------------|---|---|---|
| 1) Reliable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Hardworking | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Competent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Intelligent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 11a

Evaluation Scale of English Students on Negative Adjectives

Instructions

We would like you to rate English students on the 4 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | <i>Extremely</i> | | | |
|----------------|-------------------|---|---|------------------|---|---|---|
| 1) Unreliable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Lazy | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Incompetent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Stupid | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 11b

Evaluation Scale of Australian Students on Negative Adjectives

Instructions

We would like you to rate Australian students on the 4 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | | | <i>Extremely</i> |
|----------------|-------------------|---|---|---|---|---|------------------|
| 1) Unreliable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Lazy | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Incompetent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Stupid | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 11c

Evaluation Scale of Iranian Students on Negative Adjectives

Instructions

We would like you to rate Iranian students on the 4 adjectives below. There are no right or wrong answers. Please read the adjectives carefully and respond using the following scale.

| | <i>Not at all</i> | | | | <i>Extremely</i> | | |
|----------------|-------------------|---|---|---|------------------|---|---|
| 1) Unreliable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) Lazy | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) Incompetent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) Stupid | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

