SOCIAL IDENTITY OR SOCIAL DOMINANCE?

by

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Abstract

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Social identity theory (SIT; Tajfel & Turner, 1979) and social dominance theory (SDT; Sidanius & Pratto, 1999) have emerged as two of the leading theories used to predict individual behavior in group settings. Under many circumstances they make similar predictions; however there seem to be certain situations (for example, individual versus intergroup threat) in which each theory makes a different prediction. This research aimed to examine that difference and provide evidence as to which theory is more accurate in predicting human behavior under those circumstances. The underlying hypothesis of this research was that because social dominance orientation (SDO) is presumably a stable personality attribute (Pratto, Sidanius, & Levin, 2006; Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius & Pratto, 1999), under varying threat conditions one's SDO should remain stable as predicted by SDT. If SIT was a better explanatory mechanism on the other hand, then SDO would be more variable under those different threat situations as SIT suggests behaviors are more situational in nature. Other outcomes were also measured (personal identity, social identity, and protectiveness of the group) to examine differences between the predictive power of each theory. Findings indicate that SDT is a better explanatory mechanism for behavior choice particularly under threat conditions when a group is considered low status. Results of this study are discussed with caveats and strengths.

Keywords: social identity, social dominance, threat, status

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Chapter I: Social Identity or Social Dominance?

There are many competing theories of how individuals behave in groups. Research in this area has grown vastly and has produced a plethora of information regarding the prediction of human behavior. In fact, the field was becoming cluttered with information, although it is consolidating (Riek, Mania, & Gaertner, 2006). This research was an empirical test of two of those theories; social identity theory (SIT; Tajfel & Turner, 1979) and social dominance theory (SDT; Sidanius & Pratto, 1999) in order to help further consolidate theory in the area of individual behavior in groups. Previous comparisons have primarily been at the theoretical level (Hewstone, Rubin, & Willis, 2002) and as a synthesis of related research (Turner & Reynolds, 2003; Pratto, Sidanius, & Levin, 2006). The proposed research intends to empirically examine a comparison of the two theories directly. Previous tests of both theories have typically been conducted by researchers who subscribe to the theory being tested and who are attempting to fill in gaps in that theory, evidence which is then used to claim the other theory is wrong (Hornsey, 2008).

In particular, this study focused on two different types of perceived threat (individual and group) that influence an individual's behavior because that is when predictions from the two theories diverge. The absence of threat was also examined as a baseline comparison. Social dominance theory has rarely been applied in work settings and only one study has been published with working adults (Van Hiel, Cornelis, & Roets, 2007), whereas social identity theory has been applied frequently in that domain (Hogg & Terry, 2001; Peeters & Oerlemans, 2009). This may be due to social identity theory being the older theory, as well as it is cognitively based (which is the one of the major trends in psychology over the last few decades), and that many oriented theories with biologically related predictions tend to be ignored in

organizations. For example, evolutionary ideas and neuroscience are not typically applied in work settings. Social dominance theory (SDT) has been applied in pseudo-work settings in the laboratory (Amiot & Bourhis, 2005; Umphress, Simmons, Boswell, & del Carmen Triana, 2008) and many other laboratory settings primarily with students (Sibley & Duckitt, 2008). This research extends the literature of SDT further into the context of work via accessing participants' recollections of actual work situations.

Research using SDT has expanded exponentially in the years following Sidanius and Pratto's (1999) book. Social dominance theory is still often ignored in favor of the well-regarded and older social identity theory (SIT), and though some claim that SDT "…needs to sort out its internal inconsistencies before it can be considered a genuine theory" (Turner & Reynolds, 2003; p. 205) there is a growing accumulation of data that provides strong supporting evidence that SDT is robust in explaining human behavior in groups (Pratto, Sidanious, & Levin, 2006; Sibley & Duckitt, 2008).

The current research grew out of Redmond's (2007) master's thesis that examined a merger of predictions made by SIT and SDT under unique circumstances. The merger suggested adding one of the predictions of social dominance theory that is slightly different from the ideas of SIT. Social dominance theory suggests that high status groups want to maintain inequality with lower status groups to preserve their status (Sidanius & Pratto, 1999). Social identity researchers have not examined whether high status groups are worried about this distinction. The assumption is that only low status groups are concerned with gaining more status. In an attempt to connect those seemingly divergent lines of research Redmond (2007) predicted that commitment to the group by low status group members (temporary workers) may actually be regarded as a threat by high status members (full-time employees). In many cases temporary workers are regarded as

low status group members looking to gain status by joining the high status group (the organization and/or permanent employment; Feldman, Doerpinghaus, & Turnley, 1994; 1995; Kalleberg, 2000), which is a process reflecting a group's permeability. Specifically, the permanent employees regard those temporary workers who seek permanent employment in the organization that they are working for as a threat because they are on the outside trying to get in. Feldman, Doerpinghaus, and Turnley (1994; 1995) for instance found through qualitative interviews that temporary workers are treated as disposable pieces in the system and are not given the access to information about the job that permanent employees have access to, even though many of the temporary workers wish to join the organization permanently. Kalleberg (2000) also found that temporary employees were treated as outsiders to the organization and were not treated as members of the group. In particular, supervisors used less relational strategies with temporary employees which prevented them from joining the in-group of the organization. The general idea was that temporary workers are on the outside trying to join the high status group, and that permanent workers view temporary workers as diminishing the group's status (i.e. changing the group's status from high to low). So even though they were a lower status group in the workforce temporary workers were thought to be perceived by permanent workers as a threat similar to the predictions made by social dominance theory (Sidanius & Pratto, 1999), which would indicate that high status groups worry about group permeability the same way that low status groups do. This was an extension of past research with group permeability that had only investigated the concerns of low status group members with regards to group permeability.

Typically, according to social identity theory (SIT), commitment to the group is regarded as a positive situation for the group as well as the individual; but social dominance theory predicts that all group members worry about the permeability of the group in order to maintain

the social hierarchy in equilibrium. So according to social dominance theory (SDT) commitment expressed by lower status group members could be regarded as dangerous to the high status group. The results of Redmond (2007) were more in line with the traditional predictions of SIT; that commitment to the group by any member is regarded as a positive action. Therefore, the merger of predictions from each theory was not supported by the results. Other interesting findings did emerge. For instance, when temporary workers (the low status group) expressed commitment to the organization, they were given the highest ratings of likability and competence as is predicted by SIT.

Based on the findings of Redmond (2007), it appeared that commitment to the high status group by any individual is rewarded as traditionally predicted by SIT. Interestingly, the committed permanent employee (high status group member) received some of the lowest ratings for both competency and likability (although the absolute scores were still positive ratings). The prediction made by Redmond (2007) that expression of commitment by low status group members would result in lower ratings of likability and competence could not be assumed to exist in the larger population. This in and of itself was an interesting finding, because it suggests that marginal members of a group who express commitment to a group are likely to be well-regarded by that group. Therefore, it is important for marginal members such as temporary workers to express commitment to the organization. However, that behavior may actually be in line with the predictions of SDT as well. SDT suggests that low status group members are likely to endorse the social hierarchy in order to help themselves move from low status to high status, and that when doing so high status group members are likely to accept them. Sidanius and Pratto (1999) point out “Uncle Tom-ing behavior of certain African-Americans towards Euro-Americans” (p.44) as well as the caste system in India as classic examples for endorsing the

social hierarchy by non-dominant groups. That possibility indicated that a further investigation comparing social identity theory and social dominance theory was in order.

A possible explanation for the unanticipated findings of Redmond (2007) is that people who belong to the high status group did not expect low status group members to be committed to the organization. Therefore when commitment is expressed, the high status group members are pleasantly surprised and rate that target individual higher because of a cognitive contrast from their expectations (Festinger, 1957; Festinger & Carlsmith, 1959).

It is also possible that high status group members are not worried about low status group members crossing the group boundary and joining the higher status group as is predicted by SIT. I.e., temporary workers were not seen as a threat by permanent employees, who in turn do not see the need to behave in an out-group derogation manner.

Recent research supports the idea "…that high group status does not necessarily lead to support for social inequality (i.e., high social dominance orientation)…" (Morrison, Fast, & Ybarra, 2009; p. 208). In that research, Morrison, Fast and Ybarra (2009) found in two studies with college students that low threat conditions (exposure to same political party and good job prospects for the university's alumni) did not predict a person's social dominance orientation (SDO) score, although high threat conditions (exposure to opposing political party and poor job prospects) did. Morrison and Ybarra's (2008) findings also support the prediction of SIT that people are responsive to their current social situation in behavior production due to the fact that students in one study who identified with their race and felt threatened scored high on social dominance orientation (SDO). That finding was also replicated with identification with one's major (Morrison & Ybarra, 2008). They admit that this possibility has not been fully examined

even though Turner and Reynolds (2003) have claimed that SDT has been demonstrated to be inaccurate in this regard.

There is also recent research that supports the idea that people do have stable reactions as predicted by social dominance theory (SDT). Cozzolino and Synder (2008) found in three separate studies that those with high social dominance orientation (SDO) scores react differently than those with low SDO scores. In one study, Cozzolino and Synder (2008) manipulated access to monetary resources. They found that those with high SDO scores had similar distributive justice scores in both the disadvantaged and advantaged groups, while those with low SDO scores had distributive justice scores that changed depending on whether they were advantaged or disadvantaged by the manipulation. In particular, distributive justice scores were lower for individuals with low SDO in the disadvantaged group compared to those with high SDO, while those with low SDO in the advantaged group scored higher on distributive justice measure compared to the high SDO individuals. Although those stable reactions can be modified by situation-specific demands as indicated by the other two studies those with high SDO scores put in extra effort on a task compared to those with low SDO scores, even in those more situationally determined cases. Thomsen, Green, and Sidanius (2008) found similar results in that those with high social dominance scores are more likely than those with low SDO scores to engage in group conformity behaviors , while Umphress, Simmons, Boswell, and del Carmen Triana (2008) found that those high in SDO consistently reported that they were less likely to select a potential team member who is a member of a low-status group (i.e., White female in one study and a Black male in another) than those low in SDO. This would argue against a merger of social identity theory and social dominance theory as it suggests that the two explain human behavior

in groups differently. As such the two should be tested directly against each other empirically and were for this research.

Chapter II: Personal versus Situational Determinants of Behavior

Before examining the specifics of social identity theory and social dominance theory the background assumptions of the proposed test need to be discussed. The underlying arguments of social identity theory and social dominance theory reflect a fundamental debate in psychology; personal/individual characteristics versus situational/environmental determinants of behavior. Many older theories in psychology assumed that it was primarily one or the other. Freud's (1913) psychoanalytic theory for instance assumed that individual personality characteristics (i.e. ego, super-ego, id) drove human behavior, while May's (1967) existential psychology left human behavior up to free will. In contrast Skinner's (1974) radical behaviorism and Darwin's (1859) theory of evolution assumed that people are products of the shaping of their environment. Skinner's theory focuses on the environment at the individual level, while Darwin's focuses on the macro level. These varying assumptions of human nature helped divide modern psychology into subfields that subscribed to one or the other (personal or situational) as the primary determinant of behavior (Robinson, 1995).

The either/or distinction is false though, and more recently theories have emerged that incorporate the various determinants of human behavior in a more holistic approach. Notably Bandura's (1986) social cognitive theory describes the interactive effects of the various determinants via what he deems reciprocal determinism, the mutual influence of behavior, personal characteristics, and the environment on each other. Bandura (1986) in particular argues against both the psychoanalytic approach and the behaviorist approach as each is one dimensional. With regard to psychodynamics and the individual determinants Bandura (1986) states:

> Theories of this sort are criticized on both conceptual and empirical grounds. The inner determinants are often inferred from the very behavior they supposedly caused, creating interpretive circularities in which description becomes the causal explanation. A hostile impulse, for example, is deduced from a person's irascible behavior, which is then attributed to the action of an underlying impulse (p.2).

With regard to behaviorism and the environmental determinants Bandura (1986) argues that:

> Radical behaviorists do not deny that inner events are linked to behavior, but they express little interest in them because they are assumed to be caused by external stimuli. Through presumption that inner events transmit but cannot create influences, internal determinants get dubbed as a redundant link in the causal chain. Behavior thus becomes fully explainable by relating external stimuli to actions without regard to the internal link. (p. 12)

Bandura's (1986) ideas sparked his development of social cognitive theory which states that depending on the situation; behavior, personal characteristics or the environment can play a lead role in determining behavior in what he referred to as triadic reciprocal causation. For instance if there is a fire in the room, that would lead the vast majority of people to flee the room. That is an example of the environment determining behavior over personal characteristics. On the other hand a person choosing a favorite television program to watch (particularly in the absence of social influence) reflects a situation where personal factors drive behavior, yet there are also situational factors as the choice is limited by what is being televised. And in all social situations, the behavior becomes part of the situation as well as becomes part of a person's

history. For instance, both the experience of running from the fire and viewing the television program become memories that will influence future conversations with other people.

Social cognitive theory has become somewhat of the gold standard for modern psychological theory with its emphasis on interactions of individual differences and situational influences in addition to the fact that it has been heavily researched and continues to be applied (Feist & Feist, 2009). However, the idea of interactionism is present in many theories of individual behavior in groups-- e.g. contingency theory (Fiedler, 1964); path-goal theory (House & Mitchell, 1974) -- two of which are of interest for this study: social identity theory and social dominance theory. Social identity theory uses interactions but focuses primarily on how situational determinants influence individual behaviors, while social dominance theory uses interactions with the primary focus of personal determinants influencing behaviors in various situations. And indeed Thomsen, Green and Sidanius (2008) argue "…that out-group prejudice and discrimination is most fruitfully seen as an interactive function of individual differences and situational constraints" (p. 1455).

Chapter III: Threat

Threat is a perceived situational phenomenon in which a person experiences anxiety that motivates behavior in a protective manner. Ellemers, Spears, and Doosje (2002) indicate in their review of the literature that threat is perceived when resources are considered scarce by an individual, but depending on the type of situation (individual or group) as well as one's commitment level to that group, threat (or absence thereof) will activate different aspects of one's identity (personal or social; these ideas will be returned to in the next chapter). Hogg and Terry (2001) add that threat is triggered by uncertainty. Steele and Aronson (1995) define one type of threat (stereotype threat) that is of interest for this research as "being at risk of confirming, as self-characteristic, a negative stereotype about one's group" (p. 797) as it is a form of personal threat.

There are two types of threat of interest for this research as each activates behavior: personal and intergroup threat. Personal threat (in a social context) would indicate that an individual perceives that his or her own resources or identity are under attack, while intergroup threat would be the same basic idea at the group level. Ellemers et al. (2002), for instance, indicate that personal threat (self-directed) can come from two sources. If an individual is not committed to a group threat occurs when they are categorized into the group, as he or she is losing personal control. If an individual is highly committed to the group, personal threat comes from fear of losing membership in the group. See section on personal threat for more detail. According to social identity theory intergroup threat involves the same basic concepts at the group level (Ellemers et al., 2002; Hewstone, Rubin, & Willis, 2002). The condition of no threat (i.e. absence of attack on resources or identity) will also be discussed as a baseline comparison for both personal and intergroup threat.

Threat is a key variable in determining what types of behavior are elicited in a given situation as it is a change situation that prompts a behavioral response. The absence of threat does not necessarily direct behavior, but allows people to choose actions which may or may not reflect aspects of a person's identity. Part of the problem in the literature is that it is often assumed that various forms of threat are the same when there actually are three basic possibilities: no threat experienced by a person, personal threat when a person perceives an attack on his or her self or personal identity, and intergroup threat in which a person perceives an attack on the group which in turn causes them to experience anxiety regarding their social identity.

No Threat

The absence of threat indicates that an individual does not perceive any aspect of the situation as negative and in immediate need of response. Social identity theory argues that under conditions of no threat people are not motivated to protect resources or identity; instead they are motivated to strive for accuracy in judgment and efficiency in decision making which makes the best use of resources, which in turn can lead to cooperative behaviors (Ellemers et al., 2002). This behavior has been labeled self- and group-affirmation depending on the situation (Derks, van Laar, & Ellemers, 2009). Nario-Redmond, Biernat, Eidelman, and Palenske (2004) indicate that under non-threatening situations, Westerners are more likely to emphasize their personal identities as more important to them compared to their social identities because Western cultures tend to be individualistic (Hofstede, 2001).

The empirical evidence supports the idea of accuracy and efficiency in decision making rather than biases that can be produced under threat conditions. A meta-analysis (Hart, Albarracín, Eagly, Brechan, Lindberg, & Merrill, 2009) concluded that people who do not have

defensive motivations (i.e. those not under threat) are much more likely to rely on accuracy motivations in seeking information for a decision. That result is in line with Ellemers et al.'s (2002) accuracy prediction.

This idea is also supported by the notion of stereotype lift/boost, which is when individuals perform better when they are reminded of a positive stereotype regarding their group membership as it removes the effects of a negative stereotype and individuals are able to focus on making accurate behavior and decision choices. Walton and Cohen (2003) found in a meta-analysis that when a negative stereotype was applied to an out-group, individuals in the in-group actually increased their performance level compared to those who were not exposed to negative stereotypes denigrating the out-group. This indicates a stereotype lift effect for in-group members. So by biasing their labeling of groups, performance was actually improved. More recently Wraga, Duncan, Jacobs, Helt, and Church (2006) found that exposure to a positive stereotype for a discriminated against group also boosts the group members performance. In particular, on a spatial orientation test in which women performed 12 percent worse than men without any stereotype message, they actually performed as well as men when a positive stereotype about women was presented (Wraga et al., 2006). As the performance threat is removed via reminder of the group's stereotypical abilities, people perform at a higher level than when a reminder of a negative stereotype is consciously absent.

This idea of no threat producing more efficient and accurate behavior choices is also demonstrated by the fact that when stereotype threat is removed via stereotype disconfirming information performance between groups levels out. For example, Carnaghi and Yzerbyt (2007) demonstrated that stereotyping by an individual stops when exposed to an audience that does not

endorse those beliefs, while McGlone and Aronson (2007) found that college women exposed to a positive self-image (reducing threat of testing situation) performed just as well as men.

However, even positive stereotypes have been demonstrated to activate intergroup behavior as they can still be perceived as threats. Czopp (2008) found that when African-Americans were praised for athletic ability by White actors, they reacted negatively (lower ratings of likability and higher ratings of prejudice) to the White actors that expressed the positive stereotype compared to both Black actors expressing the positive stereotype and White actors not expressing the stereotype. This may be because implicit in that praise is a negative comparison with other personal attributes (e.g. cognitive ability).

Personal Threat

In a social context personal threat occurs when individuals perceive that their own identities are under attack or that their own resources are being diminished, which can be triggered simply by the process of being categorized into a group (Ellemers et al., 2002; Hewstone, Rubin, & Willis, 2002). This may come from physical threat or threat to one's security, but social identity theory posits that even these types of threat are subsumed by the concept of identity. For instance, if a person was being physically assaulted, at least part of the reason that they are afraid is that they perceive that their identity is coming under fire. That person may see themselves as a less capable individual because of their inability to protect themselves. Ellemers et al. (2002) refer to this type of threat as "self-directed threat." In their discussion of self-directed threat Ellemers et al. (2002) demonstrate that stereotype threat fits into this category via the evidence that when ethnic minorities and women are reminded of their categorizations that they perform as the stereotype indicates; for example more poorly in testing situations.

Typically discussions of personal threat in the field of social psychology are envisioned as individual level correlates of group threat (Ellemers, Kortekas & Oewerkerk, 1999). In other fields that are not as concerned with how groups affect individual behaviors, the notion of personal threat has been explored further. However, the discussions rely heavily on case studies pertaining to individuals where a useful measurement tool is not readily available. Stephan and Stephan (2000) acknowledged this problem in the creation of integrated threat theory (see intergroup threat for further discussion). As such, the discussion of personal threat here is somewhat limited to the current social psychological theory and research findings that examine personal threat as a part of a social situation. This is particularly relevant to work settings as people tend to work in groups or belong to organizations, even if only on a limited basis. As the aim of this research is to examine behavior of individuals in work settings in a relatively realistic way, this is a useful concept as discussed.

Intergroup Threat

"As a general definition, intergroup threat occurs when one group's actions, beliefs, or characteristics challenge the goal attainment or well-being of another group" (Riek, Mania, & Gaertner, 2006; p. 336). While this definition implies that the threat must come from another group, it actually can come from an individual who represents a group. For example a Caucasian may see a threat from a person of another race, even though the target person may not be in a group at the time. The threat is perceived as people are often categorized as being part of a group. The research on this notion is sparse, and may eventually be one of the areas that SDT adds to science of intergroup behavior as it explains more interactions between individual level characteristics and social/group ones.

Intergroup threat has traditionally been depicted as competition for resources or status, but also occurs under conditions of social comparison (Brown, 1978; Shipley, 2008). Shipley (2008) in particular demonstrated in two field studies that when social competition was introduced in a door-to-door charity donation request, donations rose significantly. The ideas of social competition and comparison are also apparent in the notion of traditional racism when one race is depicted as genetically inferior to another and therefore is a risk to steal resources; this has been referred to as realistic threat (Sherif & Sherif, 1969; Riek et al., 2006). Propaganda posters from World War II are an example of this type of threat being used to endorse discrimination. American propaganda during the time depicted the Japanese as either old or dirty humans, and on occasion as mice or ants to dehumanize them, while Americans were depicted as strong Caucasian humans, and occasionally as lions or bears.

More recently, though, social values have changed and traditional racism has eroded and evolved into symbolic threat and racism, in which the other group's values are seen as competing and/or conflicting with one's own group's (Kinder & Sears 1981; Riek et al., 2006). The general idea remains that people of one group perceive that the other group under certain conditions will use up valuable resources (material or psychological) and that there will no longer be access to the resource. Stephan and Stephan (1996, 2000) proposed the merger of realistic and symbolic threat in what they have called integrated threat theory.

Integrated threat theory proposes that in addition to realistic and symbolic threat, intergroup anxiety and negative stereotypes motivate intergroup bias (Stephan & Stephan, 1996; 2000). Intergroup anxiety and negative stereotypes, by creating negative expectations of individuals from the other group, also create perceptions that people from other groups are out to consume

resources or take away identity without regard for members of one's own group. This in turn enhances the perceived threat (Stephan & Stephan, 1996; 2000; Riek et al., 2006).

Returning to the notion of stereotype threat, Ellemers et al. (2002) acknowledged that there are different variations of stereotype threat happening at different levels of analysis (individual and group) when others have ignored the levels of analysis problem. Riek et al. (2006) partially addressed this question and conducted a qualitative and meta-analytic review of the threat literature. They found first that intergroup threat affects out-group attitudes and secondly that while there were originally many different competing versions of threat (e.g. Sherif & Sherif's, 1969 realistic group conflict; Kinder & Sears's 1981 symbolic threat) that over time the research synthesized the field down to the notion of integrated threat theory (Stephan & Stephan, 2000). In particular Riek et al. (2006) found that the various types of underlying threat are highly related and may actually indicate either the same underlying construct or that the different types of threat combine to produce intergroup anxiety, fear, anger, and other emotions that in turn trigger intergroup behaviors and out-group attitudes.

Chapter IV: Social Identity Theory

Identity has been an evolving and problematic construct to define since the days of William James (1890; Cheek, Smith, & Tropp, 2002; Weigert, Teitge & Teitge, 1986). In part this has been due to the nature of the concept of identity: it describes what makes us human so implicitly that psychologists and the general public have embraced it with little argument (Weigert et al., 1986). Nevertheless, many theorists and researchers have tackled the concept, which has resulted in many different perspectives on what comprises identity. Some of the most commonly accepted ones (and the ones of interest for this research) are personal and social.

Personal Identity

The term identity implies a construct that gives the self a meaning or purpose. Weigert et al. (1986) gave another brief definition: "identity is a definition that transforms a mere biological individual into a human person" (p. 31). To explicate further, identity is how people define themselves, via many different expressions such as autobiographical memories, which would be indicators of personal identity, or identification with groups, which would be indicators of social identity. First a brief discussion of personal identity is necessary before returning to the main concept of social identity.

Mayer, Greenbaum, Kuenzi, and Shteynberg (2009) state "…personal identity consists of moral sensibility and conscience, and also a desire for achievement, mastery, and competence" (p. 145). Personal identity is the combination of objective biosocial markers such as age, race, sex, and so on, and the personal life history of the individual (Brewer & Gardner, 1996; Weigert et al., 1986). These factors are often considered part of social identity as well, because they place the individual in a group. That being said, they involve attributes of individuals (even if they are shared within groups characterized by values of those markers), so the biosocial markers also

create a personal identity. Within the realm of social identity theory, the aspects of personal identity have not been as widely discussed as the aspects of social identity. However, personal identity refers to those aspects of the self that are unique to the individual and which are used to define the individual (Brewer & Gardner, 1996).

Social Identity

Social identity is also theorized as one of several types of identity a person possesses (Cheek, Smith, & Tropp, 2002; Ellemers et al., 2002; Weigert et al., 1986). The most widely accepted definition of social identity comes from Tajfel (1981): "that part of an individual's self-concept which derives from his [sic] knowledge of his membership in a social group (or groups) together with the value and emotional significance attached with that membership" (p. 255). According to Tajfel, social idenity has three components. First is the belief of belonging to a group (referred to in the literature as self-categorization); second, membership in the group must be of importance to one's self-concept (usually referred to as group self-esteem); and lastly that the individual must be committed to the group. Therefore, Tajfel (1981) theorizes that it is not enough to belong to an organization, but a person needs to feel connected to the group, and some sort of social-esteem must also be derived from that membership.

Social and personal identity are not completely separable, but overlap and interact with one another very closely to guide a person's perceptions, attitudes and behaviors as well as form a general identity. However, there is convincing evidence that under certain conditions, such as various types of group membership and threat conditions, one or the other of the major components of identity is likely to emerge as the primary determinant of behavior (Ellemers et al., 2002; Nario-Redmond, Biernat, Eidelman, & Palenske, 2004). For example, it has been demonstrated that under threat to a high status group, the behavior of a member of that group is

likely to be determined by his or her social identity (Haslam, O'Brien, & Jetten, 2008; Vormedal & Penna, 2005). For instance, Haslam, O'Brien, and Jetten (2008) found in two studies:

> …there was a strong positive correlation between social identification and both social support and life/job satisfaction and a strong negative correlation between social identification and stress. In both studies path analysis also indicated that social support was a significant mediator of the relationship between (a) social identification and stress and (b) social identification and life/job satisfaction. (p. 355)

In contrast, while under personal threat the same person's personal identity is likely to emerge as the primary determinant of behavior (Ellemers et al., 2002; Nario-Redmond et al., 2004). The evidence surrounding behavior with no threat is not as clear because those types of situations are more ambiguous, so any of the types of identity might emerge depending on the person's primary sense of identity although the most common is personal (Ellemers et al., 2002; Nario-Redmond et al., 2004). It should be noted that the vast majority of research was conducted primarily with individuals from Western countries where individualism is a primary cultural factor (Hofstede, 2001; Nario-Redmond et al., 2004). To keep the conditions consistent for this exploratory research, the focus included responses to no threat as well as personal and group threat from people living in Western culture.

Group self-esteem and group status. Social identity theory explains a person's behavior in a group using that person's status within the group as a social comparison. Every group has a certain amount of social status attached to its membership. Recently, Morton, Postmes, Haslam, and Hornsey (2009) demonstrated this by showing that men are more likely than women to justify their higher place in society via essentialism, the belief that there are stable immutable

reasons for the way that things are (e.g. genes, bloodlines, deity influence). Tajfel and Turner's classic studies (1979, 1986) also indicated group status as a comparison by showing that those in the winning group of a mundane task had different reactions (i.e. engaged in intergroup discrimination) than those in losing groups. Group status provides value for the individual who is a member of that particular group. Individual group members use the status from their membership in the group to gain and maintain self-esteem (Derks, van Laar, & Ellemers, 2009; Morton, Postmes, Haslam, & Hornsey (2009). Derks, van Laar, and Ellemers (2009) for example demonstrated that group affirmation (increasing group esteem) elicited high performance motivation among highly identified group members by creating challenge and protected interest in group-serving behaviors that improve collective status. By contrast, lowly identified group members were challenged and motivated to perform well only after self-affirmation (increasing self-esteem) and reported an even stronger inclination to work for themselves at the expense of the group when offered group affirmation.

Status provides self-esteem for group members because it fulfills the need for a positive social identity (Hogg, 1992; Hogg & Abrams, 1988; 1990; 1993). The motivations to enhance self-esteem and gain status cause individuals to behave in ways that maintain the group and their memberships in the group (Derks, van Laar, & Ellemers, 2009; Hogg & Abrams, 1990; Morton, Postmes, Haslam, & Hornsey, 2009). The better one's own group looks in comparison to other groups, the more status the group gains, and the more self-esteem it can provide for its members (Morton, Postmes, Haslam, & Hornsey, 2009; Tajfel & Turner, 1979, 1986).

Self-esteem is not necessarily the mechanism by which a positive social identity is achieved. Status itself can also be enough to trigger a positive social identity. Wann (2006) indicates that status alone can trigger a positive social identity by the social connections resulting

from team identification, which are expected to impact both state (via increases in temporary social connections) and trait well-being (via enduring connections). In this case, individuals seek to join a high status group to improve their own social identity in general rather than to improve their self-esteem per se (Bettencourt, Dorr, Charlton, & Hume, 2001; Wann, 2006). In either case the end goal is a positive social identity for the individual from which the person gains benefits for themselves (such as self-esteem, higher status, and possibly power or wealth) through self-identification with the high status group. The benefits of social identity have recently been demonstrated by Peeters and Oerlemans (2009) who found that in two different organizations those with strong social identifications with their organization had greater feelings of well-being than those with weaker social identification with the group.

Social identity was the primary focus of this study, but personal identity was also measured to help test the predictions made by social dominance theory (SDT) in contrast to social identity theory (SIT). Personal identity was examined in this study to help demonstrate the divergence of SIT and SDT, not as a primary focus.

Self-categorization. Self-categorization is the process of describing oneself. A person may categorize him or herself as an individual or as a member of a group. Self-categorization theory is the idea is that prior to people's social identity being activated, they must first believe that they belong to a group (Hewstone et al., 2002; Turner, 1985). Hewstone et al. (2002) acknowledge that this is not an alternative to SIT, but rather a precursor to the processes of identity emergence. Ellemers et al. (2002) include it as part of their taxonomy of behaviors associated with commitment to the group and various type of threat.

Commitment to the group. Commitment to the group is an attitude that describes how obligated or bound to the group an individual perceives him or herself. One example of this topic

is the line of research on organizational commitment. The strength of one's organizational commitment has been demonstrated to influence not only individual behavior but have an impact on the group's performance as well (Katzenbach, 2000). In particular, committed employees are more productive and other-oriented (Callahan, 1998). Individuals and teams with high organizational commitment have higher morale, lower turnover, increased job satisfaction, and increased productivity (Cohen, 2003; Meyer & Allen, 1997; Mowday, Porter, & Steers, 1982).

Intergroup Bias

Intergroup bias as proposed by social identity theory (SIT) is situation specific. However, every situation is a perception; therefore a person may see the mere existence of the target group as a threat. These perceptions will be determined by the strength of the perceived threat as well as the commitment to the in-group (Redmond, 2007). Specific perceived threats are posited to motivate intergroup bias, which can take the form of in-group favoritism or out-group derogation, both of which are behavioral expressions of one's social identity. This is one of the major differences with social dominance theory (SDT) which states that people are predisposed to be prejudiced (or not) in general. Social identity theory indicates that when not under threat, individuals in groups do not engage in intergroup bias because there is no need to protect the group or one's social identity created by membership to that group (Ellemers et al. 2002; Hogg & Abrams, 1990). Under these conditions, there is no resource competition, threat of assimilation, or other threats to provoke intergroup bias, so people tend to rely on their personal identities (Ellemers et al., 2002; Hogg & Abrams, 1990; Nario-Redmond et al., 2004). However, when there is threat, intergroup bias becomes a possible response (Ellemers et al., 2002). According to SIT motivation for intergroup bias occurs only in threat conditions, such as those created by social change situations, for example social competition (Tajfel & Turner, 1979;

Shipley, 2008) or even just social comparison (Brown, 1978; Shipley, 2008). Situations in which there is some ambiguity might be interpreted as threatening. This idea will be returned to when SDT is discussed (see Chapter V) as SDT diverges from SIT at this point, stating that individuals are motivated to protect the group even in the absence of threat, as behavior is primarily dispositional (i.e. beliefs/values) as opposed to situationally driven.

There are two primary behavioral expressions of social identity that appear because of threat: in-group favoritism and out-group derogation. In-group favoritism may be expressed by giving preferential treatment to members of one's own group, while out-group derogation may be reflected in attempts to make people who are not part of the group look bad. Both serve the purpose of enhancing the status of the in-group so that its members derive self-esteem from being a member (Hogg, 1992; Hogg & Abrams, 1988; 1990; 1993; Hogg & Terry, 2001). In a work setting, in-group favoritism may take the form of enhanced ratings of performance or effort of in-group members compared to out-group members as was found in Tajfel and Turner's original studies. Similarly, some research shows Whites giving lower ratings of performance and likability to equally qualified Blacks when not under direct threat, but when they perceive threat from an outside group member (i.e. a Black job applicant; Heilman, Block, & Stathatos, 1997; Heilman, Kaplow, Amato, & Stathatos, 1993). While there may not be a real difference in performance, in-group members get rated higher than out-group members to help give the in-group status. By giving in-group members better evaluations the group image is enhanced, and therefore, the individual members' self-esteem is also enhanced (Brown, 1978; Derks, van Laar, & Ellemers, 2009; Morton, Postmes, Haslam, & Hornsey, 2009; Tajfel & Turner, 1979, 1986).

Out-group derogation consists of perceiving and reacting to people who are not a part of the group as incompetent and unlikable or denigrating them in some other way. One way of

doing that might be by giving them low ratings of performance. This also improves the in-group's self-image because other groups are used as a social comparison (Brown, 1978; Fein & Spencer, 1997). Fein and Spencer (1997) in particular pointed out:

> … that when individuals evaluated a member of a stereotyped group, they were less likely to evaluate that person negatively if their self-images had been bolstered through a self-affirmation procedure, and they were more likely to evaluate that person stereotypically if their self-images had been threatened by negative feedback. (p. 31)

If people from the in-group perceive out-group members as incompetent, disloyal, unlikable, etc., this can lead to low ratings of performance. For example, Branscombe, Wann, Noel, and Coleman (1993) showed that people who highly identified with the group found disloyalty to the group as threatening and gave lower ratings of performance compared to those perceived to be loyal to the group who were seen as non-threatening. In a similar vein, Noel, Wann, and Branscombe (1995) demonstrated that out-group derogation was most likely to occur with highly identified group members in a public setting to help enhance the group's status. This would help boost the relative status of the in-group as the out-groups in social comparison appear as lower status due to perceived weaknesses. The main issue, however, is not the low ratings of performance, but the prejudice that produces those ratings; in other words, the in-group favoritism or out-group derogation that is expressed through those low ratings.

Chapter V: Social Dominance Theory

Social dominance theory posits that human society is ordered by systems of group-based hierarchies and that individuals within those groups are motivated for the most part to behave in ways that maintain those hierarchies (Pratto, Sidanius, & Levin, 2006; Sidanius & Pratto, 1999). Sidanius and Pratto (1999) review many facts that support this idea. In particular they cite facts that in reality very few truly dominant groups lose power quickly (e.g. the Roman Empire), in part because there are people in the subordinate group who go against the norms of their own group to try to gain access to the dominant group (something that might be called high status out-group favoritism). At the top of those hierarchies, there are a few dominant groups that are regarded as having a large amount of positive social value (Pratto et al., 2006; Sidanius & Pratto, 1999). In other intergroup theories (such as social identity theory) this idea primarily corresponds with the concept of status. In particular, groups with a positive social value would be considered high status groups, although the idea of positive social value is a somewhat broader construct. It indicates that in addition to status, the dominant group possesses more power and resources, while SIT does not assume those as givens, but rather as outcomes of status. In contrast, members of subordinate groups possess negative social value; and therefore lack power, resources, and other desirable attributes (Pratto et al., 2006; Sidanius & Pratto, 1999).

Positive social value is what motivates high status group members to maintain the hierarchy (Sidanius & Pratto, 1999). By keeping the hierarchy as it is via in-group favoritism and out-group derogation behaviors, members of the dominant group keep their status, power, and resources so that they can continue to benefit. Subordinate group members on the other hand help keep the status quo by not being able to challenge a dominant group and by hopes of eventually joining the dominant group so that they can have a chance at access to the positive

social value (Pratto et al., 2006; Sidanius & Pratto, 1999). For example, Pratto et al. (2006) support this notion with the idea of self-debilitation in addition to behavioral asymmetry. Self-debilitation is witnessed in many subordinate groups; common examples include higher crime rates, higher usage of drugs and alcohol, and higher levels of in-group violence. This idea will be returned to below as the behavioral expression of positive and negative social value gets expressed in legitimizing myths.

Negative social value on the other hand is what motivates low status group members to attempt to move up the social hierarchy, which can result in out-group favoritism and trying to join the high status group (Sidanius & Pratto, 1999). When membership is prevented by the high status group (via out-group derogation or in-group favoritism) group conflict between the group with the positive social value and the group with the negative social value is likely (Pratto et al., 2006; Sidanius & Pratto, 1999). The difference in these motivations between dominant groups and subordinate groups has been labeled behavioral asymmetry (Pratto et al., 2006; Sidanius & Pratto, 1999). According to social dominance theory in most cases subordinate groups will work to maintain the social hierarchy even though it puts them at a disadvantage as the existence of the hierarchy provides the opportunity for subordinate group members to join the dominant group and the positive social value associated with being a member of that group. The mechanisms for this are known as legitimizing myths (Sidanius & Pratto, 1999).

Pratto, Sidanius, and Levin (2006) state that the social hierarchies (via group position, social context, stable temperament and personality, gender, and socialization) result in various strength expressions of social dominance orientation (SDO) that then feed the motivation to maintain those hierarchies. Dominant group members typically score high on SDO as it is a measure of desire to maintain the social hierarchy. Huang and Liu (2005) found support for

dominant group members having higher SDO in Taiwan with both an adult sample and with high school students, particularly when primed by exposure to their own dominant group. For both sex (men; dominant gender social hierarchy group) and race (Mingnan Taiwanese; dominant arbitrary set social hierarchy group) exposing dominant group members to their own group triggered higher SDO scores for those dominant group members compared to members of other groups; with a test-retest reliability of 0.48 after one week (Huang & Liu, 2005). Liu, Huang, and McFedries (2008) also found support in that even after loss of power; members of a political party retained their high level of SDO. Subordinate group members are likely to score lower on SDO, but may still often behave in ways that maintain the social hierarchy (i.e. behavioral asymmetry). Pratto et al. (2006) and Thomsen et al. (2008) state that behavioral asymmetry occurs at least in part because the value set (SDO) that is obtained from group membership, while stable has enough flexibility to allow for situational influences. This is a complex prediction made by social dominance theory as it moves across multiple levels of analysis to explain the interactions of personal and situational determinants of behavior. Subordinate group members are discriminated against by dominant group members who create a behavioral pattern of submissiveness in subordinate group members (e.g. learned helplessness) that motivates them to maintain the hierarchy as well. This will be elaborated on in the following subsection on trimorphic structure group-based hierarchies. In research, this has been demonstrated by groups conforming to the desires of powerful others (Pratto et al., 2006; Sidanius & Pratto, 1999).

Trimorphic Structure of Group-based Hierarchies

Social dominance theory (SDT) assumes that there are three group-based social hierarchies, known as the trimorphic structure of group-based hierarchies (Pratto et al., 2006; Sidanius & Pratto, 1999). The first two are biologically based; the age system and the gender system. The

age system assumes that older people hold more positive social value than younger people and as such will strive to maintain that hierarchy. This may only be up to a certain stage in life, but as of yet this has not been addressed in the research. The age hierarchy is seen in the fact that parents hold more power in the household compared to children, and older people are usually in charge in work settings. This has been demonstrated recently by Cornelis, Van Hiel, Roets, and Kossowska (2009) who found in a large sample in Poland that older adults held conservative views that would give them more economic power than those who were younger. However, Cornelis et al. (2009) did not find the same results in Belgium, although this may be explained by varying histories of hierarchy-enhancing or hierarchy-attenuating social policies (see legitimizing myths).

The gender system assumes that men hold more positive social value than women, and this is demonstrated by the fact that men typically (64.2%) are the head of the household in family situations (at least 2 people in the household; U.S. Census Bureau, 2008) even though they make up 49.2 percent of the population (U.S. Census Bureau, n.d.) and are typically more prominent in work (Spencer Stuart, 2006) and governmental roles as well (United States House of Representatives, 2010). Evidence is also provided by the fact that men are more likely to have higher social dominance orientation scores than women (Huang & Liu, 2005; Zakrisson, 2008). In a similar vein, Morton, Postmes, Haslam, and Hornsey (2008) found that exposure to biological theories about sex difference increased men's support for discriminatory practices directed towards women.

Sidanius and Pratto (1999) are careful to point out, and it is important to mention here, that these conclusions are based on modal patterns and do not assume that any single younger person or female cannot rise to the top of an individual hierarchy. The problem is one of levels of analysis;

while any individual can rise to the top of a particular hierarchy, most hierarchies are controlled by older males, so the social system represents that pattern. This can be seen by current sociological data; 80 percent of the Standard and Poor's 500 top companies had CEOs of 50 years or older in 2005 (Spencer Stuart, 2006) and 82 percent of the United States House of Representatives are male (United States House of Representatives, 2010) as well as longitudinal research evidence that males with traditional gender role orientations are compensated substantially more than males with egalitarian views or women with either viewpoint (Judge & Livingston, 2008). This result was significantly explained by sex although job complexity and length of time did account for some of the variance. However, when discussing effect sizes, Judge and Livingston (2008) point out:

> First, earnings clearly increase over time, starting at a relatively low level when most study participants were completing their education and increasing to much higher levels at mid-career. Second, earnings increase more rapidly for men over time; on average, pay increases by 120% over the 25 years for women, but by 317% over the same time period for men. Third, whereas traditional gender role orientation is associated with increased earnings for men, it is associated with slightly decreased earnings for women. For men, moving from 1 standard deviation below the mean on gender role orientation to 1 standard deviation above the mean results in a predicted earnings increase of $8,548 for the entire sample and of $11,930 when restricted to participants working outside the home. For women, such a move (from relatively egalitarian to relatively traditional) results in a predicted earnings decrease of -$1,495 and -$1,051, respectively. (pp. 1005-1006)

The final group-based social hierarchy is known as the arbitrary set system. The arbitrary set system is comprised of hierarchical factors that are sets of human beliefs such as religion, laws, or corporate values. Looking back to the two biological social hierarchy systems (age and gender), it is more difficult to argue that females as a whole possess equal physical power to males when males are on average larger in size. That is one supposition as to why older males are dominant according to the gender and age-based hierarchies. However, arguing which religion (an arbitrary set hierarchy) is better is relatively simple as arguments can be made easily supporting any one.

Race and ethnicity are considered by Sidanius and Pratto (1999) as arbitrary set groups even though the characteristics of each are biologically determined. Their reasoning is that the arbitrary set system is more malleable and plastic than the gender and age system, and therefore more based on perceptions of the biology rather than the actual biology itself. They state:

> While the age and gender systems certainly have at least some degree of malleability in terms of who is defined as young or old, male or female, the arbitrary-set system is characterized by an unusually high degree of arbitrariness, plasticity, flexibility, and situational and contextual sensitivity in determining which group distinctions are socially salient and the manner in which ingroups and outgroups are defined. (Sidanius & Pratto, 1999, p. 3)

An example of this idea may be found in the ideas of Malcolm X after he returned from a Hajj to Africa in 1964. There he saw people who often times had darker skin than he and were labeled “white” (although at the time they would have been considered black by white Americans) and supported his cause of ending racism towards black African-Americans (X & Breitman, 1990). He also saw many races socializing without power differential, which was in

contrast to what he saw in the United States at the time (X & Breitman, 1990; X & Haley, 1992). This caused X to change his views on race from that of pursuing black civil rights to that of pursuing human civil rights (X & Breitman, 1990; X & Haley, 1992). This change in perception of race demonstrates how race fits into the arbitrary set social hierarchy as opposed to being a more biologically oriented one such as the age and gender social hierarchies.

Sidanius and Pratto (1999) claim that most group conflict arises from the arbitrary set category of group hierarchies as there are not necessarily objective determinants of the beliefs so disagreement comes easily. This concept is demonstrated by Whites discriminating against Blacks who strongly identify with their race through self-identification (i.e. overtly) as the arbitrary set hierarchy becomes more salient. Kaiser and Pratt-Hyatt (2009) found this to be the case in six studies where they manipulated where minorities identified themselves in writing as a minority and/or how much they identified with being a member of their racial group. In particular:

> Whites expressed more negative attitudes toward strongly identified racial minorities than toward weakly identified minorities. Whites who personally endorsed worldviews that legitimize the status hierarchy were particularly likely to express negative attitudes toward strongly identified minorities relative to weakly identified minorities, whereas Whites who personally rejected status-legitimizing worldviews displayed the opposite pattern. In addition, Whites' biases against strongly identified minorities dissipated when strongly identified minorities expressed strong endorsement of status legitimizing worldviews. (p. 432)

Kaiser and Pratt-Hyatt's (2009) studies suggest that dominant group members do not distribute their prejudice equally among all members of subordinate groups, and that some

subsets of those groups, particularly the strongly identified are most likely to be a target of discrimination. This has also been demonstrated in that status increases preferences for social dominance under conditions of high threat and high in-group identification. Recall that Morrison, Fast, and Ybarra (2009) found support for this with both political and school affiliation.

Just as different social identities overlap, Sidanius and Pratto (1999) acknowledge that the different types of hierarchies intersect as well. For instance, one's sex and arbitrary set hierarchies will determine how much one is discriminated against (or will discriminate). While the gender-based hierarchy predicts that women will be discriminated against, the intersection prediction states that subordinate males (for instance those of a different sexual orientation) will be most targeted by dominant group members as they don't fit the gender hierarchy or the dominant group's arbitrary set hierarchy and therefore the discriminatory effect will be multiplied.

This is demonstrated by the fact that homosexual males (compared to heterosexual and homosexual females) are much more likely to be discriminated against by heterosexual males as they don't fit the gender hierarchy (biological male sexual norms) or the arbitrary set hierarchy (beliefs about masculine roles). While being a female homosexual will still fit the gender hierarchy (actually biologically female) if not the arbitrary set one (beliefs about feminine roles) and will only incur a singular focused discrimination effect (Haley, Sidanius, Lowery, & Malamuth, 2004).

The idea of "fit" in this case is used to reflect that all of the aforementioned variations in discrimination are based on perceptions of the social hierarchies. That is how social dominance theory accounts for not all dominant members discriminating against subordinate groups. This idea is discussed below under the mechanism of legitimizing myths. These interactions of social

hierarchies are where socialization, social context, group position, gender, and temperament/personality combine through the filter of legitimizing myths to create a person's social dominance orientation (a further discussion of which is found below), which in turn influence his or her behaviors in a group.

Legitimizing Myths

"Legitimizing myths (LMs) consist of attitudes, values, beliefs, stereotypes, and ideologies that provide moral and intellectual justification for the social practices that distribute social value within the social system" (Sidanius & Pratto, 1999; p. 45). These mechanisms serve both to strengthen and weaken the social hierarchies of any given society depending on ideological or moral justifications that can (or cannot) be created for the situation (Knowles, Lowery, Hogan, & Chow, 2009; Morrison & Ybarra, 2008; Sidanius, Levin, Federico, & Pratto, 2001). Knowles, Lowery, Hogan and Chow, (2009) for instance found that:

> …perceptions of intergroup threat lead antiegalitarian White people to construe color blindness as a procedural (rather than distributive) principle. Furthermore, intergroup threat leads antiegalitarian White people to embrace color-blind tenets they normally reject—an effect mediated by these individuals' temporarily heightened desire for procedural justice. It thus appears that antiegalitarian White people can create a hierarchy-enhancing ideology (procedural color blindness) out of a hierarchy-attenuating one (distributive color blindness) and deploy it as a response to current perceptions of intergroup threat. In so doing, these individuals exploit a set of humanistic philosophical principles that they normally reject (p. 866).

The focus of legitimizing myths is on equality/inequality between dominant and subordinate groups. "Our use of the term *myth* is not meant to imply that these beliefs are epistemologically true or false, but rather that they appear true because enough people in the society behave as if they were true" (Sidanius & Pratto, 1999; p. 104).

Sidanius and Pratto (1999) argue that legitimizing myths have two primary characteristics that determine their effectiveness: potency and functional type. Potency refers to the ability of a legitimizing myth to influence group members. Several factors influence a legitimizing myth's potency: consensuality, certainty, embeddedness, and mediational strength (Sidanius & Pratto, 1999). Consensuality is the degree the myth is shared among a society's members. When there is a high degree of consensuality for a legitimizing myth, potency is increased as it is a widely accepted notion. An example of consensuality in many modern American work organizations would be that intelligent people climb the corporate ladder.

Certainty is the degree of "truth" a legitimizing myth possesses via moral, religious or scientific evidence. This is again not to suggest the that legitimizing myth is necessarily true, just that the belief becomes "certain" via the various types of evidence supporting it and therefore strengthening it. The more certainty a legitimizing myth possesses, the greater the potency. Traditional racism during the eighteenth and nineteenth century had a high degree of certainty from many different sources of evidence, thereby allowing it to be potent enough for the endorsement of slavery; clear dominance of one group over another.

Embeddedness refers to a legitimizing myth's connection to other parts of the culture. So if a legitimizing myth is part of an overall ideology (such as a political belief system) its potency is increased as it is resistant to change because of its connection to the larger system which lends it credibility. So for instance, belief that the poor are disadvantaged by being embedded with other

liberal beliefs becomes more potent as it cannot be easily separated from the other beliefs within the system.

Finally, mediational strength of a legitimizing myth is the degree it links the desire to create and maintain group-based hierarchies and actual endorsement of the social policy that maintains the hierarchy. The stronger the link between belief and actual social policy, the more a legitimizing myth becomes potent. Sidanius and Pratto (1999) use the example of the Protestant work ethic: "According to SDT, part of the reason that people endorse the Protestant work ethic is because it is an accessible and socially acceptable means of justifying group-based social inequality" (p. 48). In America, the Protestant work ethic has been used to create many social policies, for example the notion of "workfare" rather than welfare that was popularized by Richard Nixon.

Now that the ability of legitimizing myths to influence social hierarchies has been discussed, it is time to turn attention back to the other characteristic of legitimizing myths mentioned previously: functional type. Functional type refers to the direction of a legitimizing myth as either supporting or challenging a social hierarchy. As discussed previously, legitimizing myths can focus on social inequality or equality within a social hierarchy. Legitimizing myths that enhance the group-based hierarchy via justification of the social structure are known as hierarchy-enhancing legitimizing myths. For instance, the notion of chivalry is a legitimizing myth in that it endorses differences between the sexes, thus maintaining the gender hierarchy.

Hierarchy-attenuating legitimizing myths on the other hand are ones that enhance social equality within the group. In general, these would be notions of egalitarianism. An example of a hierarchy-attenuating legitimizing myth would be the theme of the United States Bill of Rights. It focuses on equality that resulted in the social policies of affirmative action that seek to ensure

fair hiring practices for both the traditionally dominant group of white males as well as the traditionally subordinate groups of women and minorities.

Social Dominance Orientation

The concept of social dominance orientation (SDO) is the '…degree to which individuals desire and support group-based hierarchy and the domination of "inferior" groups by "superior" groups' (Sidanius & Pratto, 1999). While much of what has been discussed so far has been at the social level of analysis or interaction of the social climate and the members of the society, SDO is an individual level variable.

Social dominance orientation (SDO) is perhaps the most controversial aspect of SDT. This may reflect the fact that while Sidanius and Pratto (1999) devoted a full chapter of over 40 pages to a discussion of validity and reliability of the construct (demonstrating that it is different than authoritarianism and other similar constructs), they define the construct theoretically in four paragraphs. This seems to have led to an inordinate focus on SDO to the exclusion of other aspects of the theory (Pratto et al., 2006). This focus is understandable as the SDO measures, while reliable and valid, may not have an adequate explanation of how the construct was arrived at in the first place. This has lead Pratto et al. (2006) to admit that they do not fully understand the antecedent mechanisms of SDO. They go on to state though, that it is not their primary concern because social dominance theory is not a personality theory but a theory of behavior in groups that results from the interactions of multiple levels of influence (social hierarchies and personal; Pratto et al., 2006). As a result, Pratto et al. (2006) have rescinded calling SDO a personality trait as they originally labeled it (Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius & Pratto, 1999) and now refer to it as a collection of beliefs and values (Pratto et al. 2006). Nevertheless, Pratto et al. (2006) still maintain that:

> The construct of social dominance orientation captures the extent of individuals' desires for group-based dominance and inequality. These desires for social dominance are expressed in individual acts of discrimination and participation in intergroup and institutional processes that produce better outcomes for dominants than for subordinates. (p. 281)

Pratto et al. (2006; see also Sidanius & Pratto, 1999) assert that a person's social dominance orientation (SDO) is a strong predictor of discriminatory behavior (via in-group favoritism and out-group derogation) in order to maintain social hierarchies. And indeed, Sibley and Duckitt's (2008) meta-analysis found that SDO is a strong predictor of discrimination in general which functions independently of right-wing authoritarianism and other trait-like variables. Social dominance orientation interacts with legitimizing myths (both hierarchy-attenuating and enhancing) to produce behaviors that influence social polices (both hierarchy-attenuating and enhancing). Evidence to support this idea can be seen in the work of Liu, Huang, and McFedries (2008), who found in a longitudinal study that members of a political party that had been in power for 50 years had higher SDO scores than people of political parties not in power. Interestingly, when an election changed the power balance to a new political group, the group members of the traditionally powerful group did not report lower SDO scores, although the scores of the group members of the newly powerful group's SDO did go up. This suggests that: (1) SDO is not purely a dispositional trait although it is stable once acquired; and (2) once a group obtains status it will work to maintain that status as expressed by the high levels of SDO for both political groups. The overall argument is that social policy is the result of legitimizing myths being interpreted and acted upon by individuals within the society.

Those interpretations will focus on giving the group positive social value so that in turn group members can benefit psychologically and socially.

Protectiveness

While social dominance orientation (SDO) is a measure of individuals' desire to support group-based hierarchy and the domination of "inferior" groups by "superior" groups' (Sidanius & Pratto, 1999), as mentioned previously it is not without controversy. As such, it is important to deconstruct the idea somewhat – SDO is an individual's desire to keep things the way that they are at the societal level, as such it may not be the best comparison measure to examine the differences between social identity theory (SIT) and social dominance theory (SDT). Much of the disagreement between the researchers for the two theories may come from using similar language, but discussing notions of the concept of group at different levels of theory and analysis. In particular, when SDT discusses groups, the idea is typically at the societal level (major groups interacting with other major groups, such as ethnicity or countries), while SIT typically is applied to smaller groups within a society such as competition between two workgroups.

A measure that is in line with the ideas of individuals' perception of group level relationships may help clarify the ideas of SDT, which in turn will make the comparison between SDT and SIT more fruitful. While social dominance orientation is examining a person's endorsement of the social structure, a concept such as protectiveness of the group may examine the specific reactions to threat on similar terms at the group level. Protectiveness is defined as the ability of the group to be resilient to stressors and outside factors and adapt to the situation and provide support for the group (Gardner, Huber, Steiner, Vasquez, & Savage, 2008).

Interestingly though, neither SDT nor SIT has examined this idea beyond the already existing constructs of social dominance orientation and identities. However the domain of family counseling has, it typically falls under the domain of resilience but has been adapted to describe the notion of family protectiveness by Gardner et al. (2008). While a family is a very specific type of group, the measure that Gardner et al. (2008) devised can be easily adapted to make it more applicable to other types of groups (see Method).

Chapter VI: Problem and Hypotheses

Social identity theory (SIT) proposes that only members of low status groups are concerned with increasing the possibility of group permeability. In this context group permeability refers to the ability of low-status group members to leave their own group and join a higher status group. Social dominance theory (SDT) on the other hand proposes that members of all groups (low and high status) are concerned with group permeability. Socially dominant groups wish to maintain dominance over subordinate groups and therefore behave in ways to reduce group permeability, while subordinate groups worry about gaining access to the resources of the dominant group (desire for permeability; similar to SIT).

Dominant groups (i.e. high status groups) create social policies and group norms that help keep them in power and retain control over resources, indicating that they are concerned with keeping group permeability at a minimum (Liu, Huang, & McFedries, 2008; Sidanius & Pratto, 1999; Zariksson, 2008). Zariksson (2008) for instance found evidence for this when perceptions of political equality were found only in female-dominated volunteer organizations, not municipalities high in political equality, municipalities low in political equality, voluntary associations with a majority of men, or voluntary associations with an even proportion of women and men, as traditional social norms were not only changed, but blatantly obvious. These social influences get expressed at the individual level as social dominance orientation, which is a reflection of the group's values (Huang & Liu, 2005; Pratto et al., 2006). For subordinate (i.e. low-status) group members this produces conflicting behaviors. For instance, while there may be hierarchy-attenuating behaviors (e.g., behaviors that reflect the social policy of affirmative action) there will also be hierarchy-enhancing behaviors; unconscious or conscious treatment of minorities as less than capable by dominant group members as well as minority members who

have been accepted into the dominant group because of those policies. Heilman, Block, and Stathatos (1997) and Heilman, Kaplow, Amato, and Stathatos (1993) found this to be the case when selecting people for a job. When it was made known that a new hire was selected as an affirmative action hire, the ratings of the person's job performance and likability declined even though the affirmative action hire paper-person presented in the experiments had the same exact qualifications as the control who was not an affirmative action hire even if race was known. The conflicting social pressures for subordinate group members as to which behaviors should be emphasized result in no one type of behavior being selected as the norm and the group remains subordinate because of lack of joint action (Sidanius & Pratto, 1999). However, if the social context is right (for instance if the dominant group is seen as relatively equal in strength) subordinate groups will challenge the boundary set by the dominant group, which is likely to result in conflict or out-group derogation (Pratto et al., 2006; Sidanius & Pratto, 1999; Zariksson, 2008).

Social identity theory (SIT) states that only low status group members are concerned with distribution of resources. Social dominance theory on the other hand posits that all groups worry about distribution of resources (Pratto et al., 2006; Sidanius & Pratto, 1999). And in fact, there is experimental evidence that shows that high status group members allocate rewards with in-group favoritism even under conditions of no threat. Saguy, Dovidio, and Pratto (2008) demonstrated in-group favoritism in the absence of threat in two studies where dominant group members distributed rewards with in-group favoritism after a joint task with a subordinate group. Also interesting to note is that the subordinate group members expressed desires to discuss power and power differential, but dominant group members did not and often squelched such discussions (Saguy et al., 2008).

Social dominance theory (SDT) owes part of its heritage to social identity theory (SIT), and as such makes many of the same predictions. In particular like SIT, SDT predicts that individuals in groups are motivated to enhance the group (especially if it is a dominant one) so that it can provide them with esteem, identity, and protection. The divergence concerns when and why those group-enhancing behaviors occur.

In social identity theory, the prediction is situation-specific in that those group-enhancing behaviors occur when the group is perceived as under threat, particularly when the group is a high status group, as one's social identity is activated by the group oriented threat (Ellemers et al., 2002). At other times (such as personal threat) SIT predicts that a person will behave in much more individually oriented ways, such as enhancing one's own self-esteem regardless of the group, as his or her personal identity is activated (Ellemers et al., 2002; Nario-Redmond, 2004). SIT predicts that the nature of the situation will determine the portion of identity that is salient to produce the person's state behavior. In social dominance theory, the prediction is that those group-enhancing behaviors occur no matter the situation and no matter the status of the group as social dominance orientation is assumed to be a stable belief system driving behavior in all situations even though the situation can have an impact on it (Pratto et al., 2004; 2006; Sidanius & Pratto, 1999). As such, the following predictions were made, based on the assumption that if SIT was the better explanatory mechanism that as a trend a person's state responses would be more variable depending on the situation, while if SDT was the better explanatory mechanism a person's state responses would be less variable as the responses would be based on a stable belief system (See also Tables 1-4 for a summary of hypotheses in tabular format).

Hypotheses

The hypotheses are organized in pairs and by each dependent variable below with the predictions of social dominance theory (SDT) labeled A and the predictions of social identity theory (SIT) labeled B. Each pair is preceded by a brief recap description of whether the theories are in accordance or divergence.

High status, threat and social dominance orientation. This is a place of divergence for SDT and SIT. According to SDT, when high status is provided by the group, social dominance orientation will become activated by any type of threat as group members are motivated to protect the resources (physical and psychological) of the group as well as preserve the group itself. Whereas no threat should not activate the underlying driver of behavior (i.e. social dominance orientation) as there is no need to protect resources. Social identity theory on the other hand states that members of high status groups need not worry about protecting the group when personal or no threat occur as a person's personal identity is at stake, not their social identity which is related to their group membership. However when the group itself is threatened, social dominance orientation should be activated as a protective measure of the group's social identity. See Table 1 for tabular representation of hypotheses 1A and 1B.

***Hypothesis 1A*.** When the status of the group is high, social dominance orientation will be lower for no threat compared to personal threat and group threat.

***Hypothesis 1B*.** When the status of the group is high, social dominance orientation will be higher for group threat compared to no threat and personal threat.

Low status, threat and social dominance orientation. The effects of low status and the various types of threat on social dominance orientation are a place of agreement between SIT and SDT. Both theories assume that when the group does not provide status to the individual that the motivation to protect the group or remain a part of it will be low. Therefore no type of threat

will affect change in a person's social dominance orientation as the person is actually more likely to leave the group rather than see the need to protect it. See Table 1 for tabular representation of hypotheses 2A and 2B.

Hypothesis 2A. When the status of the group is low, social dominance orientation will be the same for all threat conditions.

***Hypothesis 2B*.** When the status of the group is low, social dominance orientation will be the same for all threat conditions.

High status, threat and personal identity. The effects of high status and the various threat types on personal identity are another place of accordance for SIT and SDT. Both theories make the prediction that personal identity will be the higher under personal threat situations as a person's personal identity will be activated, whereas with high status group membership and no threat, personal identity may not even be important as the high status is providing motivation for social identity rather than personal identity becoming a motivating factor. See Table 2 for tabular representation of hypotheses 1A and 1B.

***Hypothesis 3A*.** When the status of the group is high, personal identity will be higher for personal threat compared to no threat and group threat.

***Hypothesis 3B*.** When the status of the group is high, personal identity will be higher for personal threat compared to no threat and group threat.

Low status, threat and personal identity. Social dominance theory and SIT diverge under various combinations of threat and low status provided by the group. Social dominance theory again states that because the group is providing nothing that no differences will emerge as people will not feel pressure from the group in any way. Social identity theory agrees with that notion for group threat, but states that personal identity will be the active factor for no threat and

personal threat and therefore personal identity will become more salient in those two types of situations. See Table 2 for tabular representation of hypotheses 4A and 4B.

***Hypothesis 4A*.** When the status of the group is low, personal identity will be the same for all threat conditions.

***Hypothesis 4B*.** When the status of the group is low, personal identity will be higher for no threat and personal threat compared to group threat.

High status, threat and social identity. The effects of high status and the various threat types are another place of accordance for SDT and SIT. Both assume that when the group is threatened that a person's social identity will become the active factor in determining behavior as the group is important to one's identity. However, when the group is not threatened such as is the case with no threat or personal threat, there will be no need for social identity to become active. See Table 3 for tabular representation of hypotheses 5A and 5B.

***Hypothesis 5A*.** When the status of the group is high, social identity will be lower for no threat and personal threat compared to group threat.

***Hypothesis 5B*.** When the status of the group is high, social identity will be lower for no threat and personal threat compared to group threat.

Low status, threat and social identity. The combination of low status and the threat types is a place of divergence for SDT and SIT. Similar to the social dominance orientation and personal identity predictions, social identity should not be activated when the group provides not status according to SDT. Social identity theory on the other hand predicts that social identity will be lower for group threat compared to no threat or personal threat under this situation as a person will want to disassociate him or herself from the group. See Table 3 for tabular representation of hypotheses 6A and 6B.

***Hypothesis 6A*.** When the status of the group is low, social identity will be the same for all threat conditions.

***Hypothesis 6B*.** When the status of the group is low, social identity will be higher for no threat and personal threat compared to group threat.

High status, threat and protectiveness. Social dominance theory and SIT come into accordance again with high status and the various threat types with regards to protectiveness. The group is providing valuable resources when it is considered high status and therefore when the group is threatened the individual will see the need to conserve those resources. However when the group is not threatened there is nothing to protect, so protectiveness will be lower under those two conditions. See Table 4 for tabular representation of hypotheses 7A and 7B.

***Hypothesis 7A*.** When the status of the group is high, protectiveness will be lower for no threat and personal threat compared to group threat.

***Hypothesis 7B*.** When the status of the group is high, protectiveness will be lower for no threat and personal threat compared to group threat.

Low status, threat and protectiveness. The last pair of hypotheses is a divergence point for SDT and SIT as low status and threat are predicted to combine to produce protectiveness in different ways. Social dominance theory posits that as the group is not providing any resources, when it is deemed of low status, therefore a person is not motivated to protect anything so there is no difference in protectiveness for the three threat types. Social identity theory on the other hand predicts that protectiveness will be higher under no threat and personal threat as a person will be motivated to protect their own identity and will not be affected under group threat. See Table 4 for tabular representation of hypotheses 8A and 8B.

***Hypothesis 8A*.** When the status of the group is low, protectiveness will be the same for all threat conditions.

***Hypothesis 8B*.** When the status of the group is low, protectiveness will be higher for no threat and personal threat and low group status compared to group threat.

In sum, social dominance theory proposes that people are motivated to behave by a stable belief system (i.e. social dominance orientation) that is determined by the groups to which they belong. As such, that belief system should emerge consistently under differing situations (the focus here is various threat situations), particularly when the status of the group is highly regarded. Social identity theory (SIT), on the other hand, predicts that people will behave in ways that reflect the portion of their identity that is activated by a person's current situation – so if the threat is aimed at the group, people will behave in ways that enhance their social identity if the group's status is meaningful, whereas if the threat is individually aimed their personal identity will be activated and they will behave in ways to enhance that aspect of themselves. Finally, with no threat, SIT states that personal identity is likely to emerge in Western societies because of the focus on individualism.

Chapter VII: Method

There are three major types of manipulations traditionally used to invoke intergroup behavior (Haslam, 2004). The first type is accessibility-based manipulations which involve increasing or decreasing group members' awareness of their membership to the group (Haslam, 2004). One of the more widely used is McGarty, Haslam, Hutchinson and Turner's (1994) "public commitment" manipulation in which participants are asked to publicly announce their membership and commitment to the group. A major drawback of accessibility-based manipulation is that it is not particularly strong (Haslam, 2004), which is in accord with Redmond's (2007) findings that threat is difficult to induce in an experimental setting. Another commonly used accessibility based manipulation is Doosje, Ellemers and Spears's (1995) "bogus pipeline" in which participants are lead to believe that the experimenter has direct access to their thoughts and feelings via a bogus galvanic skin response measured by a computer. The computer assigns participants a score which is supposed to reflect their ability to solve problems, but which in reality is a randomly generated number that places them in the high status group or the low status group. While apparently a strong manipulation, it lacks realism and ease of use.

The second type of manipulation is known as normative fit-based, in which the general idea is to make participants feel positively or negatively about the group that they have been assigned to (Haslam, 2004). One of the more common normative fit-based manipulations is Jetten, Spears, and Manstead's (1997) "linguistic framing." In linguistic framing, participants are asked to agree or disagree with statements that serve the purpose of directing towards identifying with their group or not. This normative fit-based manipulation is strong but also seems to manipulate other attributes that may confound experimental interpretations, in particular self-esteem and mood. Another common normative fit-based manipulation is Ellemers, Kortekaas and

Ouwerkerk's (1999) "self-assignment." In self-assignment, like the bogus pipeline, participants are given a score based on a bogus test and then given the opportunity to assign themselves to a group. While this seems a more realistic manipulation the end result is very similar to that observed by Redmond (2007) in which the primary effect can be attributed to commitment rather than intergroup behavior.

The final category of manipulations is classified as comparative fit-based (Haslam, 2004). The basic premise of this procedure is to make one's in-group a salient factor in behavior by presenting an out-group as a threat. Kramer and Brewer (1984) for instance told participants (traditional college age students) that the purpose of their study was to compare the results for young and old populations, while Uzbalis (1999; as cited in Haslam, 2004) asked participants to focus on a major competitor prior to obtaining the dependent measures. Comparative fit-based manipulation seem the most strong, but have ethical problems, such as invoking hostility and fear. This research sought to avoid invoking hostility and fear (or at the very least reduce each) by combining aspects of several of the accepted methodologies.

The methodology adopted for this study is unique in the literature for both social identity theory (SIT) and social dominance theory (SDT), although it has been used widely in other domains, particularly the study of emotions in the workplace (e.g. Aaker, Drolet, & Griffin, 2008). It was based on the normative fit-based manipulations mentioned above, but added more realism by having participants recall actual situations in their own lives. The realism was achieved by making the identification process specific to a particular event, similar to the comparative fit-based, but reduced the problems of the comparative fit-based by being past-oriented so that strong emotional responses were avoided. Additionally, the methodology avoided the problems of the accessibility-based manipulations via use of situations that were not

only similar to the real world, but actually real and easily implemented. The methodology was not effective in practice though as it appears that participants did not react strongly enough; see discussion for more on this idea. This methodology was a version of role-taking which is used in lieu of deception, a more ethical procedure discussed by Lefkowitz (2003).

The primary reason for using this methodology is Redmond's (2007) work that found that realistic threat is a particularly difficult variable to simulate in the laboratory—especially in an ethical manner. The strategy of asking people to recall actual threatening and non-threatening situations was a way to induce feelings of threat more realistically but without actually actively threatening participants. That in turn should have made the detection of the different predictions of SIT and SDT easier to distinguish as people should have reacted stronger to actual threat situations they have actually experienced. This added to the realism of the experiment which in turn aids its generalizability and therefore application to actual organizations.

In 2008 Redmond conducted a pilot version of this study using students in a research methods course as participants. Those individuals did not have a difficult time recalling threat situations pertinent to the groups to which they belong. However, the data collected showed that most students recalled the family as their group rather than a workgroup. That was to be expected of traditional college-age students who were in their second year of study with limited work experience, and unlike the current research were given the opportunity to describe the family as an organization to which they belonged. The drawback of that option was that the experiences of the family being threatened lead participants to perceive threat at both the individual and group level of analysis. The current study precluded this by using adult workers who were currently working and asked them to rate how threat and status were perceived in the work situation (See Appendix A).

Participants

Participants were 66 adults, M_{age}=43.17 years, *SD* =12.07; 69.7% female; 86.4% White, 9.1% Black, which exceeded the necessary requirement as indicated by a power analysis (*n*=48 with a critical *t* = 1.96 for an effect size of 0.5 [Cohen's *d*] and an alpha of 0.05 and power = 0.95; calculated using GPower [Faul, Erdfelder, Lang, & Buchner, 2007]). Participants were required to be working; but working meant they could be paid contingent workers (i.e. part-time and temporary; 15.2%), paid full-time employees (81.8%), full-time volunteers (0.0%), or part-time volunteers (3.0%) to increase generalizability. Participants had been working on average 21.31 years, *SD*=12.51, and had 5.82 years, *SD* =5.43, experience in their current position.

Measures

All measures were presented to participants by means of an internet-based questionnaire in which they were provided with ample room to respond to open-ended questions, and choices were clear for closed-ended responses.

Independent variables. Threat was measured by self-report of self-described situations (see Appendix A). Each participant described in writing one of the three different threat situations from their work experiences; some participants described situations when they felt personally threatened, others when they felt the group they belonged to was threatened, and others described situations that did not involve threat. Participants were also asked to rate the types of threat to assess whether the manipulation worked as well as to examine the interplay of the various threat types (see Appendix A; e.g., "I felt that there was something threatening in the situation that was mostly directed towards me"). Ratings were on a seven-point scale ranging from *completely false in the situation I described* to *completely true in the situation I described*. The three threat manipulations were randomly assigned to participants to ensure equality of

groups. The Cronbach's Alpha for the three threat items was .76. Twenty-three of the sixty-six (34.8%) participants did not follow the manipulation as intended and were not included in the a priori analyses (however when examined in post-hoc analyses, this did not change the results).

Status was measured by a self-report that had participants rate the perceived status of their workgroup at the time they are rating their perceptions of threat (see Appendix A; e.g., "How do you feel about the importance of the workgroup that you described?"). Ratings were on a seven-point scale ranging from *not important at all* to *very important*. This measure had a kurtosis of 3.77 as the mean on a seven point scale was 6.06 with a standard deviation of 1.15. In particular, 92.2 percent of the sample responded above the mid-point of the scale and 42.2 percent choosing the maximum on the scale (*very important*). As such the comparisons made in this report are adjusted by contrasting *very important* to a combination of all other responses.

Directly after each written situation, the participants were presented with the dependent variables (see Appendices B, C, & D).

Dependent variables. Social dominance orientation (SDO) was measured by self-report on a slightly modified version of the Social Dominance Orientation scale (SDO_6; Sidanious & Pratto, 1999; see Appendix B). Modifications included a change in instructional wording to focus participants on the threat situation just described (e.g., "It's OK if my group had more of a chance in this situation than others"). Response options were on a seven-point scale ranging from *completely false in the situation I described* to *completely true in the situation I described*. The reliability (Cronbach's Alpha) for the scale was .84, which is close to the median reliability for the SDO_6 of .89 according to Sidanius and Pratto (1999).

The measure used for social identity in this study was a slightly modified version (items changed to past tense) of Ellemers, Kortekaas, and Ouwerkeerk's measure (1999; see Appendix

C) as it typically has an acceptable reliability (Cronbach's Alpha = .82) as well as being designed to measure the aspects of social identity proposed by Tajfel (1981). It also contains personal identity scales. Ratings were on a seven-point scale ranging from *completely false in the situation I described* to *completely true in the situation I described*. The overall reliability for social identity in this study was not as strong with a Cronbach's Alpha of .35; however one of the subscales was acceptable (Garson, 2008). The reliability for the three subscales is as follows; group self-esteem (e.g., "I felt good about my group") with a Cronbach's Alpha of .33, self-categorization (e.g., "I identified with other members of my group"), α=.62, and commitment to the group (e.g., "I would have liked to continue working with my group"), α=.20. For the final analyses, the two unreliable scales have been discarded and only the social identity self-categorization scale (SISC) was used.

The overall scale reliability for personal identity fared somewhat better than the social identity scale with a Cronbach's Alpha of .71. The reliability for the two subscales is as follows; personal self-esteem (e.g., "I felt good about myself"), α=.38, and personal identification (e.g., "I felt like a unique person"), α=.71. Because of the unacceptable reliability for the personal self-esteem scale, it is discarded in the following analyses and only the personal identity self-categorization (PISC) scale was used in the final analyses.

Protectiveness of the group was measured using a modified version of Gardner, Huber, Steiner, Vasquez and Savage's (2008) Inventory of Family Protective Factors (IFPF; see Appendix D). The modification changed the reference group from the family to the work group (e.g., "There have been more positive experiences than problems with our workgroup's finances in the past 3 months"). Ratings were on a five-point scale ranging from *almost always like my*

workgroup to *not at all like my workgroup*. The Cronbach's Alpha for the modified IFPF was .86, which is similar to the previously reported overall reliability of .88 (Gardner et al., 2008).

The dependent measures were presented together to prevent participants from guessing the underlying constructs. The social dominance orientation, identity measures, and protectiveness (IFPF) items were randomly presented to prevent order effects. The social dominance and the identity measures used a seven-point scale, while the protectiveness measure used a five-point scale to remain consistent with past research.

Covariates. Social dominance theory states that there are certain stable hierarchical systems that do not change (Sidanius & Pratto, 1999); as such age and sex data were collected and controlled for. These data points were collected at the end of the survey so that they did not influence the participants' responses by priming them to consciously focus on their hierarchical systems groups.

Demographics. In order to better describe the sample so that the results of the study can be aptly generalized, several demographic items regarding employment history were also included. In particular, an item was included to measure how long participants had been working, and another to measure how long they have been in their current positions (see Appendix A).

Procedure

A recruitment email was sent to potential participants (See Appendix E) from publically available email lists. Participants who agreed to participate followed the link to the online survey materials (See Appendices F & G).

Participants who went to the survey website were first given an informed consent explanation and introduced to the study (see Appendices F & G). Participants were then asked to describe in writing one actual threat situation (either personal or intergroup) at work within the

past year or a no threat situation (see Appendix A). One group described a situation in which they felt individually threatened at work, another group described a situation in which they felt the group they belonged to at work was threatened and the last group described a situation when they felt no threat to themselves or the group. Participants were randomly assigned to conditions by a computer. After having described the situation participants were asked to fill out measures of social dominance orientation (see Appendix B), identity (which had personal and social scales; see Appendix C), and protectiveness (IFPF; see Appendix D). At the conclusion of the study, participants were debriefed (see Appendix H).

Within each sample the conditions were randomly assigned but equally balanced. Therefore each condition (threat manipulation) was presented to one-third of participants in each sample.

Design. This research was a 2 x 3 between-subjects experimental design. Differences between the three threat situations (individual, group, and no-threat) and two status categories (high and low; see independent variables) were examined using Multivariate Analysis of Covariance (MANCOVA).

Chapter VIII: Results

Prior to the hypothesis-testing analyses, assumptions of each statistical test were examined using traditional data cleaning procedures. For instance, linearity and normality were examined for the age covariate as those are assumptions of Multivariate Analysis of Variance. The age covariate was normal; Shapiro-Wilk W=.96, p=.06; kurtosis=-1.09. p=.60; skewness=.15, p=.30. The sex covariate was also acceptable as a chi-square of 1.22, p=.54, indicated that an appropriate number of males and females were in each condition.

Box's test of equality of covariance matrices showed that the covariances could be assumed equal for all conditions, M=75.45, p=.22. Next the no threat and individual threat conditions were examined using a two-group MANCOVA for all four outcomes; social dominance orientation (SDO), protectiveness (IFPF), social identity (SISC), and personal identity (PISC). Two group analyses were conducted for the intergroup and personal threat comparison (see Table 5) and the intergroup and no threat comparison (see Table 6).

Exploratory post hoc analyses were also conducted including a full three-group MANCOVA of no threat, personal threat and intergroup threat was examined to see if anything interesting emerged (see Table 7). The full three-group MANCOVA found no significant results, which actually aligns in part with social dominance theory as there were several “no difference” predictions made by that theory (hypotheses 2A, 4A, 6A, and 8A; see following paragraphs and discussion; social identity theory also made one no difference prediction: Hypothesis 2B). As such, each of the hypotheses was examined separately for the three groups to discover exactly what the data supported. Please recall that the hypotheses were paired competing predictions of social dominance theory (labeled A) and social identity theory (labeled B). The results are organized according to these pairs as well.

Social Dominance Orientation

There were no main effects on social dominance orientation (SDO) from either status or threat.

High status, threat and social dominance orientation. Hypotheses 1A and 1B examined social dominance orientation when status of the group is high. The means were in the predicted direction to support social dominance theory (SDT; higher social dominance orientation scores for both threat conditions compared to the no threat condition; see Table 8) however, the MANCOVA was not significant (see Table 9). Those results also do not support social identity theory (SIT) as it was predicted that social dominance orientation would be higher for intergroup threat compared to no threat and individual threat.

The no threat and high status condition was the lowest social dominance orientation score, *M*=44.89, *SD* =18.56 (see Table 8), which supports hypothesis 1A that when the status of the group is high, social dominance orientation will be lower for no threat compared to personal threat and group threat, in accord with SDT and hypothesis 1B that when the status of the group is high, social dominance orientation will be higher for group threat compared to no threat and personal threat in accord with SIT.

The high status mean was 54.27, *SD* =8.97 (see Table 8), which supports in part SDT's hypothesis 1A that when the status of the group is high, social dominance orientation will be lower for no threat compared to personal and group threat and disconfirms hypothesis 1B in part that when the status of the group is high, social dominance orientation will be higher for group threat compared to no threat and personal threat.

Low status, threat and social dominance orientation. Hypotheses 2A and 2B tested social dominance orientation under low status. Under these conditions there was no significant

difference between any of the threat conditions (see Table 10). This result supports hypothesis 2A of SDT, but also hypothesis 2B in favor of SIT.

The low status mean was 50.91, *SD* =15.64 (see Table 8), which supports hypothesis 2A that when the status of the group is low, social dominance orientation will be the same for all threat conditions in concordance with SDT and disconfirms hypothesis 2B for SIT that when the status of the group is low, social dominance orientation will be the same for all threat conditions.

For the intergroup versus no threat comparison a significant difference for social dominance orientation scores emerged for the threat/status interaction $F(1,45)=5.09$, $p=.03$ (see Table 6). The highest score was the no threat and low status condition, $M=59.14$, $SD=9.78$ (see Table 8), which goes in part against the prediction of both hypothesis 2A for SDT and 2B for SIT.

Personal Identity

There was a main effect of status on personal identity self-categorization, personal identity self-categorization (PISC); $F(1,43)=4.46$, $p=.04$ (see Table 5), regardless of threat type. Personal identity self-categorization was greater for high status groups, $M=15.39$, $SD=3.20$ (see Table 8) compared to low status groups, $M=12.52$, $SD=4.75$ (see Table 8), Cohen's $d=.69$. These data are in line with the predictions made by social dominance theory (SDT) in as personal identity was predicted to be higher for high status groups compared to low status groups by SDT (hypotheses 3A and 4A). Social identity theory on the other hand predicted that there should be no difference between PISC for status alone (hypotheses 3B and 4B), although it does predict that PISC should be higher for personal threat compared to intergroup threat regardless of status in general.

High status, threat and personal identity. Personal identity self-categorization (PISC) as a representation of personal identity was tested for high group status to examine hypotheses 3A

and 3B. No significant differences were found (see Table 11). This result supports neither SDT nor SIT as both theories predicted higher PISC scores for personal threat compared to the other two conditions.

Low status, threat and personal identity. For hypotheses 4A and 4B, Personal identity self-categorization (PISC) in low status groups was examined. No significant differences were found (see Table 12). This result supports hypothesis 4A rather than hypothesis 4B, indicating that SDT was the better explanation for people's behavior in this situation.

Social Identity

There were no main effects on social identity as represented by social identity self-categorization (SISC) from either status or threat.

High status, threat and social identity. Social identity was examined via social identity self-categorization (SISC). Hypotheses 5A and 5B were with regard to high status groups. Both theories predicted that SISC would be lower for no threat and personal threat compared to intergroup threat. There were no significant differences therefore no evidence for either theory was found (see Table 13).

Low status, threat and social identity. Hypotheses 6A (when the status is low, social identity will be the same for all threat conditions) and 6B (when the status is low, social identity will be higher for no threat and personal threat compared to group threat) examined SISC under low status. No significant differences were found (see Table 14). These data support the prediction of social dominance theory which indicated that there would be no difference in social identity for any of the threat conditions, while social identity theory predicted that SISC would be higher for no threat and personal threat compared to intergroup threat.

Protectiveness

For the intergroup versus personal threat comparison there was a main effect of threat on protectiveness, IFPF; $F(1,43)=4.64$, $p=.04$ (see Table 5), regardless of status. Protectiveness scores were higher for personal threat, $M=38.71$, $SD=8.59$ than intergroup threat, $M=31.77$, $SD=7.85$ (see Table 8), Cohen's $d=.37$. These data in general are not in accord with social dominance theory hypotheses; when status is high, protectiveness will be the lower for no threat and personal threat compared to group threat.

High status, threat and protectiveness. Hypotheses 7A (when status is high, protectiveness will be lower for no threat and personal threat compared to group threat) and 7B (when status is high, protectiveness will be lower for no threat and personal threat compared to group threat) examined protectiveness (IFPF) when status of the group is high (see Table 15). The MANCOVA results were not significant. Those results also do not support SIT or SDT as it was predicted that protectiveness would be lower for no threat and individual threat compared to intergroup threat.

Low status, threat and protectiveness. Hypotheses 8A and 8B tested protectiveness under low status. Under these conditions there was no significant difference between any of the threat conditions (see Table 16). This result supports SDT as it predicted no difference, while SIT predicted protectiveness to be higher for no threat and personal threat compared to intergroup threat.

Intergroup Versus Other Threat Types

No other significant differences emerged for intergroup threat in comparison to personal threat. This is an interesting finding in and of itself as the predictions made by both theories should emerge during this comparison. However, these non-significant findings may support

hypotheses 2A, 4A, 6A, 8A, and 2B all of which predicted no differences between groups. See discussion for more on this.

No other significant findings emerged for intergroup threat versus no threat. Again this data aligns with some parts of the hypotheses albeit those primarily made by SDT (1A, 2A, 3A, and 4A) rather than SIT (1B and 8B partially supported). See discussion for further explanation.

Results Summary

Of the 16 hypotheses, seven (1A, 2A, 3A, 4A, 6A, 8A, and 2B) at least partially supported social dominance theory, while three hypotheses (1A, 2B, and 8B) at least partially supported social identity theory. Interpretation of these findings is examined next in the discussion.

Chapter IX: Discussion

This research sought to answer the question: which theory of individual behavior based on group membership is better at predicting behavior under various threat conditions; social identity or social dominance? MANCOVA results were presented indicating that social dominance theory has somewhat better explanatory power than social identity theory for human behavior under various types of threat conditions for different status groups. Interesting conclusions concerning both the independent variables threat and status can also be drawn.

The predictions that primarily found support were those that predicted no differences between groups (hypotheses 2A, 4A, 6A, 8A, and 2B) and this finding will now be examined more closely. This finding might indicate that social dominance theory (SDT) is better at empirically explaining individual behavior based on group membership for different types of threat compared to social identity theory (SIT). All of those hypotheses are ones made by SDT while only hypothesis 2B is made by SIT, and it is actually the same as hypothesis 2A made by SDT. This could be the case as SDT predicts no differences in behavior under various threat conditions more than SIT because of the relatively stable nature of social dominance orientation, the driving mechanism of intergroup behavior for individuals, oftentimes independent of environmental cues such as group status and type of threat. Social identity theory on the other hand predicts more differences in intergroup behavior between the various threat situations as behavior is primarily seen as a function of the situation (e.g. group status and type of threat) as the major explanatory mechanism rather than an individual difference variable such as social dominance orientation. It may be the permeability of groups is a concern of both high and low status groups or it is not of concern at all for either type of group according the data at hand, as both status groups reacted the same. However that notion must also be couched by the extreme

kurtosis of the status manipulation where the vast majority of respondents even in the low status condition actually gained positive status from their group. But that idea would be out of line with the plethora of social identity theory research, although it would be in line with social dominance theory predictions.

Continuing that line of reasoning, hypotheses 2A, 4A, 6A, 8A, and 2B are essentially null hypotheses, predicting no differences among three groups. As confirming the null is impossible, the findings here are indeterminate; particularly considering the few significant differences for either theory from the a priori tests do not demonstrate a pattern supporting either theory. For instance, while in partial support for hypotheses 3A and 4A (main effects of status that are in line with predictions of SDT) was found, the interaction effects of no threat and low status actually partially disconfirm hypothesis 2A for SDT (as well as hypothesis 2B for SIT). That said hypothesis 2A did gather some support in the intergroup and low status interaction. Hypothesis 1A also gained support for SDT with the interaction effects for no threat and both low and high status, while SIT was partially supported for the high status, but not low status (hypothesis 1B).

Again, while it may seem odd to have made “no difference” predictions and obtained results that match as this is not typically the case in conducting research, null predictions can be useful when they go against expectations as there is a built in comparison (i.e. observed power equivalency; see Tables 5-7, and 9-16 for observed power in the MANCOVA tests for this study). For instance, in this research when the status of the group was low, there were no significant differences in social dominance orientation, social identity or protectiveness for any type of threat, although there was one for personal identity. The idea that three dependent variables did not vary between six combinations of independent variables when several predictions were made that there should be differences, suggests that there may be a non-

intuitive pattern at work. Social dominance theory is not as intuitive as social identity theory (see criticisms by various authors in Chapter V), so the no difference findings could be useful. This is particularly true when all relevant variables are controlled for, such as age and sex were in this study.

Theoretical Implications

If the partial support for the no difference results could be found again and more of the predicted significant differences were also found (albeit with improved methodology; see section on future research), the notion that social dominance theory (SDT) is a better explanation of intergroup behavior than social identity (SIT) could have tremendous impact on intergroup studies. As the focus in the research for the past 30 years has been SIT, it may now be time to move onto a newer theory such as SDT that holds many of the same tenets as SIT, but adds further explanatory power. In particular this may mean leaving the separate types of identity constructs (e.g. personal and social) behind and focusing on more general constructs such as social dominance orientation and/or general identity as explanatory mechanisms as well as adding more levels of analysis such as social conditions that occur at various group levels rather than the individual level. This possibility seems ripe for exploration, particularly considering the implications with regard to threat and status (see other findings and future research).

Practical Implications

The practical implications of a paradigm shift in theory would be how people work to combat racism and other forms of discrimination as well as conflict between groups. This change would be similar in scale to the way that anti-racism training changed from the mere exposure effect (Zajonc, 1968) of simply introducing members of different groups to each other, to the notion of finding a common identity in addition to being introduced, similar to the change in

interventions after Tajfel and Turner's original studies. The change would still include creating a shared/common social identity for people from different groups. That has worked with social identity theory based intergroup conflict interventions that have been used create successful organizational mergers where there were separate corporate social identities (Hogg & Terry, 2001).

However, the new interventions would acknowledge that this change may not be possible on the individual level for some people (i.e. people with a high social dominance orientation). Therefore an emphasis would also need to be placed on making societal/organizational changes that influence the legitimizing myths that help create and regulate those individual dispositions. In other words, the shift in focus would go from the individual and group level separately to the interaction and reciprocal influence of individual and group level influences. That distinction is overstated for the sake of simplicity (as discussed in Chapter II). The actual focus would be three-fold; building on the ever improving nature of theory and research concerning intergroup behavior. The first focus would be exposure to other groups (i.e. environment/situational – individual level), the second would be changing attitudes (i.e. personal/individual), and the last would be changing social policies (i.e. environmental/situational – group level) all the while considering the relationship between the three. In today's society, this would most likely mean focusing on global or organizational social policies that create equality and equity between individuals as well as groups. For example at the societal level this may include a truly global monetary system, similar to the creation of the Euro as the currency of the European Union that had the intention of making trade between countries more equitable. At the organizational level this might include equitable pay systems that are transparent to those within the organization so that members can see that everyone is being treated similarly for similar work.

Other Findings

Another interesting outcome of this study is the somewhat serendipitous, although not entirely surprising finding (based on Redmond, 2007 and Riek et al., 2006; see also limitations) that threat did not manipulate the way that it was expected to. In particular the lack of distinction between personal and intergroup threat suggests several things. The first is that the distinction in the research between the two types may be over stated, and that all types of threat in reality are the same construct simply labeled differently. The second is that this may imply that even in American society (an individualistic culture) that social identity and personal identity are more intertwined than previously envisioned as threat seems to activate defensiveness of identity in general rather than a specific portion. This suggests that it may be more fruitful to examine the influence of general identity on intergroup behavior rather than as the separate constructs of individual and social identity as is currently found in the literature.

Another unexpected finding was that of group status. The vast majority of participants perceived their work organizations to be of extremely high status and very few perceived their work organizations as providing low status. This finding is interesting as it may suggest that working by itself regardless of the reputation of the organization provides people with enough status to build a strong social identity. That may be especially true for the sample for this study as the data were collected during the global recession of 2009 where many people were out of work and job satisfaction may have been higher than normal due to people being happy that they had jobs (Shepherd, 2008).

Limitations of the Study

The results of this study must be interpreted with caution as several problems with the data emerged. The first problem being a restriction of range for the status variable that forced an

unnatural comparison between extremely high status versus all other statuses (including all other positive statuses and a very few low status). The theoretical issue with status may be that it cannot be separated out from other variables such as commitment to the group, which as mentioned previously is a strong influence according to social identity theory. The more practical issue for this research is that status was measured with a single item which did not encourage variability in the responses to allow for truly useful analysis of the construct. It may be that status needs to be manipulated as it seems that when participants recall status that membership in a workgroup by itself is enough to be perceived as providing high levels of status. A potential remedy would be to assign participants experimentally to high and low status groups via procedures used in other research where one group has success versus another group in competition situations such as with Tajfel and Turner's classic studies (e.g. Tajfel, 1981; Tajfel & Turner, 1979; 1986).

The second problem was that several of the sub-scales on two of the four dependent variables were unreliable. While the unreliable scales were discarded from the analyses, these results do not completely coincide with previous findings. However, all four dependent variables were at least partially represented.

Additionally roughly a third of participants did not respond to the threat manipulation as intended. Although the data from these participants were discarded for the a priori analyses, it may have reduced the power of those analyses to a point where detection of differences was not possible. Although the fact that several significant differences were detected in the a priori analyses suggests that this probably was not the case. Nevertheless, a lack of power to detect differences may be the reason that the findings do not strongly support either theory as the general pattern of non-significant results were out of line with previous research as four pairs of

hypotheses did not align with either theory. A quick glance at the observed power in the MANCOVA tables (see Tables 5-7, 9-16) of this research shows that the highest power observed for the hypothesis tests was .60 with the mean observed power being .22, which suggests power was an issue in at least several of the tests.

The strengths of this study were that participants were asked to recall actual situations that happened to them within the previous year so that they had actually experienced the factors (particularly threat) involved rather than the artificial nature of a true laboratory experiment as well as avoid the ethical problems of deception (Lefkowitz, 2003). Although the roughly one third occurrence of not following the assigned manipulation again suggests that threat is difficult to manipulate, or may not be several distinct constructs. In a previous study (Redmond, 2007) a manipulation of threat was not successful in the laboratory, and that was believed to be because threat cannot be artificially induced. This blurring of threat though may be further evidence of Riek et al.'s (2006) conclusion that the various types of threat actually are one construct (or at least combine into a singular perception) and it may be more fruitful to examine future research in this vein. It is recommended that another type of independent variable be examined, perhaps social competition (in line with Shipley, 2008) rather than threat as a more concrete example for participants to latch onto so that the manipulation has a stronger effect. Additionally, the current research expands the literature by applying the concept of social dominance to the realm of work in which it has not been fully examined.

The primary weakness of this study is that it was based entirely on self-reports. As this was an exploratory study, the researcher believed this to be a parsimonious starting point on which future research could be built. However, it may be that including independent variable manipulations that were self-report, writing about oneself and so many self-report dependent

variables increased participant burden. This weakness may be the reason behind the restriction of range for status, and will have to be examined in further detail in the future research. It is recommended in future research that pre-existing high and low status groups be examined, perhaps determined by outside raters.

Another weakness was that some of the recalled threat situations may be recalled as both personal and intergroup threat at the same time, although this was measured with a manipulation check, again this manipulation may be strengthened by switching to another independent variable. Another possible weakness is that not all kinds of identity (beyond personal and social) were examined in this research. This was attempted to be compensated for by using multiple scale measures of identity, although not entirely successful because of the unreliability of several subscales. This research also did not include all SDT concepts (group position, social context, stable individual differences in temperament and personality, gender, and socialization). However, in an attempt to partially address this issue sex, age, group status, and group commitment were measured to examine the theoretical concepts as envisioned by the originators of SDT.

Future Research

Future research will include a replication of this study with several modifications. The first change will be obtaining samples of already existing high and low status groups to increase the chances of detecting the differences predicted by the two theories for those conditions. This will be examined by outside raters as well as perceptions of the individuals participating. The second change will be an expanded measurement of threat using several more items to examine whether the combination of personal and intergroup threat is truly necessitated. A similar change will also occur for the identity scales to increase reliability to stay in line with previous research. Once

these more basic issues are resolved a more conclusive distinction between social identity theory and social dominance theory can be made. Once that distinction is made, a line of research following the stronger theory will be developed.

Footnotes

[1] The term “gender” is the original language of Sidanius and Pratto (1999) and is used here for consistency, even though what is meant by the concept is sex differences (male and female) as opposed to gender differences (masculine and feminine).

[2] The results of the pilot study indicated that in a limited sample (n=19) although multicultural (participants from two countries) and what turned out to be a weak design (several variables had to be collapsed; in particular the important threat manipulation) that when status is high and threat is perceived 10 of 13 responders chose group oriented behaviors to respond to the threat; results in line with the predictions of SDT, not SIT. When status was low and no threat was perceived, 14 of 16 responders chose individually oriented behaviors to respond to the threat; results that are in line with both theories, which can only be separated out when the different types of threat (personal and intergroup) are parsed as is tested by this study.

Table 1

Hypotheses for social dominance orientation

	Theory	
Status	SDT	SIT
High	$\mu_N < \mu_P = \mu_G$	$\mu_N = \mu_P < \mu_G$
Low	$\mu_N = \mu_P = \mu_G$	$\mu_N = \mu_P < \mu_G$

Note: N = No threat, P = Personal threat, G = Intergroup threat

Table 2

Hypotheses for personal identity

	Theory	
Status	SDT	SIT
High	$\mu_N < \mu_P > \mu_G$	$\mu_N < \mu_P > \mu_G$
Low	$\mu_N = \mu_P = \mu_G$	$\mu_N = \mu_P > \mu_G$

Note: N = No threat, P = Personal threat, G = Intergroup threat

Table 3

Hypotheses for social identity

	Theory	
Status	SDT	SIT
High	$\mu_N = \mu_P < \mu_G$	$\mu_N = \mu_P < \mu_G$
Low	$\mu_N = \mu_P = \mu_G$	$\mu_N = \mu_P > \mu_G$

Note: N = No threat, P = Personal threat, G = Intergroup threat

Table 4

Hypotheses for Protectiveness

	Theory	
Status	SDT	SIT
High	$\mu_N = \mu_P < \mu_G$	$\mu_N = \mu_P < \mu_G$
Low	$\mu_N = \mu_P = \mu_G$	$\mu_N = \mu_P > \mu_G$

Note: N = No threat, P = Personal threat, G = Intergroup threat

Table 5

A priori MANCOVA of intergroup versus personal threat

Source	Dependent Variable	*df*	*F*	*η*	*p*	*1-β*
Corrected Model	IFPF	5	2.05	0.22	0.09	.62
	SDO	5	0.28	0.04	0.92	.11
	SISC	5	0.33	0.04	0.89	.12
	PISC	5	1.16	0.14	0.35	.36
Intercept	IFPF	1	35.29	0.49	0.00	1.00
	SDO	1	28.52	0.44	0.00	1.00
	SISC	1	18.67	0.34	0.00	.99
	PISC	1	24.96	0.40	0.00	1.00
Age	IFPF	1	0.94	0.02	0.34	.16
	SDO	1	0.12	0.00	0.73	.06
	SISC	1	0.30	0.01	0.58	.08
	PISC	1	0.43	0.01	0.51	.10
Sex	IFPF	1	0.53	0.01	0.47	.11
	SDO	1	0.20	0.01	0.66	.07
	SISC	1	0.00	0.00	0.98	.05
	PISC	1	0.06	0.00	0.80	.06
Type of threat	IFPF	1	4.64	0.11	0.04	.56
	SDO	1	0.10	0.00	0.75	.06
	SISC	1	0.04	0.00	0.85	.05
	PISC	1	0.52	0.01	0.47	.11
Status	IFPF	1	0.19	0.01	0.66	.07
	SDO	1	1.01	0.03	0.32	.17
	SISC	1	0.17	0.00	0.68	.07
	PISC	1	4.46	0.11	0.04	.54
Type of threat * Status	IFPF	1	1.25	0.03	0.27	.19
	SDO	1	0.01	0.00	0.91	.05
	SISC	1	0.67	0.02	0.42	.13
	PISC	1	0.01	0.00	0.91	.05
Error	IFPF	37				
	SDO	37				
	SISC	37				
	PISC	37				
Total	IFPF	43				
	SDO	43				
	SISC	43				

	PISC	43
Corrected Total	IFPF	42
	SDO	42
	SISC	42
	PISC	42

Table 6

A priori MANCOVA of intergroup versus no threat

Source	Dependent Variable	*df*	*F*	*η*	*p*	*1-β*
Corrected Model	IFPF	5	1.09	0.12	0.38	.35
	SDO	5	1.46	0.16	0.22	.46
	SISC	5	1.01	0.11	0.42	.32
	PISC	5	0.92	0.11	0.48	.29
Intercept	IFPF	1	17.43	0.31	0.00	.98
	SDO	1	41.86	0.52	0.00	1.00
	SISC	1	38.80	0.50	0.00	1.00
	PISC	1	46.41	0.54	0.00	1.00
Age	IFPF	1	0.31	0.01	0.58	.09
	SDO	1	0.02	0.00	0.90	.05
	SISC	1	0.60	0.02	0.44	.12
	PISC	1	0.12	0.00	0.73	.06
Sex	IFPF	1	0.00	0.00	0.99	.05
	SDO	1	0.68	0.02	0.41	.13
	SISC	1	0.00	0.00	0.96	.05
	PISC	1	0.20	0.01	0.66	.07
Type of threat	IFPF	1	0.90	0.02	0.35	.15
	SDO	1	0.03	0.00	0.86	.05
	SISC	1	2.26	0.05	0.14	.31
	PISC	1	1.10	0.03	0.30	.18
Status	IFPF	1	1.84	0.05	0.18	.26
	SDO	1	1.21	0.03	0.28	.19
	SISC	1	2.79	0.07	0.10	.37
	PISC	1	1.06	0.03	0.31	.17
Type of threat * Status	IFPF	1	2.19	0.05	0.15	.30
	SDO	1	5.09	0.12	0.03	.60
	SISC	1	0.00	0.00	0.95	.05
	PISC	1	2.03	0.05	0.16	.29
Error	IFPF	39				
	SDO	39				
	SISC	39				
	PISC	39				
Total	IFPF	45				
	SDO	45				
	SISC	45				

	PISC	45
Corrected Total	IFPF	44
	SDO	44
	SISC	44
	PISC	44

Table 7

Post hoc MANCOVA for all three threat types

Source	Dependent Variable	*df*	*F*	*η*	*p*	*1-β*
Corrected Model	IFPF	7	0.75	0.13	0.63	.27
	SDO	7	1.10	0.18	0.38	.40
	SISC	7	1.13	0.18	0.37	.41
	PISC	7	0.66	0.12	0.70	.24
Intercept	IFPF	1	19.16	0.35	0.00	.99
	SDO	1	38.47	0.52	0.00	1.00
	SISC	1	44.43	0.56	0.00	1.00
	PISC	1	29.04	0.45	0.00	1.00
Age	IFPF	1	0.38	0.01	0.54	.09
	SDO	1	0.04	0.00	0.84	.05
	SISC	1	2.48	0.07	0.12	.33
	PISC	1	0.00	0.00	0.95	.05
Sex	IFPF	1	0.05	0.00	0.82	.06
	SDO	1	0.83	0.02	0.37	.14
	SISC	1	0.02	0.00	0.88	.05
	PISC	1	0.00	0.00	0.95	.05
Type of threat	IFPF	2	0.28	0.02	0.75	.09
	SDO	2	0.23	0.01	0.79	.08
	SISC	2	2.25	0.11	0.12	.42
	PISC	2	1.03	0.06	0.37	.22
Status	IFPF	1	1.32	0.04	0.26	.20
	SDO	1	0.33	0.01	0.57	.09
	SISC	1	0.69	0.02	0.41	.13
	PISC	1	0.69	0.02	0.41	.13
Type of threat * Status	IFPF	2	1.35	0.07	0.27	.27
	SDO	2	2.07	0.11	0.14	.40
	SISC	2	0.49	0.03	0.61	.12
	PISC	2	0.95	0.05	0.40	.20
Error	IFPF	35				
	SDO	35				
	SISC	35				
	PISC	35				
Total	IFPF	43				
	SDO	43				
	SISC	43				

	PISC	43
Corrected Total	IFPF	42
	SDO	42
	SISC	42
	PISC	42

Table 8

Means and standard deviations for dependent variables by threat type and status.

Dependent Variable	Threat type	Status	M	s.d.	N
Protectiveness (IFPF)	Group	Low	28.03	9.23	7
		High	37.00	4.64	5
		Total	31.77	7.85	12
	None	Low	37.00	8.20	13
		High	30.22	14.42	9
		Total	34.23	11.37	22
	Personal	Low	40.40	9.56	5
		High	36.60	5.35	4
		Total	38.71	8.59	9
	Total	Low	36.52	8.79	25
		High	32.72	10.80	18
		Total	34.93	9.75	43
Social Dominance Orientation (SDO)	Group	Low	50.91	15.64	7
		High	54.27	8.97	5
		Total	52.31	11.16	12
	None	Low	59.14	9.78	13
		High	44.89	18.56	9
		Total	53.31	15.39	22
	Personal	Low	46.60	16.80	5
		High	54.00	9.52	4
		Total	49.89	13.80	9
	Total	Low	55.36	12.96	25
		High	49.22	14.46	18
		Total	52.79	13.79	43
Social Identity (SISC)	Group	Low	13.00	5.42	7
		High	13.20	5.40	5
		Total	13.08	5.16	12
	None	Low	15.23	3.68	13
		High	17.00	2.40	9
		Total	15.95	3.27	22
	Personal	Low	15.40	2.30	5
		High	14.75	3.95	4
		Total	15.11	2.93	9
	Total	Low	14.64	4.01	25
		High	15.44	3.90	18

		Total	14.98	3.94	43
Personal Identity (PISC)	Group	Low	13.43	4.28	7
		High	16.80	2.49	5
		Total	14.83	3.90	12
	None	Low	15.92	2.53	13
		High	15.44	4.13	9
		Total	15.73	3.19	22
	Personal	Low	13.20	5.81	5
		High	13.75	3.50	4
		Total	13.44	4.64	9
	Total	Low	12.52	4.75	25
		High	15.39	3.20	18
		Total	13.72	3.74	43

Table 9

MANCOVA of threat on SDO for high status

Source	*df*	*F*	*η*	*p*	*1-β*
Corrected Model	4	1.04	0.16	0.41	.27
Intercept	1	26.18	0.54	0.00	1.00
Sex	1	1.01	0.04	0.33	.16
Age	1	0.00	0.00	1.00	.05
Type of threat	2	1.79	0.14	0.19	.33
Error	22				
Total	27				
Corrected Total	26				

Table 10

MANCOVA of threat on SDO for low status

Source	*df*	*F*	*η*	*p*	*1-β*
Corrected Model	4	1.07	0.11	0.39	.30
Intercept	1	27.64	0.45	0.00	1.00
Sex	1	0.37	0.01	0.55	.09
Age	1	0.25	0.01	0.62	.08
Type of threat	2	1.69	0.09	0.20	.33
Error	34				
Total	39				
Corrected Total	38				

Table 11

MANCOVA of threat on PISC for high status

Source	*df*	*F*	*η*	*p*	*1-β*
Corrected Model	4	0.47	0.08	0.76	.14
Intercept	1	36.05	0.62	0.00	1.00
Sex	1	0.07	0.00	0.79	.06
Age	1	0.93	0.04	0.35	.15
Type of threat	2	0.13	0.01	0.88	.07
Error	22				
Total	27				
Corrected Total	26				

Table 12

MANCOVA of threat on PISC for low status

Source	*df*	*F*	*η*	*p*	*1-β*
Corrected Model	4	1.60	0.16	0.20	.44
Intercept	1	14.72	0.30	0.00	.96
Sex	1	0.03	0.00	0.86	.05
Age	1	0.08	0.00	0.78	.06
Type of threat	2	3.18	0.16	0.05	.57
Error	34				
Total	39				
Corrected Total	38				

Table 13

MANCOVA of threat on SISC for high status

Source	*df*	*F*	*η*	*p*	*1-β*
Corrected Model	4	0.61	0.10	0.66	.17
Intercept	1	17.36	0.44	0.00	.98
Sex	1	0.00	0.00	0.96	.05
Age	1	0.17	0.01	0.69	.07
Type of threat	2	1.09	0.09	0.35	.22
Error	22				
Total	27				
Corrected Total	26				

Table 14

MANCOVA of threat on SISC for low status

Source	*df*	*F*	*η*	*p*	*1-β*
Corrected Model	4	1.32	0.13	0.28	.37
Intercept	1	43.17	0.56	0.00	1.00
Sex	1	0.00	0.00	0.95	.05
Age	1	3.09	0.08	0.09	.40
Type of threat	2	0.78	0.04	0.47	.17
Error	34				
Total	39				
Corrected Total	38				

Table 15

MANCOVA of threat on IFPF for high status

Source	*df*	*F*	*η*	*p*	*1-β*
Corrected Model	4	0.51	0.09	0.73	.15
Intercept	1	12.17	0.36	0.00	.92
Sex	1	0.94	0.04	0.34	.15
Age	1	0.46	0.02	0.51	.10
Type of threat	2	0.78	0.07	0.47	.17
Error	22				
Total	27				
Corrected Total	26				

Table 16

MANCOVA of threat on IFPF for low status

Source	*df*	*F*	*η*	*p*	*1-β*
Corrected Model	4	1.69	0.17	0.18	.46
Intercept	1	19.52	0.37	0.00	.99
Sex	1	0.92	0.03	0.34	.15
Age	1	0.03	0.00	0.87	.05
Type of threat	2	2.60	0.13	0.09	.48
Error	34				
Total	39				
Corrected Total	38				

Appendix A: Self-report of Threat Situations

Please take your time and read all of the questions carefully and think about your responses before writing or selecting a response.

[Salience Prime]

Please describe in a few sentences a work group to which you belong or have belonged to within the past year or so such as at a place of business or a volunteer group. “Work group” could be any group that has some clear goals, purpose or mission. For example, this could mean your department or your organization as a whole.

(Space will be provided here for a written description of the situation).

[Manipulations (presentation of scenarios will be random)]

[No threat.]

Describe a time in the work group you just described when things were going along normally and everyone felt calm. For example, this could have been an employee orientation meeting or a training session.

(Space will be provided here for a written description of the situation).

(Dependent variable measures will go here).

[Threat Manipulation check].

Thinking about the situation that you just described, how did you feel about the situation? Please read each item carefully and indicate how accurately each describes your feelings in the

situation that you just described. Fill in the blank next to each item by choosing a number from the scale below.

1= Completely false in the situation I described

2= Somewhat false in the situation I described

3= Just slightly false in the situation I described

4= Neither particularly true nor false in the situation I described

5= Just slightly true in the situation I described

6= Somewhat true in the situation I described

7 = Completely true in the situation I described

1. I felt that there was no threat to me or my work group
2. I felt that there was something threatening in the situation that was mostly directed towards me
3. I felt that there was something threatening in the situation that was mostly directed towards my work group

[Status Measure]

How do you feel about the importance of the workgroup that you described? Please choose the response that best describes your opinion. How important to you is (was) your membership in that work group? For instance, did the work group provide you with opportunity for success? Did the work group give you a chance to build self-esteem? Did the work group give you pleasurable relationships with others? Etc.

1=not important at all

2=somewhat not important

3=slightly not important

4=neutral

5=slightly important

6=somewhat important

7 =very important

OR

[Personal threat.]

Describe a time in the work group you just described when you felt **personally** threatened from members of another group. For example, feeling that you might lose your job or that you might have to leave the group.

(Space will be provided here for a written description of the situation).

(Dependent variable measures will go here).

[Threat Manipulation check.]

Same as above.

[Status Measure]

Same as above.

OR

[Intergroup threat.]

Describe a time in the work group you just described when you felt that the **group** was threatened by members of another group. For example, feeling that the group might lose sales to a competitor or the group might have to disband.

(Space will be provided here for a written description of the situation).

(Dependent variable measures will go here).

[Threat Manipulation check.]

Same as above.

[Status Measure]

Same as above.

Demographics

How many years have you been working? (nearest whole year) _____ Years

How long have you held your current position? (nearest whole year) _____ Years

What is your age? (nearest whole year) _____ Years

What is your sex?

Female

Male

What is your ethnicity or national origin? Please check all that apply.

American Indian or Alaska Native

Black, African Am., or Negro

Asian Indian

Chinese

Filipino

Japanese

Korean

Vietnamese

Cuban

Hispanic, Latino, or Spanish origin

Mexican, Mexican Am., Chicano

Puerto Rican

Another Hispanic, Latino, or Spanish origin

White

Native Hawaiian

Guamanian or Chamorro

Samoan

Other Pacific Islander

Other: _____

[Check that participant is working]

What is/was your work status during the situations you described before? Please circle one.

a. Paid full time employment (35 or more hours per week on a permanent basis)
b. Paid part time or temporary employment (35 hours per week or with an agreement that employment is only for a limited time)
c. Volunteering full time work (35 or more hours per week on a permanent basis)
d. Volunteering part time or temporary work (35 hours per week or with an agreement that the work is only for a limited time)

e. Unemployed

Thank-you very much for your cooperation.

Appendix B: Modified SDO_6 (Sidanius & Pratto, 1999)

INSTRUCTIONS: These items describe different aspects of groups. Please read each item carefully and indicate how accurately each describes your feelings in the situation that you just described. Fill in the blank next to each item by choosing a number from the scale below.

1= Completely false in the situation I described

2= Somewhat false in the situation I described

3= Just slightly false in the situation I described

4= Neither particularly true nor false in the situation I described

5= Just slightly true in the situation I described

6= Somewhat true in the situation I described

7 = Completely true in the situation I described

a. Some groups of people were simply inferior to my group.
b. In getting what the group wanted, it was sometimes necessary to use force against other groups.
c. It's OK if my group had more of a chance in this situation than others.
d. To get ahead in this situation, it was necessary to step on other groups.
e. If certain groups stayed in their place, we would have had fewer problems.
f. It's probably a good thing that certain groups were at the top and other groups were at the bottom.
g. Inferior groups should have stayed in their place.
h. Sometimes other groups must be kept in their place.

i. It would have been good if groups could have been equal.

j. Group equality should have been our ideal.

k. All groups should were given an equal chance in this situation.

l. We did what we could to equalize conditions for different groups.

m. This situation increased social equality.

n. We would have had fewer problems if we treated people more equally.

o. We should have striven to make incomes as equal as possible.

p. No group should have dominated in this situation.

Appendix C: Modified Social and Personal identity scales (Ellemers et al., 1999)

INSTRUCTIONS: Same as Appendix C; items from Appendix C and D will be presented together.

Response scale: Same as Appendix B.

Social identity group self-esteem items: a-d

Social identity self-categorization items: e-g

Social identity commitment to the group items: h-j

Personal identity group self-esteem items: k-q

Personal identity self-categorization items: r-t

a. I think my group had little to be proud of
b. I felt good about my group
c. I had little respect for my group
d. I would rather not tell that I belonged to this group
e. I identified with other members of my group
f. I was like other members of my group
g. My group was an important reflection of who I was
h. I would have liked to continue working with my group
i. I disliked being a member of my group
j. I would rather have belonged to another group
k. I had what it took
l. I think I had sufficient qualities
m. I generally felt like a failure

n. I could do most things just as well as others

o. I had nothing to be proud of

p. I felt good about myself

q. I was generally satisfied about myself

r. I saw myself as someone with individual characteristics

s. I was different from other people

t. I felt like a unique person

Appendix D: Modified Inventory of Family Protective Factors (Gardner et al., 2008)

Directions: This is an inventory about the events your workgroup has experienced and how your workgroup has handled them. Please indicate to what extent each of the following statements is true for your workgroup. Fill in the blank next to each item by choosing a number from the scale below.

1 = Almost always like my workgroup

2 = Generally like my workgroup

3 = Sometimes like my workgroup

4 = A little like my workgroup

5 = Not at all like my workgroup

a. There have been more positive experiences than problems with the health status of our workgroup in the past 3 months.
b. There have been more positive experiences than problems with our workgroup's finances in the past 3 months.
c. There have been more problems than positive experiences with our workgroup's friends in the past 3 months.
d. Our workgroup has had more positive experiences than problems with work/school in the past 3 months.
e. Our workgroup is optimistic and concentrates on the positives in most situations.
f. Our workgroup is creative, resourceful and self reliant.
g. Most people think our workgroup is friendly and others like to be around us.

h. Our workgroup is competent and has pride.

i. Our workgroup has a good relationship with at least one supportive person.

j. Our workgroup has at least one caring person in our lives.

k. Our workgroup can trust at least one person in our lives.

l. Our workgroup has at least one person who is interested in our lives.

m. Our workgroup has been able to resolve many (but not all) of our problems by ourselves.

n. Our workgroup has control over many (but not all) events in our lives.

o. Our workgroup has coped well with one or more major stressors in our lives.

p. Our workgroup has been able to make “the best out of a bad situation” a number of times.

Appendix E: Recruitment E-mail

Hello,

I am a doctoral student collecting data for my dissertation. My research requires individuals who are working and have had experience on the job. Therefore traditional age students are not appropriate for my research and your participation would be greatly appreciated. No identifying information will be collected, this data will remain confidential.

As such, you are invited to participate in a research study called “Evaluating work situations.” The purpose of the study is to see how employees respond to different types of situations at work. During the time that you participate in this study you will be asked to describe your workplace and then describe a situation that occurred at work. You will then answer some questions regarding your opinions about that situation. The study should take less than a half hour of your time, but you may learn something about how you react at work, and the results of the study may help expand the research knowledge about how people react at work. This study is for research purposes only.

If you are at least 18 years old, are currently working (or have worked in the past year), and wish to participate in this study, please follow the link below. Also, if you have any questions about the research, please feel free to contact the researcher using any of the below methods.

http://www.baruch.cuny.edu/asset/survey?id=416946

Regards,

Brian F. Redmond

Appendix F: Informed Consent

Brian Redmond, a PhD student at The Graduate School and University Center and Baruch College, City University of New York, is conducting the present research.

The title of the study is “Evaluating work situations.” The purpose of the study is to see how employees respond to different types of situations at work. During the time that you participate in this study you will be asked to describe your workplace and then describe a situation that occurred at work. You will then answer some questions regarding your opinions about that situation. You will also be asked to complete a demographic sheet that will ask you to give your age, sex, and other personal information. If you are younger than 18 years old, please do not proceed; please discontinue the survey at this time and we thank-you for your time. Participation should take less than 30 minutes of your time. At the conclusion of the study we will explain in some more detail what the study is about.

If you want to, you can discontinue participating in the study at any time for any reason without penalty; you may also skip any questions that you do not wish to answer. However, we would appreciate your cooperation. Your completion of the study will be taken as your consent to participate. Participation in this study may benefit you by allowing you to see how you respond to situations at work. This study may benefit society by contributing to the understanding of how workers make decisions about their behavior at work.

All of the data and information collected will remain anonymous. No one will be able to identify your responses.

Your participation is entirely voluntary. I will be happy to answer any questions or concerns you may have about this study. Please feel free to contact me at (814) 863-0409. To obtain more information about your rights as a research participant, please feel free to contact the Institutional Review Board (IRB) for Human Research at Baruch College, City University of New York (646) 312-2205.

(or)

Your participation is entirely voluntary. I will be happy to answer any questions or concerns you may have about this study. Please feel free to contact me at (814) 863-0409. To obtain more information about your rights as a research participant, please feel free to contact the Office for Research Protections (ORP) at The Pennsylvania State University (814) 865- 1775.

Appendix G: Instructions

Introduction to study

You will be asked to describe in writing some things about your current or a past place of work. This could be a business, a volunteer organization, a non-profit organization, or any other place at which you have worked with a group to achieve some goal(s) set by the organization even if it was not paid work. If you are not currently working, please try to think about an organization in which you have participated within the past year or so. Second, after you have briefly described your workgroup, you will be asked to describe a situation that occurred at that work within the past year. Third, after you have described the situation you will be asked to answer some questions regarding how you thought, felt, and acted in that situation. After that there will be some brief biographical questions and a further explanation of the study will be provided.

Appendix H: Debriefing

Thank you for participating in this study. The purpose of the study was to determine how people react to different types of threats at work; personal and group oriented threat, as well as no threat at all. You were asked only about one of these situations, other people were asked about the others. There are two competing psychological theories about how people will behave under these situations. “Social Identity Theory” states that people will behave differently under the two types of threat because people react differently in various types of situations, whereas “Social Dominance Theory” states that people will behave the same because there is a personal characteristic that all people have that predisposes them to do so. This research project hopes to provide evidence as to which is better at explaining people’s behavior at work when faced with threatening situations.

Please do not discuss this research with any other coworkers at the college until the end of the semester. If you have any questions or concerns, or if you would like to know the general results of the research project, contact me at (814) 863-0409.

Again, I thank you for your participation.

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