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WHY WHO YOU ARE AT THE TIME MATTERS: AN EXAMINATION OF THE  
RELATIONSHIP BETWEEN SOCIAL IDENTITY SALIENCE AND RISKY  
DECISION MAKING

By

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## **ABSTRACT OF THE DISSERTATION**

**Why who you are at the time matters: An examination of the relationship between social identity salience and risky decision making**

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Risky choice is an integral part of the strategic decision making process. It encompasses both organizationally and personally relevant outcomes. Individual decision makers must navigate the process in such a manner that yields optimal results for the organization as well as the individual decision maker. As a result, it is important to further uncover additional antecedents to strategic decision making in organizations.

The goal of this dissertation is to examine how salient social identities, or the social identity that is psychologically active at the time a decision is made, influences the risky decision making process. Specifically, I explore the question of whether individuals in a particular social group change their risk taking depending on the context that activates their social identity. I argue that individuals will be more likely to make a risky decision when their identity puts them at an advantage (positive social identity) than when they are put in a disadvantageous position (negative social identity). In addition, I argue that identity orientations, or whether an individual views himself as separate from or a representative of their social group, influence risky decision making. The results provide some evidence that priming social identities can affect the nature of an individual's risk taking. Boundary conditions to these relationships are discussed.

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*Taking our powers of rapid cognition seriously means we have to acknowledge the subtle influences that can alter or undermine or bias the products of our unconscious*

*-Malcolm Gladwell*

## **Chapter 1: Introduction**

Since the latter part of 2008, this country has experienced a devastating collapse of the economic structure that has been held in such high regard for the past decade. Of particular import is the list of firms that have fallen victim to this economic demise...Bear Sterns, Morgan Stanley, Merrill Lynch. These companies have stood guard at the helm of the financial gate for more than a century. They have all been top performing firms in their own right and have been the launching pad for successful careers. They now lay in ruin. Overwhelmingly, the key to their demise has involved a complicated, multi-layered packaging of seemingly high-risk debt that relied, precariously, on the sustainability of a fragile debt system. Because the negative impact of this collapse has been so far reaching, it is important that we understand what prompted individuals from these firms, and others like them, to engage in such high-risk transactions.

According to prospect theory, individuals are conservative when they focus on what can be gained, but are more risk-taking when their focus changes to the possibility of experiencing a loss (Kahneman & Tversky, 1979; Tversky & Kahneman, 1986). Arguments supporting this theory concentrate on the nature of the prospect and how its presentation can influence an individual's decision making. What the theory does not explore is how subtle changes to an individual's cognitions brought on by social psychological factors can change how an ambiguous prospect is perceived. Very often

individuals are presented with prospects that are not clearly framed in one direction or another, unlike what has been demonstrated in Khaneman and Trversky's research (1979, 1986). As such, the question remains whether individuals experiencing different social influences would view the same ambiguous prospect differently. For example, did individuals in high performing firms like Merrill Lynch initially view the decisions that led to the economic problems this country is presently experiencing as high-risk decisions, or did membership in these firms alter the lens used to view the decision such that it was considered only a moderately risk endeavor? Would individuals who identified with a poorer performing firm perceive a similar level of risk when evaluating the same prospect, leading them to make the same decision? The goal of this dissertation was to understand what happens when the presentation of the prospect remains the same but the social influences on the decision makers change.

Risky choices are an integral part of strategic decision making (Ruefli, Collins & Lacugna, 1999). Key decision makers in the organization must often decide between options that may simply extend an organization's longevity by maintaining the status quo (Bigley & Wiersema, 2002; Geletkanycz, 1997; Hambrick, Geletkanycz, & Fredrickson, 1993; Hambrick & Mason, 1984) or risky alternatives, which can either propel the organization to new performance heights (Walls & Dyer, 1996), or result in negative consequences or even the death of the firm (Audia & Greve, 2006). While strategic decisions are important for the organization as a whole, they can be equally relevant to the individual decision maker. At the very extremes, the right decision can make

someone a star or can end a career (see recent press regarding CEOs of Merrill Lynch and Time Warner) (Jackall, 1984).

While organizations often take measures to encourage decision making that benefits the organization and its stakeholders (Larrazza-Kintana, Wiesman, Gomez-Mejia, & Welbourne, 2007; Wiseman & Gomez-Mejia, 1998), there is evidence that managers do not always respond to this encouragement in the way that is expected but continue to behave in ways that reflect their self-interest (Larrazza-Kintana, et. al., 2007). This dissertation moves to explore social identity management strategies as a possible source of this self-motivated behavior.

A strategic decision maker must evaluate the risks involved with each decision that he or she makes. Risk, or the “extent to which there is uncertainty about whether potentially significant and/or disappointing outcomes of decisions will be realized” (Sitkin & Pablo, 1992, p. 10) is a multi-dimensional construct that is both context-dependent and domain-specific, encompassing both financial and personal risks (Barbosa, Kickul, & Liao-Troth, 2007; Hancock, Johnson, Wilke, 2006; Hogarth, 1987; Slovic, Fischhoff & Lichtenstein, 1982, Weber, Blais, & Betz, 2002). For example, Weber, et. al.(2002) found that individual risk-taking behavior changed from one domain to the next, depending on how the person perceived the risks in different contexts. This research has provided further evidence that risk taking is not simply a measure of dispositional differences, but must be considered in a social context, where individual perceptions can account, in part, for these differences.

Risk perception, and decision making as a result of these perceptions, are susceptible to the effects of social psychological operations of human behavior (Sitkin & Pablo, 1992). For example, emotions have been found to have an impact on how individuals make risky decision (Seo & Barrett, 2007; Williams & Wong Wee Voon, 1999), and entrepreneurs' illusions of control influence whether or not they view an event as an opportunity (Keh, Foo, & Lim, 2002). Considering that managers' biases often cloud effective strategic choice (Cyert & March, 1963; Das & Teng, 1999; Hodgkinson, Brown, Maule, Glaister, & Pearman, 1999; March & Simon, 1958), including their inclination to take risks (Bryant & Dunford, 2008; McNamara & Bromiley, 1997; Kahneman & Tversky, 1979; Tversky & Kahneman, 1986), organizations would benefit from further understanding how these social-psychological factors operate to affect risky decision making.

In this dissertation I offer a model of risky decision making that introduces social identity salience as a social psychological component to the model. It explores how salient social identities, or the identity that is psychologically active at the time risk is being evaluated, affect the way in which individuals make a risky decision. Specifically, I examined whether individuals differ in their risk-taking behavior when the context under which they are making the decision changes. It is not meant to be an in-depth study of risky decision making, but an opportunity to link previously unrelated concepts to generate a model that extends Sitkin & Pablo's (1992) work (Fig.1). Their theory of risky decision making notes that decision behavior is based on the way individuals perceive risk (Sitkin & Weingart, 1995). Their model suggests that social factors can influence an

individual's risk perceptions, but they do not elaborate on what those potential factors may be. I proffer that an individual's salient social identity may shape risk-taking behavior by influencing his or her perception of the risks involved in the decision.

Social identity refers to "those aspects of an individual's self-image that derive from the social categories to which he perceives himself as belonging" (Tajfel & Turner, 1986, p.16). In other words, individuals use membership in a variety of social groups to help define who they are. Individuals have been found to have multiple social identities (Stryker & Serpe, 1994), each of which have prototypical behaviors associated with them (Stryker & Burke, 2000). I argue that there are multiple ways in which the same decision alternative can be evaluated based on the way in which an individual's social identity is made salient at the time the decision is made. As a result, individuals varying in salient social identities can demonstrate different levels of risk-taking behavior.

While managers can experience corporate success as a result of their risk-taking behavior (MacCrimmon & Wehrung, 1986, 1990), they may also be motivated to protect themselves from the negative outcomes of risky decisions (Josephs, Larrick, Steele, & Nisbett, 1992). This motivation to protect one may result in managers altering their risk-taking behavior according to the condition under which a decision is being made. For instance, individuals new to the movie industry were less likely to take risks in extremely autonomous positions (Peretti & Negro, 2006). The freedom to make decisions exposed the novices to what was considered unmanageable levels of uncertainty, prompting them to engage in a more protective mode (Schwenk, 1984), and motivating risk averse behavior.

Previous research has shown that individuals vary in risk propensity, a general tendency towards risk taking behavior. For instance, men have been found to take more risks than women (Barsky, Juster, Kimball, & Kimball, 1997; Karakowsky & Elangovan, 2001; Levin, et. al., 1988), and entrepreneurs are more likely to take risks than managers (Stewart & Roth, 2001). Within this however, propensity towards risk that is not completely stable, but is often context-specific (March & Shapira, 1987; McNamara & Bromiley, 1997; Schubert, Brown, Gysler & Branchinger, 1999; Starbuck & Milliken, 1988). Contextual cues, either directly or indirectly, can alter how individuals perceive risks (Sitkin & Pablo, 1992), often constraining the decision maker and forcing a less-than-optimal decision. In reviewing the commonalities between these findings, it is possible that differences found in risk-taking can be explained by evaluating this behavior through a social identity lens. That is to say, it may not simply be membership in these groups that prompts a disparity in risk propensity, but the way in which the groups interpret the social context in which these risky decisions are made.

For example, executives at CBS network decided to air the controversial show “All in the Family” despite the fact that market research on the show was negative (Gladwell, 2005). In this instance, “...the network was so dominant at that point that it felt it could afford to take a risk on the show” (Gladwell, 2005, p. 174). Having a positive social identity as a member of a successful network may have influenced the executive to perceive the risks around making the decision to air the show as only moderately high, allowing them to air the show. In essence, their previous successes may have acted as a buffer in the event the decision failed. If another individual, or even that same individual

was a member of a poorer performing network, the lack of successful past experiences may have caused them to view the same decision to air the show as too high a risk to take, ultimately leading to the decision to decline the show.

Decision makers operate under multiple constraints, which can impede individuals from reaching optimal decisions (March, 1978; Simon, 1982; Taylor, 1975). This may be because “the elements of the definition of the situation are not ‘given’ but are themselves the outcome of psychological and sociological processes, including the chooser’s own activities and the activities of others in the chooser’s environments” (Mahoney, 2005, p. 49). For instance, managers may have seemingly objective information as to the financial concerns involved in a particular transaction, but whether they decide to take risks is contingent upon a number of factors, including their past history and the lens through which they are viewing the information (Sitkin & Pablo, 1992; Sitkin & Wiengart, 1995).

Managers find that they must navigate strategic decision making carefully since they are engaged in two processes simultaneously (Lopes, 1987). They must find the balance between what is best for the organization and what is politically savvy for their personal survival within that organization (Jackall, 1984). What may be considered a low-risk opportunity for the organization may still be too high a personal risk for the individual decision maker to take. The evaluation of personal risk may be influenced, in part, by salient social identities because they may shape how managers navigate the decision making process.

*Problem framing as an influence on risk perception*

Differences in risk perception are contingent upon the way in which a problem is framed (Kahneman & Tversky, 1979; Tversky & Kahneman, 1986), suggesting that shifts in problem framing provoke changes in risk taking behavior. Specifically, problems framed positively lead to risk aversion, while negatively framed prospects result in risk taking behavior. Individuals are less likely to take risks in an environment of certain gain, and more likely to take risks in the face of possible loss. In addition, individuals demonstrate higher levels of risk-taking when that risk is the most dominant solution to the problem, but will revert to their general propensity when the riskier prospect is not as obvious (Tversky & Kahneman, 1986). For example, an officer in an organization with few slack resources must decide whether or not to adopt a new technology into his or her business. If that manager is generally risk-averse, she may choose to wait if she feels there is more to lose in making the transition than there is to gain. However, if this new technology is quickly becoming the industry standard, she may feel that she is left with little choice but to take the risk.

With the understanding that evaluations of risk are not completely utility-based (Tversky & Kahneman, 1979), it is in the interest of scholars and practitioners to further disentangle the complex undertaking of making risky decisions. While there is an increased interest in examining how social identity theory applies to organizational practices (Boen, Vanbeselaere & Cool, 2006; Chattopadhyay & George, 2001; Haslam, et. al., 2006; Highhouse, Thornbury, & Little, 2007; Kriener, Ashforth & Sluss, 2006; Lewis & Sherman, 2003; Tidwell, 2005), there is little evidence to date that links it specifically to organizationally relevant strategic outcomes.



In this dissertation I attempt to show that a salient social identity influences the way in which individuals evaluate a risky decision. I contend that the prototypical behavior associated with that identity group shapes the decision environment. According to social identity theory (Tajfel & Turner, 1979;1986), and self-categorization as an extension (Hogg & Terry, 2000), individuals rely on perceptions of group membership to help them order their environments. The general theory argues that group membership gives people a sense of belonging, as well as provides a boost in esteem. However, subsequent research has demonstrated that social identity is much more nuanced than was initially proposed (Hogg, Abrams, Otten & Hinkle, 2004; Lewis & Sherman, 2003; Hogg & Terry, 2000; Kelly, 1990) . For example, individuals often cannot control to which group they must categorize themselves, and membership in that group can put an individual at a disadvantage (Mummendey, Kessler, Klink,& Mielke, 1999).

While positive social identities follow the traditional model of social identity theory, where individuals seek group membership to enhance their sense of belonging and to boost their level of self-esteem, negative social identities can have the opposite effect (Mummendey, Kessler, Klink, & Mielke, 1999). Although group members in these negatively valenced groups experience a sense of security due to their membership (Tajfel & Turner, 1986), they also perceive that group membership puts them at a disadvantage (Kelly, 1990). In essence, it is better to belong to a group than not, even if there may be a personal price to pay for that membership (Jost & Banaji, 1994; Jost, Banaji, & Nosek, 2004). As was stated earlier, group membership orders one's environment, helps an individual to understand her place in society and provides a guide

to behavior. Even if that guide shows an individual's place as being lower in the social hierarchy, members may continue to experience a sense of security in their ability to know what is expected of them and what to expect from others (Sidanius, 1993; Sidanius, Pratto, van Laar, Levin, 2004).

In this dissertation I provide some evidence that members of a particular social identity group vary in risky decision making behavior based on the context in which the decision is being made. This argument is made at both the individual and the group level. First, I attempt to demonstrate that membership in a social identity group may be associated with context-driven levels of risk-taking behavior. That is to say, members of a particular social identity group may change their risk-taking behavior based on the way in which that group's social identity was made salient. My second goal was to demonstrate that these differences in risky decision making could be replicated within the individual in that changes to the salient social identity may affect his or her risk perception, thereby altering risk-taking behavior from one context to another.

It is my intention to contribute to the literature in the following ways: 1) by providing further evidence of how contextual factors, specifically factors that prime a particular social identity, can influence decision making in organizations; 2) extending Sitkin & Pablo's (1992) argument that risky decision making is contingent upon the way in which risks are perceived by demonstrating that social identity salience can influence those perceptions; and 3) providing evidence of organizationally specific outcomes which support the notion that social identity salience has a social psychological impact on the decision making process.

## CHAPTER 2: REVIEW OF THE LITERATURE

### *Risky behavior*

Risk has been identified in the management literature as an important factor to consider during the strategic decision making process in organizations. The way in which individuals perceive risk also contributes to differences in risk-taking behavior (Sitkin & Weingart, 1995). Risk is defined as the likelihood and magnitude of possible loss (March & Shapira, 1987), where a risky choice “is one that contains a threat of a very poor outcome” (March & Shapira, 1987, p. 1407). When an individual assesses the risks associated with pursuing a particular idea, he or she will evaluate the possibility that a loss will occur and what the potential magnitude of that loss will be.

A great deal of research has been done to understand the nature of risky decision making and the processes by which risky decisions are made. A number of factors affect risk-taking behavior, such as problem framing (Kahneman & Tversky, 1979), and mood (Mittal & Ross, 1998; Mano, 1994; Isen & Patrick, 1983). In essence, the element of risk complicates the decision making process, which has led to the call for the introduction of psychological and social psychological factors to further understand how risky decisions are made.

Past research has divided risk-taking behavior into two primary components: risk propensity and risk perception (Keil, & Wallace., 2000; March & Shapira, 1997; Sitkin & Pablo, 1992; Sitkin & Weingart, 1995). Risk propensity is described as a stable individual difference and is defined as the general likelihood of a person’s behaving in a more or less risky way, although earlier studies demonstrated the relative instability of an

individual's risk propensity (Wehrung, MacCrimmon, & Brothers, 1984), particularly when personal wealth was at stake. There is evidence of group differences in risk propensity; for example, based on a simulated task, men were less cautious than women and were more willing to take gambles (Levin, et. al., 1988) and public-sector administrators were more risk-averse than were members of the private sector (Brown, 1970). In addition, women were particularly more conservative than men when they felt the decision environment was ambiguous, meaning where no obvious solution was available (Zinkhan & Karande, 1991).

Risk perceptions, on the other hand, are more situation specific and signify the way in which individuals notice and respond to risky situations. These differences in perceived risk to the individual are argued to influence the degree to which an individual will engage in risky behavior. For example, entrepreneurs evaluated opportunities based on their perceptions of risk (Keh, Foo, & Lim, 2002), and were less likely to fund business opportunities when they perceived the risks involved in the ventures as too high (Mullins & Forlani, 2005)

Sitkin & Pablo (1992) proposed that a number of possible constructs have an impact on risky decision making. For example, individuals often use social influence to inform their risk-taking behavior. Organization members often take their cue from others in the environment as to what should be considered a risky endeavor. They also note that an individual's prior history shapes risk perception. While they argue that all of these influences shape the way problems are framed, their primary argument is that both risk propensity and risk perception are mediators to risky decision making. Thus, when

individuals are asked to make a particular decision, both their natural tendency towards risk-taking and the way in which they view the decision-making context influence the likelihood of making a decision.

As a follow-up to that framework, Sitkin & Weingart (1995) tested parts of this theory, and found that risk propensity mediated the relationship between outcome history and risky decision-making behavior, while risk perception mediated the relationship between problem framing and behavior. Specifically, the outcome of past decisions impacts an individual's risk propensity, while the way in which problems are framed has an impact on how risks are perceived. Of particular importance to this dissertation was the finding that higher perceptions of risk had a negative impact on the propensity to engage in risky behavior. Because risk perception significantly affects risk-taking behavior, it is important to identify and understand the antecedents to these differences in risky decision making. For example, Seo & Barrett (2007) found that the intensity of individuals' emotions actually enhanced their decision making performance. However, there is no evidence to date that an individual's risk taking behavior is associated with a salient social identity. With this in mind, I argue that social identity salience is an additional antecedent to risk perception and, as such, risky decision making.

### **Social identity**

According to the minimal group paradigm of social identity theory (SIT), individuals are inclined to distinguish themselves from others by classifying themselves into in-group members and out-group members (Tajfel & Turner, 1986). In-group members include all individuals, who, in a specific context, are similar to them, while out-group members

encompass all relevant others. For example, when a person first starts a new job, he or she may categorize people based on a number of social groups, including race, gender, education, rank, etc. That person asks himself “How is this person similar to or different from me? How should I treat that person?” This categorization process creates a prototype of behavior for that individual, reducing the uncertainty of the situation and providing a schema, at least initially, for how he or she should behave towards the other individual. A comparison between the members of one’s group and members of a relevant, but opposite group is difficult to avoid (Tajfel & Turner, 1986), often irreversible (Johnson, et. al., 2000), and very potent (Ashforth & Humphrey, 1997; Tajfel & Turner, 1986). In other words, it is quite likely that individuals are constantly assessing their environment in any given situation and identifying their place in it.

Although one's primary goal in categorizing individuals is to reduce the uncertainty of one’s social environment, another goal is to maintain a positive self-concept (David & Turner, 1999; Hogg & Terry, 2000). This is defined as the in-group bias (Tajfel & Turner, 1986). According to SIT, once an individual has distinguished the in-group members from the out-group members, it is assumed that the individual will favor members of his own group over members of the opposing group in a number of ways. These include forming negative stereotypes about the out-group members (Tajfel & Turner, 1986) and ignoring negative information about their own group members (Hutchinson & Abrams, 2003). To put it simply, a person will first group everyone into “us” and “them” categories and then attempt to show how “we” are better. It is important

to note, however, that these comparisons are based on what is salient to that individual within a particular context.

### *Identity salience*

Identity salience is an essential concept in SIT (Brickson, 2000; Briley, Wyer, & Robert, 2002; Tajfel & Turner, 1984). Research in this area has highlighted the fact that an individual has multiple social identities (Randel, 2000). Oakes (1987, pg. 118) defines a salient identity as the “one which is *functioning psychologically* to increase the influence of an individual’s membership in that group on perception and behavior”. It is the salient identity that informs individuals on how to behave in a particular encounter (Stryker & Serpe, 1994). For example, Foreland, Deshpande & Reed (2002) found that when men were in a diverse group, even if they were still in the majority, their gender identity became salient. It is this numerical distinctiveness that primes a particular identity. In addition, recognizing others’ distinguishing characteristics primes one identity to become salient over another (Pratt, Rock & Kaufmann, 2001; Randel, 2000).

While individuals have multiple identities (Stryker & Serpe, 1994), there is evidence that there is a “hierarchy of salience” which changes as the context changes (Randel, 2000). For example, an employee in the sales department of a particular organization may function in terms of her work-group identity when working internally on a cross-functional team which contains representatives from different departments across the organization. However, she may operate in terms of her organizational identity externally when representing the company at a recruiting event.

### **Identity Valence: Positive versus Negative Social Identities**

An initial assumption of social identity theory was that members of a particular group would automatically find their group to be superior, and that they would favor their group members over other people. In this way, they create a positive social identity for themselves. However, subsequent research has shown social identity to be more complex. Instead, one is often unable to control to which group one is categorized, and that this group may have either a positive or a negative social identity (Blanz, Mummendey, Mielke, & Klink, 1998). That is to say, there is usually little confusion as to which groups one should be categorized when categorizations are based on demographic factors such as race or gender, for example. The line of demarcation between categories often creates groups that are either high or low in prestige (Hogg & Abrams, 1988). As compared to a positive social identity group, a negative social identity is defined as identifying with a group that is disadvantaged (Blanz, et. al., 1998). Although not always, this disadvantage is often determined by status differences between the opposing groups and can change according to the context.

Within the organizational setting, an individual's social identity can be based on any group that can be distinguished from others, including the organization, work group, department and cohort, or it may be on more fixed groups, such as race, age and gender (Ashforth & Mael, 1989). If the psychological operations that trigger the social categorization and identification processes are being elicited within organizations, it is imperative to understand if and how they are affecting organizational outcomes.

### **Identity Orientation: Collective versus Individual Social identities**



Research in the SIT domain has also found that individuals also have either a collective or individual identity that is often at odds with one another (Spears, 2001). A collective identity is “one that is shared with a group of others who have (or are believed to have) some characteristics in common” (Ashmore Deaux, & McLaughlin-Volpe, 2004, p. 81). This phenomenon refers to the individual (Simon & Klanderman, 2001) because, by definition, its presence is determined by whether a person considers himself or herself to be part of a collective (Deaux, 1995; Brewer & Gardner, 1996). However, the concept of collective identity differs from both individual and relational identities in that it connotes a depersonalization of the categorization process, and rather focuses on a cognitive interpretation of the stereotypical characteristics of group members (Brickson, 2000).

As is true with distinguishing between positive and negative social identities, the level of social identity also varies according to the context (Ashmore, et. al. 2004). Brickson (2000) notes that “the identity orientation elicited by a given situation affects individuals’ cognitive affect and behavioral responses.” (p. 2). In addition, the priming of either a collective or an individual identity relies on a complex, self-categorization process (Hogg & Terry, 2000) wherein even those who appear to obviously fit into a particular group vary in their sense of ‘belongingness’ (Phinney, 1996). Identity orientations are as much about ‘who I am not’ as they are about ‘who I am.’

As was previously stated, whether an individual or collective identity is primed depends on the degree to which an individual identifies with a group. Ashforth and Mael (1989) define identification as “the perception of oneness or belongingness.”(p. 21)

Although an individual may categorize himself to a particular group, that categorization does not assume identification with that group (McGarty, 2001). For example, while I may categorize myself as a Rutgers student, I may not consider myself a prototypical member of that category. As a result, I may not identify with other Rutgers students and continue to operate in ways to distinguish myself from the collective.

### **Identification**

The identification construct has been studied on a number of levels of abstraction. Dutton, Dukerich & Harquail (1994, p. 239) define identification as the “degree to which a person defines him or herself as having the same attributes that he or she believes defines the [group].” The more one learns about the group and the norms associated with group membership, the more one is able to identify with that group. As one continues to identify with the group, one begins to internalize this information such that it becomes embedded within that individual’s thought process and, as such, behavior.

Work effort, job satisfaction, organizational commitment and turnover intentions have all been linked to group identification (Cicero & Pierro, 2007). For example, high identifiers were found to be more satisfied with their college alma mater, more likely to encourage their children to attend that institution, and had greater intentions of making alumni contributions than did those with lower levels of identification (Mael & Ashforth, 1992). Differences in identification levels affect how we react to other members in our social groups (Coull, Yzerbyt, et. al., 2001) as well as members of relevant out-groups (Nadler & Halabi, 2006).

The degree to which one identifies with a particular group is reflective of the way in which that person was socialized, an iterative process wherein one learns the norms and values associated with group membership and solidifies one's place in that group. Ashforth & Mael (1989) describe this as the socialization-identification-internalization process. As a result of the socialization process, individuals high in group identification are also more inclined to base their preferences on group norms when in-group members were present as compared to when out-group members were present (Smith & Terry, 2006), and were also found to have higher levels of group loyalty and commitment than did their low-identifying counterparts (Elmgers, Spears & Doosje, 1997). In fact, high identifiers were less inclined to leave their group even when they experienced a personal threat based on their membership (Elmgers, et. al, 1997).

### CHAPTER 3: HYPOTHESES DEVELOPMENT

#### *Shifting between identities*

As was stated earlier, SIT's basic premise is that individuals are primarily motivated to categorize themselves and others into social groups to enhance their self-concept and to help interpret their environment. These social groups are generally associated with prototypical behavior, which results in a behavioral expectation both from in-group and out-group members. For example, Mahoney (2005) states, "sales managers react like sales managers because they occupy particular organizational positions, receive particular kinds of communications, are responsible for particular sub-goals and experience particular kinds of (economic) pressures" (p.21). That is to say, identifying as a sales manager is not only contingent on how that individual views herself, but also on how others respond to her. The ways in which an individual experiences his work environment and functions in that capacity all contribute to an individual's self-categorization to, and identification with his group (Hogg & Terry, 2000; Tajfel, 1978). This identification is also an iterative process (Ashforth & Mael, 1989) in that initial levels of identification with the sales group leads to behavior which is that of the prototypical sales manager, further solidifying his identity as a sales manager.

In certain contexts self-categorization and identification to a particular social group do not enhance the self-concept but cause the individual to experience a threat to her social identity due to her membership (Steele & Aronson, 1995). Expectations of the group's prototypical behavior may, in fact, put an individual member at a disadvantage. For example, a sales manager who may be expected to push an early product launch has

sound research to justify why the organization should proceed quickly with a particular product. However, her initial entreaties to individuals from other departments are ignored. In this instance, expectations of her behavior as a representative of her social group (the sales department) may force her to take additional measures to get the same message across as someone from a different social group. In essence, her group membership may have put her at a disadvantage whereby she was forced to take additional measures to elicit the same results as someone who does not belong to that group.

*Social identity and stereotype threat*

A personal threat based on one's identity is also referred to as stereotype threat (Steele & Aronson, 1995). A stereotype threat is an individual's perception that he or she is being judged based on societal stereotypes about one's group (Aronson, Quinn, & Spencer, 1998; Steele & Aronson, 1995). It is important to note that knowledge of these stereotypes does not need to be confirmed for the effect to take place. The simple fear of being judged based on these stereotypes can prompt individuals to change their behavior (Bergeron, Block, & Echtenkamp, 2006; Stone, Sjomeling, Lynch, & Darley, 1999). The strength of a stereotype threat existing in a particular context depends on 1) whether the individual knows the negative stereotypes that apply to a particular group and 2) whether that individual thinks others in the environment are aware of those stereotypes (Steele & Aronson, 1995).

Working in an environment where an individual perceives there is a stereotype threat has been shown to have a negative impact on performance. When people were

given the impression that those judging their performance also had knowledge of the group to which they belonged (race, gender, etc.) their performance decreased, even though there were no such judges (Aronson, et. al., 1999; Steele & Aronson, 1995). By simply thinking there was a possibility of being judged on things other than their performance, the fear of confirming a negative stereotype actually increased the likelihood of doing so.

The existence of stereotype threats in an organization can also prompt a reversal of the in-group bias effect (Lewis & Sherman, 2003). Very often there are groups that are looked upon negatively, even by their own group members (Crocker & Major, 1989; Crocker, Major & Steele, 1998) Individuals can maintain a negative impression about their in-group because this negative perspective was formed prior to the realization that he or she actually belonged to the group in question (Johnson, et. al. 2000). A child may be socialized to believe, for example, that African-Americans are inferior to other people before realizing that he or she is African-American. Instead of this realization prompting positive views of one's group, being categorized into a group previously looked upon negatively does little to change those views.

Salient identities usually prompt a behavior (Stryker & Serpe, 1994) that reflects a particular social motivation, whether it is a behavior that is in the interest of the individual or the collective (Brickson, 2000). With that in mind, it may be beneficial to understand how these different motives associated with the salient identity can affect key decision makers in an organization.

While early research on decision-making focused on economic models proposing that rationality is a key component to making optimal decisions, subsequent research has recognized that decision-making takes place in a social environment in which there are outside influences that can complicate the decision-making process. As was previously stated, prospect theory demonstrates that individuals are risk-averse when problems are framed in terms of potential gain, but are risk-seeking when problems are framed in terms of possible loss (Kahneman & Tversky, 1979, Tversky & Kahneman, 1986). However, it is not clear what prompts an individual to frame an otherwise ambiguous decision in terms of gains or losses.

I argue that social identity salience serve as a factor that influences how individuals frame a risky prospect. When individuals decide between a risky decision and less risky alternatives, they are conducting computations of the prospect's expected value as well as a cost comparison of the personal value of success as compared to the cost of failure (Lopez, 1987). In other words, when managers are making strategic decision in organizations, they are engaged in two processes simultaneously. They are seeking to balance between what is best for the organization and what is best for them as an individual (Jackall, 1984). Since individuals can hold multiple social identities, which can operate at any given instance, it is essential to understand whether this balancing act prompts group members to alter their risk-taking from one context to another as determined by the group's identity salience.

If we consider that the traditional definition of risk is the potential for loss, risk perceptions may be based on the level of threat an individual experiences upon making a

decision. For example, men were found to choose a high risk/high gain option when they were competing with other men of equal status. However, they were less likely to choose the high risk option when they were competing with men in higher status groups. In these experiments, the men used their risk-taking strategies to both protect the self and manage status-based interactions with individuals in other groups (Ermer, Cosmides & Tooby, 2008).

Based on a threat to one's identity, losses associated with an idea may loom larger for some individuals than for others or change for an individual from one context to another (Stapel & Koomen, 1998). For example, in one instance possible losses based on a risky decision may threaten the newcomer more when that status is viewed as a disadvantage as compared to when it is seen as an advantage. In another instance, the first decision a manager makes that day may seem a higher hurdle to clear than does the final decision of the day. In either case, the idea that individuals experience risk as a potential threat to their self, their group, or their organization may contribute to variations in risk perception.

I argue that the activation of a particular social identity can alter the likelihood of making a risky decision as a means of managing one's identity. Identity management refers to the methods individuals engage in to protect their social self, the group, or the organization (Kessler & Mummendey, 2002). For example, Siegel, Simms & Wieland (2008) show that high status individuals were more likely to risk self-handicapping themselves under conditions found to elicit self-handicapping (Jones & Berglas, 1978) than were their low-status counterparts. Self-handicapping is defined as the taking or



claiming of obstacles to one's performance (Jones & Berglas, 1978). It is the means by which individuals manage expectations of their performance wherein failure can be attributed to the presence of that obstacle, while individuals are lauded if they are able to perform successfully in spite of the obstacle. Seigel, et. al. (2008) argued that high status individuals were motivated to protect their position in high status groups and self-handicapped themselves to obscure the link between their behavior and the resulting performance. If they performed well in the face of an obstacle, their position in their group is justified, as there is an expectation that high status individual will perform well (Berger, et. al., 1977). However if they perform poorly, the performance can be attributed to the obstacle itself and not directly to the individual's performance, thereby continuing to protect their position in their high status group.

Elsbach and Kramer (1996) demonstrated in their work that individuals change the criteria on which their group is compared to a relevant out-group, particularly when their identity is threatened (one factor that increases an identity's salience (Tajfel & Turner, 1986). This same pattern of behavior, I argue, will be found when comparing the decisions made by group members when their group identity is positive with members of the same group, but with a negative social identity. For example, while women have been found to be more risk averse than men (Zinkhan & Karade, 1991), further analysis may reveal that it is not simply their gender that fostered their conservative behavior, but the context in which their risk-taking was tested that accounts for the difference. A deeper examination of gender differences in risk-taking may find that women are risk-seeking in contexts where they see their gender as giving them an advantage, but more risk averse

when their gender is viewed as a disadvantage (i.e. the masculine/feminine distinction noted in Bergeron, et. al., 2006). For example, women in the nursing profession, a female-dominated occupation, may appear more risk-taking in this context, while female police officers may be more conservative when considering risky decisions. In this male-dominated context, female officers may be motivated to prevent errors in decision-making from being attributed to their gender.

The decision making process includes searching for a reasonable solution to the problem, and weighing the risks of the available alternatives (March & Simon, 1958). A lengthened search process increases the possibility of making a more accurate, less risky decision. However, as Venkataraman (2002) notes in his entrepreneurship research, this search increases the chance of success, but decreases the likelihood that [the decision] will be made at all. Because individuals in positive identity groups are bolstered by the esteem of group membership, they can evaluate a problem with relatively little concern for how the consequences of making that decision will affect them as a member of the group. In fact, a positive identity's salience may result in a shortened search process because there is less need for managing the likelihood of potential loss when making the decision. As a result, individuals in the positive identity group may be more likely to take the risky prospect. For them, the focus will be less on possible loss and more on potential gain.

On the other hand, the identity management strategies for individuals in negative social identity groups will be very different, as they are more likely to experience a collective threat to their social identity when compared with members of positive social

identity groups (Cohen & Garcia, 2005). Blanz and colleagues (1998) outline several possible strategies individuals may use to respond to a negative social identity. They represent either individual or collective strategies. Individual strategies are used to help people distinguish themselves from the group to which they are categorized, while a person will use a collective strategy to attempt to change the status of the group. Specifically, some individuals in a negatively stereotyped group will engage in behaviors that will help them disidentify from the group, while others will act as a representative of the group and behave in ways that counter the negative stereotypes and possibly elevate perceptions of the group (Blanz, et. al., 1998; Deaux & Ethier, 1998; Ellemers & van Knippenberg, 1993).

The effort required for individuals in negative social identity groups to combat this negative ascription is such that they not only evaluate the level of financial and organizational risk of the prospect, but they also compare the expected value of the reward with the personal cost of failure. The fear of confirming a negative stereotype motivates these individuals to frame problems in terms of certain gain and, as a result, decreases the likelihood of making a risky decision (Seigel, Simms & Wieland, 2007).

For example, if two managers are evaluating the launch of a product, the one with the salient positive social identity will be more likely to launch the product since she would only need to be fairly certain of its success. She will frame the problem highlighting what there is to lose by not launching the product (Mullins & Forlani, 2005), increasing the likelihood of taking the risk. For individuals with a salient negative social identity, however, the fear of confirming a negative stereotype will cause them to view

the product's launch with much less certainty. In this instance, the individual with a negative social identity may frame the product launch in terms of what there is to gain by not launching the product. To use Dickson and Giglierano's (1986) analogy, individuals with a positive social identity would fear missing the boat and would be more likely to take the risk, whereas individuals with a negative social identity may fear sinking the boat, and therefore would be less likely to take a risk. As a result, they may see the risks associated with the project as much higher than the manager with a salient positive social identity and, therefore, are less likely to agree to the launch. Based on these arguments, I hypothesized the following:

*H1: There is a relationship between social identity valence and risky decision-making such that individuals with positive social identities are more likely to make a risky decision than are those with negative social identities*

### **Risk perception as a mediator of the social identity-risky decision making relationship**

There are different cognitive schemas that inform one how each identity “should” behave (Taylor & Crocker, 1981), thereby influencing the decision-making process. As such, it is important to understand the impact this can have on risky-decision-making in organizations. It is particularly important to examine this relationship when there is evidence that managers are expected to take some risks to enhance the possible benefits to the firm (Jensen & Meckling, 1976).

As was previously stated, differences in risky decision making have been linked to changes in the way in which risks are perceived (Sitkin & Pablo, 1992; Sitkin & Weingart, 1995). This is because contextual cues can alter how an individual evaluates a

particular decision environment (Lant & Hewlin, 2002). I argue that these cues can trigger a particular social identity's salience, thereby affecting how the risks associated with a problem are perceived.

Social identity groups vary on their prototype for behavior, and the link between an identity group's prototypical behavior and risk-taking has not yet been tested. Different social identities provide individuals with varied lenses through which they make sense of their environment. When a group has a positive social identity, it may perceive a risky decision as having a lower risk threshold than when it has a negative social identity because the group members are engaged in very different management strategies. As was stated earlier, positive social identity groups provide their members with the security and esteem that is associated with membership. Membership in positive social identity groups almost insulates them from failure, as it is not an expectation of their performance. Both in-group and out-group members generally view the group as being highly competent on the dimensions on which they are being compared to the relevant out-group. As a result, members in these groups can absorb higher levels of risk, which their risk perceptions will reflect.

On the other hand, members of negative social identity groups often feel threatened by group membership, and as such, are more likely to engage in protective behaviors. The motive to protect either the self or the group drives them to further scrutinize problems for solutions with the greatest probability of success. In other words, they may perceive the risks of making a particular decision as being higher than would their positive social identity counterparts. This need to protect themselves from the

impact of a poor decision increases the perception of the level of risk associated with that decision and decreases the likelihood that the risky decision will be made. Individuals in the negative social identity group want a prospect that will almost guarantee a successful outcome that not only benefits the organization, but that individual as well.

Participation in a doctoral program is an example of this phenomenon. While all individuals who enter a doctoral program are considered students, those who wish to identify themselves as students may be less likely to approach faculty with research ideas or to debate with their advisors as to the direction their research should go. In contrast, those who consider themselves to be apprentices may navigate their doctoral experience quite differently. For these individuals, the motive to be seen less as a student and more as a future colleague will cause them to perceive the risks of a debate with their advisor about their research as lower than would a “student”. In fact, they may believe it is a greater risk to avoid engaging in such activities. Because “students” may see themselves at a disadvantage as compared with faculty, they may be less likely to take the lead on projects or may look for projects with the greatest potential for success. This change in perception based on the salient social identity as either a “student” or an “apprentice” will be reflected in whether or not they make a risky decision. As such, I offered the following hypothesis:

*H2: Risk perception mediates the relationship between social identity valence and risky decision-making such that individuals with negative social identities will view the same decision as having higher levels of risk when compared with individuals with positive social identities, and as a result, are less likely to make a risky decision than are those with a positive social identity.*

### **The impact of identification on risky decision making**

If we are to understand the role social identification plays in the decision making process, we must further articulate how identification is not an all-or-nothing proposition but can vary among group members. Social identities arise, in part, from a need for order and uncertainty reduction. It begins to give shape to who we are as people and, as such, how we are going to behave in a given situation. However, social identities provide only a sketch of the individual; understanding how that person identifies with a particular social group adds color and dimension to the sketch.

Because individuals vary in the degree to which they may identify with a particular social group, they may be differentially motivated in protecting or enhancing the welfare of the group. For example, high identifiers in positive social identity groups may view risk-taking as a way to enhance the group's standing in its social environment. This high level of identification may prompt them to see the group's success and their personal success as interchangeable. At the same time, the positive social identity allows them a sense of security in feeling that because of their social position they are somewhat buffered from the effects of failure.

Low-identifiers, on the other hand, would be less inclined to take a risk. These individuals may not see their position as interchangeable with that of the group, but may still want to demonstrate that membership in this group is warranted. Taking a risk that ultimately fails may call into question their membership in this group, which low-identifiers in these positive social identity groups may not wish to answer. As a result,

they will look for a level of certainty in the decision that high identifiers will not need, and, as such, will be less likely to take the risk.

The reverse effect would be expected in the case of negative social identity groups. High identifiers in negative social identity groups may experience a risky decision as a collective threat and, as a result, respond accordingly. Their level of motivation may prime a collective response, which is primarily to protect the group's social standing, while seeking opportunities to enhance the group's position. They may seek decisions that are fairly certain and have a relatively high expectation of success because they are using the decision making process as a means to manage a negative social identity. For high identifiers, personal success necessarily implies the group's success, which is of equal, if not greater, importance.

Low identifiers, in contrast, may use the decision making process to manage their negative social identity differently. This lower level of identification can prompt a distinctiveness approach, moving decision makers to seek ways to distinguish themselves from the group and behave in ways that help them disidentify from the group (Kreiner, 2002; Elsbach, 1999). As a means of almost active disidentification (Elsbach & Battacharya, 2001), low-identifiers may be more inclined to take a risk for two reasons: first, the mere act of risk-taking may demonstrate deviating behavior from the group norm. For example, if evidence shows that women are more conservative than men in certain circumstances, a woman willing to take a risk may have already distinguished herself from others in her social group. Second, a successful outcome as a result of taking the risk may be especially meaningful for individuals in negative social identity groups,



particularly if they out-perform low expectations based on their group membership. In this way, low-identifying females are able to disidentify from the negative social identity group.

It is not enough to provide evidence that social identity groups differentially affect risky decision making; I argue that we must understand the nuances to this relationship.

As such, I hypothesized the following:

*H3a: The relationship between social identity valence and risky decision making will be moderated by the degree of identification such that the more an individual identifies with a positive social identity group, the more likely he or she will be to make a risky decision.*

*H3b: The relationship between social identity valence and risky decision making will be moderated by the degree of identification such that the more an individual identifies with a negative social identity group, the less likely he or she will be to make a risky decision.*

### **Identity orientation and risky decision making**

Identity is a complex construct, which is multi-layered in its affectations and enactments. While it was previously argued that social identities could be either positive or negative, social situations can also prime either collective or individual identities. This priming can have an impact on how individuals, again, interpret their decision environment. The nature of this behavior, however, is contingent upon what the situation dictates. Depending on the degree of identification, a situation can prime either a collective self or an individual self (Gaertner, Vevea, Sedikides, & Iuzzini, 2002). The more an individual identifies with the group, the more the collective self is primed by a situation. For high identifiers, this means showing a successful performance that continues to distinguish them from members of opposing groups, and avoiding failures that would impact not only that person as an individual, but also as a representative of

that group. For example, if a woman in a male dominated environment must risk making a costly mistake, she may feel that an error can have a direct impact on the impression her co-workers have of her as well as their impression of women in general, particularly if she highly identifies with her gender group.

The more an individual views group membership through a collective lens, the more he or she will want to improve the group's social identity (Mummendey, et. al., 1999). For a person whose collective identity is salient, his goal is to enhance the group's social identity. He wants to prove to others, and maybe even himself, that their impression of the group is wrong and that the group is at least equal, if not superior to the out-group. As a result, that individual may be less likely to make a risky decision to avoid possible negative outcomes. For this individual, failure will not only impact that person, but will possibly confirm the group's negative social identity. Because this person's goal is to enhance the group, he or she will be careful to only make strategic decisions that have a greater likelihood of success. Therefore, this person is less likely to make a risky decision than someone with an individual identity. These distinctions lead to the following argument.

*H4: There is a relationship between identity orientation and risky decision-making such that those with salient individual identities are more likely to make a risky decision than are those with a salient collective identity.*

## **CHAPTER 4: PILOT STUDY ANALYSIS**

### **Lab Experiment**

The goal of this dissertation research was to evaluate the hypothesized relationships and understand whether these effects occur (Kerlinger, 1973). The intent was not to make generalizations to any targeted population, especially individuals who make strategic decisions in organizations. For this reason I have elected to enlist experimental methods. I conducted a series of experiments using decision scenarios (Fredrickson, 1986) to test the hypothesized relationships. First I conducted a series of pilot studies to test the strength of the social identity manipulations and to determine the validity of the hypothesized arguments.

In order to gauge the viability of the experimental design, three pilot studies were conducted. Prior to each administration of the study, Ph.D. students pre-tested the instruments and the instructions. They were asked to comment on length and presentation of the instruments, completion time, the logic and flow of the instructions, identification of the manipulations, and the clarity of the decision scenario. The instruments were then adjusted to accommodate the feedback received. For the first iteration, six Ph.D students provided feedback, for the second iteration, eight Ph.D students were solicited and for the final iteration, five Ph.D. students were contacted to pre-test the experimental design changes and instructions.

## **Study 1**

### **Sample**

Sixty-two individuals taking the undergraduate business students at a mid-sized northeastern university participated in this preliminary study. Forty-four (71%) of the students were male and eighteen (29%) were female. The average age of the participants was 26.6 years and had an average of 6.4 years of employment experience. All participants were told that they would be entered into a random drawing for \$25 for their participation.

### **Procedure**

Participants were randomly assigned to one of four experimental conditions measuring identity valence (positive or negative) by identity level (individual or collective): positive social identity/individual identity, positive social identity/collective identity, negative social identity/individual identity or negative social identity/collective identity. Participants were told that they were being asked to participate in a strategic decision making competition. They were then given a packet that contained instructions with the experimental manipulations, and two questionnaires; each that contained the measured variables and demographic information.

Participants were first asked to complete the questionnaire with some demographic information. This questionnaire also contained the manipulation to prime either the positive or negative social identity condition (Sinclair, et. al., 2007). They were then presented the decision scenario and were asked to answer the corresponding questions. These questions measured risk-taking. Finally, participants completed the

follow-up questionnaire, which contained the items for risk perception and risk propensity (Sitkin and Weingart, 1995), identification (Mael and Ashforth, 1992), self-esteem (Rosenberg, 1965), and additional demographic information.

### **Data Analysis**

Due to the small sample size, only a brief, preliminary analysis was conducted. Manipulation checks were done to determine the effectiveness of the experimental manipulations. The tests suggested that the manipulation for identity valence was effective ( $F(1,60) = 69.4, p < .0001$ ) but that the manipulation for identity level was not effective and should be strengthened. It is possible that participants had to read the instructions too closely to note the manipulation. As a result, subsequent analyses for the pilot only tested the identity valence (positive v. negative) condition.

A simple means test showed individuals in the positive identity condition were more likely to take a risk than those in the negative identity condition, although this difference was not significant.

Inter-item reliability for risk propensity was (Chronbach's  $\alpha = .71$ ), for social identification was (Chronbach's  $\alpha = .79$ ), for risk perception was (Chronbach's  $\alpha = .80$ ), and for self-esteem was (Chronbach's  $\alpha = .76$ ). Because of the small sample size, none of the scales were factor analyzed.

Hierarchical regression was used to test the hypothesized relationship because the theoretical arguments suggest that the hypothesized variables account for variance above

and beyond what was previously demonstrated. However, due to the sample size, mediation was not tested.

## **Results**

A stepwise regression method was used to test the experimental model. Because the small sample size yielded insufficient power to make any statistical inferences (.28 for the model), the results will only be used to offer suggestions for the future direction of the study. The results suggest support for the hypothesized model, ( $F_{5,21} = 3.203$ ;  $p < .05$ ). However, Table 2 shows that only risk perception is significantly related to risk taking. The mean differences show some evidence of the argument that identity may have an impact on risky decision making, but the sample size must be increased before any conclusions can be made.

## **Further Development of Instruments**

As a result of what was learned from the pilot tests, I made the following changes to strengthen the design. First, 20% of the respondents did not complete the items for risk perception. Although the presentation of the items was adjusted based on the pre-test feedback, it is possible that participants were not used to completing semantic differential scales and, therefore, overlooked the questions. I changed the presentation of the scale to bring greater attention to the directions and the format of the scale to increase the likelihood of being completed.

Finally, comments made during the debriefing noted that participants became suspicious of the competitive nature of the experiment due to the presentation of the decision scenario. It is possible that the relative simplicity of the scenario did not really

engage the participants, and did not pose an identity threat as was hypothesized. I changed the presentation of the manipulation from a strategic decision making to a simple statement notifying participants that their decision making behavior was being compared with that of students from either a higher ranking or lower ranking institution. In addition, I changed the scenario to one that better reflected a risky decision in which the participants would be invested.

## **Study 2**

### **Sample**

Forty undergraduate business students at a mid-sized northeastern university participated in this preliminary study. Twenty-eight (70%) of the students were male and twelve (30%) were female. The average age of the participants was 22.8 years and had an average of 6.4 years of employment experience.

### **Procedure**

Participants were randomly assigned to one of two experimental conditions measuring identity valence (positive or negative). Participants were told that their decision making behavior was being compared with that of a competing university. In the positive condition participants were told that they were being compared with students at a lower ranking school (According to US News and World Report). In the negative condition they were told that they were being compared with students from a higher ranked institution. Prior to receiving the scenario and subsequent questions, participants were given a packet that contained instructions with a questionnaire that contained the measured variables and demographic information.

The design of the second study was similar with the exception of the identity manipulation. In study 2, participants were randomly assigned to one of two identity orientation conditions: collective or individual. In the collective condition participants were told they were making a decision on behalf of their family and in the individual condition, participants were told that they were making a decision on their own behalf.

### **Data Analysis**

Due to the small sample size, only a brief, preliminary analysis was conducted. Manipulation checks were done to determine the effectiveness of the experimental manipulations. The tests suggested that the manipulation for identity valence was effective ( $F(1,38) = 72.3, p < .0001$ ) as well as the manipulation for identity orientation ( $F(1,38) = 3.42, p = .06$ ).

An independent sample t-test showed individuals in the positive identity condition were more likely to take a risk than those in the negative identity condition, although this difference was not significant.

Inter-item reliability for risk propensity (Cronbach's  $\alpha = .74$ ), social identification (Cronbach's  $\alpha = .79$ ), risk perception (Cronbach's  $\alpha = .82$ ), and self-esteem (Cronbach's  $\alpha = .76$ ). Because of the small sample size, none of the scales were factor analyzed.

### **Further Development of Instruments**

As a result of what was learned from the pilot tests, I made the following changes to strengthen the design. First, 7% of the respondents did not complete the items for risk perception. Although the presentation of the items was adjusted based on the pre-test



feedback, it is possible that participants were not used to completing semantic differential scales and, therefore, overlooked the questions. As a result I used the Keh. Foo, & Lim (2002) measure of risk perception ( $\alpha=.89$ ), which is measure on 7-point Liker-type scale ranging from strongly disagree to strongly agree. However, to keep the scales consistent I measured the items on a 5-point scale.

### **Study 3**

#### **Sample**

Eighty-three individuals from two Northeastern universities participated in this study. There were 53 Males (64%) and 30 Females (36%). The average age was 22.2 years. The participants consisted of 14% African-Americans; 24% Asians; 16% Hispanics; 2% Multi-Racial; and 24% White students. Twelve percent of the participants chose not to respond. The average years of work experience was 4.87 years.

#### **Procedure**

Participants were randomly assigned to one of two conditions (positive or negative social identity). According to social identity theory, 'evaluations of one's social standing depend on the comparison group and comparison dimensions, leading to either a positive or negative outcome (Mummendey, et. al., 1999:230). Negative and positive social identity was manipulated by changing the comparative object. In the negative condition, participants were told that they were being compared with students of a higher ranked school (according to US News Annual Report). In the positive condition, participants were told that a comparison was being made between students in their school and students in a lower ranked school.

## Data Analysis

In the first step of the analysis a manipulation check was completed using an independent samples t-test. This test is used to determine if there is a difference in the means for each manipulation. Participants were asked to determine if their school was ranked higher than the school with which their behavior was being compared. The t-test results demonstrated that individuals in the negative condition marginally ranked their institution as ranked lower than the comparison school ( $M_{\text{negative}} = 2.77$ ,  $M_{\text{positive}} = 3.13$ ,  $p = .07$ )

## Results

A test of reliability was done as a means of measuring whether scaled items were answered consistently. Chronbach's alpha ( $\alpha$ ) were the following:

Self-esteem,  $\alpha = .83$ ; Identification,  $\alpha = .82$ ; and Risk

Perception,  $\alpha = .72$ . Because risk propensity Chronbach's  $\alpha$  was .58 it was excluded from the analysis. The scales fall within the generally accepted levels among management scholars, with the exception of the risk propensity scale. Although an acceptable measure of reliability is somewhat arbitrary and considered a rule of thumb I used the risk propensity scale in the subsequent analysis with caution.

*Test of hypotheses.* An independent samples t-test was used to compare the means of the dependent variable for the two levels of identity valence. The results of this test show that individuals in the negative condition (compared to a higher ranked school) put less money towards the decision ( $M = \$4,641.03$ ) than were those in the positive condition ( $M = \$5,011.36$ ), although this difference was not significant. The main effect of identity on risky decision making was then tested using multivariate analysis of covariance

(MANCOVA). This test was used because the dependent variables were likely to be correlated and because this analysis allows for covariates to be included. The addition of the covariates to the analysis reduces error by controlling for within group differences. Because age, gender, and risk propensity have been previously linked to risky decision making, these were included as covariates in the analysis. Self-esteem was also include as a covariate in the analysis.

A moderated relationship between identity valence, identification and risk perception was also hypothesized. ANCOVA was done with identification split along the median and included as a two-level fixed factor in the model.

Independent samples t-test for both the risk decision scale ( $M_{\text{negative}} = 1.94$ ,  $M_{\text{positive}} = 1.89$ ,  $p = .336$ ) and dollar amount ( $M_{\text{negative}} = 4641.03$ ,  $M_{\text{positive}} = 5011.36$ ,  $p = .37$ ) As was expected, individuals in the positive social identity group were willing to risk more money on a venture than were individuals in the negative identity group. However, this relationship was not significant. I then conducted a MANCOVA with both dependent variables included in the analysis. The results of the MANCOVA show in Table 1 that this relationship was not statistically significant (risky decision,  $F(3,79) = .15$ ,  $P = .70$ ); dollar,  $F(3, 79) = .16$ ,  $p = .69$ ). As a result, Hypothesis 1 was not supported.

In this study a mediated relationship was hypothesized between identity valence, risk perception, and risky decision making. However, there must be a main effect between the IV and the DV to provide justification to test for mediation (Baron & Kenny, 1986). As this did not take place, mediation was not tested.

The test of the moderated relationship between identity valence, identification and the risk variables should have shown a significant interaction between identity valence and identification, with a median split for identification entered as a second fixed factor to support Hypotheses 3a and 3b. However, this relationship was not significant.

#### **Study 4**

Fifty-eight participants were recruited from an undergraduate management course at a large northeastern university. There were 35 Males (60%) and 23 Females (40%). The average age was 20.9 years. The participants consisted of 14% African-Americans; 28% Asians; 12% Hispanics; 3% Multi-Racial; and 28% White students. Fifteen percent of the participants chose not to respond. The average years of work experience was 3.3 years.

#### **Procedure**

Participants were randomly assigned to one of two conditions: collective identity and individual identity. Similar to the procedure described in Study 1, participants were asked to complete a questionnaire and then were asked to complete a vignette with the decision scenario and follow-up questions to measure their perceptions of risk regarding the scenario.

#### **Data Analysis**

As was done in the first study, an independent samples t-test was conducted to test the strength of the experimental manipulation. In this study, participants were randomly assigned to one of two groups: one where a collective identity orientation was elicited,

and the second where an individual identity orientation was elicited. The t-test scores showed a effective manipulation where individuals noted they were either making a decision for themselves or as a representative of their group ( $M_{\text{individual}} = 3.79$ ,  $M_{\text{collective}} = 3.08$ ,  $p < .05$ ).

## Results

An independent samples t-test was done to determine if there was a difference on both dependent variables. No significant difference was found in the risky decision variable, but individuals were found to risk more money in the individual condition than they did in the collective condition. However, this difference was not statistically significant. For further analysis, a MANCOVA was conducted with the likelihood of making a risky decision and the dollar amount of the risk entered as the dependent variables. The results show that the relationship between identity orientation and risky decision making is not statistically significant ( $F_{\text{RISKDEC}} (3,50) = 1.22$ ,  $p = .27$ ;  $F_{\text{DOLLAR}} (3,50) = .870$ ,  $p = .36$ ).

## Final Development of Instruments

While the results continued to be statistically non-significant, the trends in the data suggested that the manipulations may need to be strengthened to uncover the hypothesized relationships. As a result the following changes were made:

First, the two studies were combined into one 2x2 factorial experimental design. To strengthen the manipulation of the social identity valence condition, I provided participants with an article about their institution's performance in a business competition. In the positive condition, students from their institution won the competition (see Appendix B), and in the negative condition, students from their institution were beat

by the comparison institution (NYU) (see Appendix C). Second, participants were asked to write three comments about their institution as it compares, either positively or negatively, to NYU.

To strengthen the manipulation in the identity orientation condition, participants were asked to make the comments regarding their institution starting with either the phrase “my school is...” (individual condition) or “we are...” (collective condition). The changes were then pre-tested with Ph.D. students prior to the instrument’s final administration.

## CHAPTER 5: EXPERIMENTAL DESIGN

The final study was designed as a 2x2 factorial experiment testing the nature of the relationships between social identity valence, social identity orientation, and risky decision making.

### Procedure

Participants were randomly assigned to one of four conditions: positive social identity valence, individual identity orientation; positive social identity valence, collective identity orientation; negative social identity valence, individual identity orientation; negative social identity salience, collective identity orientation. I used methods similar to those outlined in Kramer & Brewer, (1984), in that all participants were given the cover story that they were participating in an experiment where their performance was being compared to that of students from New York University (NYU). This was done to heighten the salience of their own social identity based on their institution. According to social identity theory, 'evaluations of one's social standing depend on the comparison group and comparison dimensions, leading to either a positive or negative outcome (Mummendey, et. al., 1999:230).

To manipulate social identity valence, individuals in the negative condition were first told to read an article that stated that their institution lost to NYU in a business competition. In the positive condition, the article was modified to state that their institution won the business competition (Appendix C). In addition, individuals in the negative condition were asked to write three reasons why one would elect to attend NYU as opposed to their institution, while individuals in the positive condition were told to write

three statements why individuals would elect to attend their institution as opposed to NYU (Appendix D).

Identity orientation was manipulated in the following way: Individuals in the individual condition were primed to write their comments about their institution starting with the phrase “my school is...” while individuals in the collective condition were primed to use the phrase “we are...” They were then given the decision scenario to read. In the individual condition the scenario read,

You find out that you have inherited a trust for \$10,000. “Energy” Oil Company, a company that specializes in oil drills, recently found oil in a section called AREA A. Experts in oil drilling and in oil shares claim that there is a 50% chance of finding ANOTHER oil well in this area. This can double the value of the shares you invest. However, there is also a 50% chance that no oil will be found, which will lead your shares to lose all of their value. If this is the result, you will lose all your money and end up with \$0. You also have the option of partnering with another interested party and only investing a portion of your shares.

The collective condition was modified to read the following:

NYU has been given a trust of \$10,000 to be used at the leadership’s discretion. As part of the business school’s investment competition, you have been given the responsibility of making investment decisions for school’s trust.

Participants were given a packet to complete. This packet included the decision scenario, and a questionnaire measuring the variables to be discussed below. After completing the scenario, participants were asked to complete the follow-up questionnaire containing the measured and demographic variables.

### *Subjects*

Eighty participants were recruited from MBA management courses at a large northeastern university. In the final sample there were 46 Males (57.5%) and 34 Females (42.5%). The average age was 28.2 years. The participants consisted of 8.8% African-



Americans; 20% Asians; 2.5% Hispanics; 3.8% Multi-Racial; and 45% White students, with twenty percent of the participants choosing not to respond. The average years of work experience was 6.48 years.

### *Sampling Criteria*

Because the focus of this study is on decision makers in a business context, participants were recruited from the population of individuals who will be decision makers in organizations. Thus, students in the MBA management courses were invited to participate.

### *Cover Story*

The use of a cover story is important for a few reasons. First, competition, even if implicit, is a factor that can strengthen an identity's salience (Tajfel & Turner, 1986). Experimental research has often been criticized for its lack of face validity and its inability to motivate participants to perform; using a cover story may counter these arguments.

Second, social comparison has been found to drive strategic decision making (Porac, Thomas, & Baden-Fuller, 1989). Finally, knowledge of a social comparison should serve to provide a sense of realism to the experiment and encourage participants to become more involved in the study.

### *Random assignment procedure*

Participants were randomly assigned to experimental conditions at the time that they receive their experimental task.

### *Task Materials*

**Decision Scenario.** This research examined how individuals with different salient social identities perceive the same decision. As a result, all participants received the same decision scenario. The scenario was a modified version of the oil investment scenario used by Fox & Dayan (2004). This scenario was chosen because it was specifically designed as an ambiguous decision.

**Questionnaires.** Participants were asked to complete a post-treatment questionnaire. The questionnaire was designed to collect demographic data as well as the measured variables. In all cases existing instruments were used. However, all instruments were pre-tested. The following measures were collected:

### *Measures*

**Dependent Variables: *Risky Decision*** (Fox & Dayan, 2004). A behavioral measure of risky decision making was measured on a Likert-type scale where 1= Invest the full amount, 2= Partner with someone and invest \$\_\_\_\_\_, 3=Decide not to invest.

***Dollar Amount*,** In the business scenario, participants were also given the opportunity to invest part of their money in the project given. \$10,000 was used when participants chose to invest the entire amount of their money, and \$0 was used when participants chose not to invest. In all other cases the participant's selected dollar amount was used.

**Moderator: *Identification*** (Mael& Ashforth, 1992), a multi-item survey measuring the degree to which the participant identifies with the salient identity. Mummedy, et. al. (1999) have noted that identity does not imply identification and that it is necessary to uncover the level of identification to further understand the individual's social motives

Mediator: *Risk perception* (Sitkin & Weingart, 1995), multi-item survey measuring the degree of risk perceived in the decision scenario.

Controls: I collected a series of demographic information to use as controls. Because race, gender and age have been linked to differences in risk propensity, these were included as controls. In addition Sitkin & Weingart (1995) found that risk propensity was an antecedent to risk perception, I included this measure in the hypothesized equation to highlight the relationship between social identity and risky decision making as it is mediated by risk perception. Finally, as there are some indications that motives to identify with a group have often been confused with measures of self-esteem, I collected self-esteem measures using the Rosenberg Self-Esteem Scale (1965) to demonstrate that the hypothesized relationship exists above and beyond what can be predicted by variances in self-esteem.

#### *Data Collection Procedures*

Two copies of the consent form were included in the experiment packet; one to be signed and returned to the researcher and one for the participant to take. This consent form assured that participation is voluntary and reminds the participant that he or she can discontinue participation at any time.

Participants then completed the decision task, after which participants were asked to complete a post-treatment questionnaire which contained instruments of the measured variables in the research model. Once all sections of the experiment were completed, participants received a debriefing form and were thanked for their participation.

Instructions. The instructions informed the participants that they were participating in a decision making experiment where their behavior was compared with that of students from another institution, and the name of the school they were being compared against. All instructions were pre-tested for clarity.

## CHAPTER 6: ANALYSIS

As a first step of the analysis a manipulation check was completed using an independent samples t-test. This test is used to determine if there is a difference in the means for each manipulation. To check the identity valence condition, participants were asked to determine if their school was ranked higher than the school with which their behavior was being compared. The t-test results demonstrated that individuals in the negative condition considered their school to be ranked lower than the comparison school, as compared with individuals in the positive condition ( $M_{\text{negative}} = 2.31$ ,  $M_{\text{positive}} = 4.26$ ,  $p = .0001$ ). An independent samples t-test was also done to test the strength of the identity orientation manipulation. The t-test scores showed an effective manipulation where individuals noted they were either making a decision for themselves or as a representative of their group ( $M_{\text{individual}} = 2.53$ ,  $M_{\text{collective}} = 3.28$ ,  $p < .01$ ).

*Reliability Analysis.* A test of reliability was done as a means of measuring whether the scaled items were answered consistently. Chronbach's alpha ( $\alpha$ ) were the following: Risk propensity:  $\alpha = .64$ ; Self-esteem,  $\alpha = .86$ ; Identification,  $\alpha = .81$ ; and Risk Perception,  $\alpha = .62$ . The scales fall within the generally accepted levels among management scholars.

*Test of hypotheses.* Prior to conducting tests of the hypotheses I examined the correlations between variables to determine possible relationships, although correlations do not indicate causality. As Table 1 shows, a significant relationship exists between risk propensity and the amount of money individuals were willing to invest toward the project, suggesting that the higher one's propensity to take risks, the more risk-taking that

individual will tend to be. What is noteworthy for this study is that there is a relationship between identification and risk perception (.25,  $p < .05$ ). This suggests that high identifiers may also perceive greater amounts of risk associated with a decision than will those with lower levels of identification.

An independent samples t-test was used to compare the means of the dependent variable for the two levels of identity valence. The main effect of identity valence and identity orientation on risky decision making was then tested using multivariate analysis of covariance (MANCOVA). This test was used because it is especially useful in conjunction with experimental research (Hair, Black, Babin, Anderson, & Tatham, 2007) as it allows for the manipulation of the independent variables. In addition, MANCOVA is appropriate because the dependent variables were likely to be correlated and because this analysis allows for covariates to be included. The addition of the covariates to the analysis reduces error by controlling for within group differences. Because age, gender, and risk propensity have been previously linked to risky decision making, these were included as covariates in the analysis. Self-esteem was also included as a covariate in the analysis.

A moderated relationship between identity valence, identification and risk perception was also hypothesized. To test this relationship I split the identity valence variable and conducted separate MANCOVA analyses on each condition.

## **Results**

The goal of this study was to determine whether risky decision making can be influenced when either a positive or negative social identity is primed. Independent

samples t-test for both the risky decision measure ( $M_{\text{negative}} = 2.32$ ,  $M_{\text{positive}} = 2.28$ ,  $p = .39$ ) and dollar amount ( $M_{\text{negative}} = \$2,837.63$ ,  $M_{\text{positive}} = \$2,948.72$ ,  $p = .43$ ) was conducted. As was expected, individuals in the positive social identity group were willing to risk more money on a venture than were individuals in the negative identity group. However, this relationship was not significant. I then conducted a MANCOVA with both dependent variables included in the analysis. The results of the MANCOVA show in Table 2 that this relationship was not statistically significant (risky decision,  $F(7, 79) = .004$ ,  $P = .95$ ); dollar amount,  $F(7, 79) = .00$ ,  $p = .99$ ). As a result, Hypothesis 1 was not supported.

In this study a mediated relationship was hypothesized between identity valence, risk perception, and risky decision making. However, there must be a main effect between the IV and the DV to provide justification to test for mediation (Baron & Kenny, 1986). In addition, the relationship between the mediator (risk perception) and neither of the dependent variables was significant (risky decision,  $F(1, 79) = 2.31$ ,  $p = .13$ ; dollar amount,  $F(1, 79) = 2.44$ ,  $p = .12$ ). As this did not take place, mediation was not tested.

The test of the moderated relationship between identity valence, identification and the risk variables should have shown a significant interaction between identity valence and identification to support Hypotheses 3a and 3b. I conducted a split-file analysis where I conducted a MANCOVA separately for the positive and negative conditions. The results showed that for individuals in the negative condition, there is a significant relationship between an individual's degree of identification and their risk-taking behavior (Risky decision,  $F(17, 40) = 5.02$ ,  $p = .001$ ; dollar amount ( $F(17, 40) = 2.88$ ,  $p = .001$ ).

= .02). The relationship between identification and risky decision making for the positive condition was not significant (risky decision,  $F(13, 38) = .80$ ,  $p = .65$ ; dollar amount,  $F(13, 38) = .83$ ,  $p = .63$ ).

I also conducted separate t-tests for each identity valence condition. I dichotomized the identification variable by splitting the cases on the median and included that as the grouping variable for the analysis. Low identifiers were coded as “0” and high identifiers were coded as “1”. The results of the analysis show that high identifiers in the negative condition were more likely to make a risky decision ( $M_{\text{low}} = 2.45$ ,  $M_{\text{high}} = 2.16$ ,  $t = .158$ ,  $p = .06$ ), but there was no significant difference in the amount of money individuals were willing to invest ( $M_{\text{low}} = \$2454.77$ ,  $M_{\text{high}} = \$3305.56$ ;  $t = -.89$ ,  $p = .19$ ). In addition, it was the high identifiers in the positive condition that were more likely to take a risk ( $M_{\text{low}} = 2.17$ ,  $M_{\text{high}} = 2.38$ ;  $t = -1.32$ ,  $p = .10$ ), while the low identifiers invested more money than the high identifiers ( $M_{\text{low}} = \$3500.00$ ,  $M_{\text{high}} = \$2476.19$ ;  $t = 1.33$ ,  $p = .10$ ). Although the analysis revealed significant relationships between the degree to which one identifies with his or her group and the willingness to take risks, the results are mixed. Hypothesis 3a and 3b are not supported, although the results are significant in the opposite direction than what I hypothesized.

Finally, a test of the relationship between identity orientation and risk-taking was done using MANCOVA. The results show that the relationship between identity orientation and risky decision making is not statistically significant ( $F_{\text{RISKDEC}}(1,79) = .105$ ,  $p = .75$ ;  $F_{\text{DOLLAR}}(1,79) = .171$ ,  $p = .68$ ). Hypothesis 4 is not supported.

**Insert Tables Here**



## CHAPTER 7: DISCUSSION AND IMPLICATIONS

The goal of this dissertation was to provide evidence that risky decision making has both social and instrumental goals. Recent research has called for a more in-depth examination into the social factors that influence risk perception and risky decision making (Bryant, & Dunford, 2008) Although McNamara & Bromiley, (1997) argue that organizational factors have a stronger influence on risk-taking than do our cognitions, this dissertation research provides some evidence that organizations cannot underestimate the degree to which one's social motives can influence one's behavior. Individuals experiencing a threat based on their salient identity may act in response to that threat, making an irrational decision seem rational.

Essentially, this research attempted to further disentangle the risky decision making process. I used a series of experimental studies to demonstrate that salient social identities can influence whether individuals take risks. The studies were designed to show how one's social identity may influence perceptions of risk. The findings prompt further examining of the dynamics involving risky decision making. The story I attempt to tell is one of how risk taking behaviors can change in the face of identity-based threats, as previous research has demonstrated that individuals are inclined to act when they experience these types of threats (Elsbach & Kramer, 1999).

It is apparent that priming the organizational identity did have an effect on participants' behavior. In fact, the data from study show that the more participants identified with the negatively valenced organization, the more money they were willing to risk toward the business investment. This finding is in line with research on stereotype threat, which argues that it is generally individuals with marginalized identities who

engage in ego-protective responses (Steele & Aronson, 1995). However, previous research in this arena demonstrates that behavior modifications individuals make as a result of experiencing identity threats can result in performance outcomes that confirm the stereotype. It is unclear in this dissertation, if the participants' behavior is motivated by the need to protect the identity or disidentify from it. In fact, individuals may actually be engaging in identity bifurcation, or presenting themselves in non-stereotypical ways as a means to respond to the perceived threat (Pronin, Steele, & Ross, 2004). Identity bifurcation has been found to be especially present in individuals who strongly identify with their social group, and may explain why the high-identifiers in this study took greater risks than their counterparts.

In addition, the results from the initial study also demonstrated that the more individuals identified with their organization, the higher they perceived the risk to be in the scenario. An increased understanding of an individual's social motives may help explain how different identity groups perceive risk, as well as help us understand why a widely held belief about the relationship between perceptions of risk and risky behavior was not replicated in this study.

Risky decision making is not simply a matter of reading objective data. Individuals are at the source of every decision and evidence continues to mount that demonstrates individuals are often self-serving when making strategic decisions. It is possible that individuals use risk-taking as a means to manage identities as well as manage the organization's strategic outcomes. Specifically, those individuals who view a decision outcome as a possible threat to their identity, as well as the identity of their social group, may be more likely to take a risk particularly if they strongly identify with

that group. This behavior may be appropriate if the individual's personal goals are in line with the organization's goals. However, there may be negative consequences to the organization if the decision maker is choosing to serve his interests as opposed to those of the company.

There has been a call for scholars to operate with the notion that "irrationality and politicality" are as much a part of organizational life as rational behavior (Brown & Starkey, 2000). Past research has demonstrated that risky behavior is based on how individuals perceive risks (Sitkin & Pablo, 1992; Sitkin & Weingart, 1995). If the risks involved in a decision are deemed too high, an individual is less likely to make that decision. However, this dissertation was not able to replicate this finding. The fact that Sitkin & Weingart's (1995) results were not replicated may suggest that priming a social identity can change the nature of this previously demonstrated relationship. In fact, the trends in the data suggest that individuals may be more likely to take a risk if the decision is seen as a riskier decision. This distinction may be an example of where rational and irrational behaviors intersect. Evaluating a seemingly objective prospect in the organizational context may change once an individual's social identity is primed. She must consider the impact her decision has on the organization, her individual self, and her social self. Keeping these different perspectives in mind may prompt one to behave "irrationally" and act in spite of how she perceives the risks associated with her decision to be. Continued research in this area may show that priming an individual's organizational identity, for example, may prompt that individual to take a risk just because he perceives the risk associated with the decision, as being high (A Maverick) or at least in spite of that fact.

It is my estimation that while the experimental manipulations in this dissertation yielded distinct identity groups, the treatments may not have elicited a threat response based on stereotypes associated with the primed social identity, which was the participants' school in this case. It is not clear whether there is a universal stereotype regarding performance from students from the participating institution, or whether knowledge of these differences was salient while individuals were completing the business scenario. Second, participants may not have been invested enough in the actual scenario to respond in the expected manner. That is to say, the manipulation may have been effective, but the decision scenario may not have created enough of a stereotype-relevant threat to uncover differences in decision making behavior.

Secondly, according to Brown & Starkey (2000), "...we negotiate both our relatedness, but we also share- if we are lucky- our otherness, our uniqueness, and in the process, we diminish-again if we are lucky- our aloneness," (p.150). Although individuals are categorized, or self-categorize, into groups, there is not always a set standard as to how membership in these groups is navigated. Scholars may not always be able to determine behaviors simply by understanding the group to which one belongs, as identity is as much about how membership is experienced as it is about group membership itself. In other words, while making one's identity salient may trigger a feeling of relatedness, it may also define a time that individuals exhibit their uniqueness.

This uniqueness may be captured by an individual's social motives. "Social motives reflect the relative importance people place on their own versus joint outcomes in social interactions," (Weingart, et. al, 2007, p. 994). Individuals considered cooperators are concerned with both their own as well as the outcomes of others, while

individualists are simply concerned with their own outcomes (Messick & McClintock, 1968). Although the experimental manipulations in this dissertation were effective, it is not clear what subsequently motivated the participants' behavior. Groups do not consist of individuals with homogeneous social motives (Weingart, et. al., 2007). For example, some individuals in the identity valence condition may have been compelled to work towards their personal interests, while others in the same group may have felt the need to work towards the benefit of the group. The same can be said for the identity orientation condition. Priming a collective identity for cooperators may have motivated them to represent the group to the best of their ability, while it may have moved individualist to do whatever it takes to disidentify from the group. In this instance, priming someone to view himself in terms of the group may be much more threatening for an individualist than it is for a cooperator. While both are in the same identity group, each is experiencing membership quite differently, and, as a result, may behave very differently.

### **Theoretical and practical implications**

This study may contribute to both the organizational behavior and strategy literature by providing empirical support for the argument that social-psychological factors may influence strategic outcomes. Specifically, this research provides some evidence that risky choice is context-specific, and that contextual cues can prime a particular social identity during the strategic decision making process. In addition, the present research provides some evidence that social identities not only influence intergroup relationships within organizations, but that they can have a direct impact on an organization's strategic operations.

The findings of this dissertation research may have relevance for practitioners as well. Although there is a general recognition that decision makers operate under a multiplicity of constraints that prevent them from consistently reaching the optimal solution to a problem, organizations continue to function from a utility perspective, where they seek to maximize profit and minimize expense. This research may motivate scholars to provide an additional explanatory model of why this utility goal is not always met. With this information, practitioners may have an increased understanding of the decision making process, particularly when it comes to risk-taking, and can introduce organizational mechanisms that can enhance an individual's risky decision making. Specifically, this study provides further support for managers to enlist institutional controls to increase the likelihood that individual and organizational goals are aligned (Jensen & Meckling, 1976). In addition, managers may want to move to create an environment that reduces the impact of identity threats on individuals in their organizations. By increasing employee awareness of how language can create a threatening space within the organization, it is possible to reduce the threat to those who might otherwise be marginalized.

### **Limitations**

As with most experimental studies, the findings in the research cannot be generalized, but are designed to establish that the hypothesized relationships exist. Secondly, although I am interested in risky choice, I do not give them a choice between alternatives, a condition that is more likely to mirror what takes place in organizations. In addition, a task that is more ambiguous and does not clearly define options that are essentially a "toss-up" may present a decision in which participants can be more invested.

This greater investment, in turn, may provide stronger evidence of the theorized relationships.

Finally, while manipulation checks do give a degree of assurance that the identity manipulations worked, it is difficult to discern whether individuals are making decision from the perspective of an activated identity. There may also be some confusion whether the valence of the identity group was based on the identity's status or the group's performance. Although status construction theory (Ridgeway & Erickson, 2000) argues that status ascriptions are based, in part, on performance outcomes, the methods used to activate negative and positive identities may confound the two. In the future I will tease these variables apart to determine if status or performance is driving the relationship with risky decision making.

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## Appendix A: Revised Consent Letter

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### Decision Research

You have volunteered to participate in a study on decision making. The goal of this study is to help managers better understand how individuals make decisions in organizations. The Investigator, Shalei Simms, is a doctoral candidate in the Organization Management department at the State University of New Jersey Rutgers Newark and New Brunswick. Mrs. Simms would like to learn more about the decision making process. By signing this form, you have volunteered to participate in this research. Your participation is completely voluntary. You may end your participation at any time.

The study will take place over two days. On the first day you will receive a survey, which will ask you to answer a series of questions. The survey should take approximately 15 minutes to complete. On the second day you will be asked to read a series of decision scenarios and answer the questions that follow. This portion of the study should take approximately 20 minutes to complete.

Each packet you receive will have a cover sheet attached for you to write your name. This is only for the purpose of matching your packets. Once your packets have been matched, a code number will be assigned and the cover sheets will be destroyed. Your name will not be made public. No one, other than the investigator, will have access to your work.

Your performance in this study will not be graded nor released to anyone other than the investigator.

No names will be released. All information obtained in connection with this study will remain completely anonymous. Any written reports and publications resulting from this study will only be used as aggregated data; no one will be identified. Results from this study can be provided at the participant's request.

There is a minimal level of risk involved in participating in this study. The probability and magnitude of harm or discomfort anticipated in the proposed research are not greater, in and of themselves, than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.

If you have any questions, please contact Shalei Simms ([shaleis@pegasus.rutgers.edu](mailto:shaleis@pegasus.rutgers.edu)) at RBS - Organization Management 94 Rockafeller Road, Piscataway, NJ 08854 or call (732) 445-3576 and she will answer them. For any concerns regarding this study, please contact the Office of Research & Sponsored Programs, 3 Rutgers Plaza, New Brunswick, NJ 08901 or call IRB Administrator (732) 932 0150 ext. 2104).

---over---

Your signature below indicates that you have read the above information and have agreed to participate in the decision making research. Your signature also confirms that you are a student at the State University of New Jersey Rutgers Newark and New Brunswick. You may withdraw from this study at any time without prejudice after signing this form.

*This informed consent form was approved by the Rutgers University Institutional Review Board for the Protection of Human Subjects on 3/9/2009; approval of this form expires on 3/8/10.*

\_\_\_\_\_  
Signature of Participant      Date

\_\_\_\_\_  
Signature of Investigator      Date

\_\_\_\_\_  
Name (printed)

## Appendix B: Article for Positive Social Identity Condition

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### Instructions

*Please read all instructions carefully before you begin.*

Please read the following article.

### ***FOR IMMEDIATE RELEASE***

#### **RUTGERS STUDENTS WIN SECOND ANNUAL NYSSA INVESTMENT RESEARCH CHALLENGE**

NEW YORK, NY — On April 22, a team of five first-year Rutgers MBA students won the second annual New York Society of Security Analysts (NYSSA) Investment Research Challenge. The Challenge was an eight-month educational initiative in which industry professionals worked with business students to guide them in researching and reporting on publicly traded companies.

Liya Brook, Aramie Dimm, Bradley Korch, Alex Orozco and Javed Siddique represented Rutgers and competed against teams from eight area business schools including Columbia Business School and NYU Stern in the initial phase of the competition.

Rutgers and three other finalist teams were selected to make oral presentations on April 22 to a panel of Wall Street executives. The Rutgers team was chosen as the winner, based on its combined scores for its written report and presentation. As the winner, the Rutgers team will spend a day onsite at Prudential Financial with their equity research team and their report will be cited in the *Journal of Investment Management*.

## Appendix C: Negative Social Identity Condition

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### Instructions

*Please read all instructions carefully before you begin.*

Please read the following article.

### ***FOR IMMEDIATE RELEASE***

#### ***NYU STERN STUDENTS WIN SECOND ANNUAL NYSSA INVESTMENT RESEARCH CHALLENGE***

NEW YORK, NY — On April 22, a team of five first-year NYU Stern MBA students won the second annual New York Society of Security Analysts (NYSSA) Investment Research Challenge. The Challenge was an eight-month educational initiative in which industry professionals worked with business students to guide them in researching and reporting on publicly traded companies.

Liya Brook, Aramie Dimm, Bradley Korch, Alex Orozco and Javed Siddique represented NYU Stern and competed against teams from eight area business schools including Columbia Business School and Rutgers Business School in the initial phase of the competition.

Stern and three other finalist teams were selected to make oral presentations on April 22 to a panel of Wall Street executives. The Stern team was chosen as the winner, based on its combined scores for its written report and presentation. As the winner, the Stern team will spend a day onsite at Prudential Financial with their equity research team and their report will be cited in the *Journal of Investment Management*.

**Appendix D: Identity Manipulation, Positive/Collective Condition****Instructions**

List three ways in which Rutgers Business School positively compares with the NYU Stern School of Business. That is to say, list three reasons one would select to attend Rutgers over NYU.

We are....

1.

2.

3.

**Appendix E: Identity Manipulation, Negative/Individual Condition****Instructions**

List three ways in which Rutgers Business School negatively compares with the NYU Stern School of Business. That is to say, list three reasons one would NOT select to attend Rutgers over NYU.

My school is....

1.

2.

3.

## Appendix F: Decision Scenario and Follow-up Questions

*Please read all instructions carefully before you begin.*

You are taking part in a study that is also being conducted with participants from the **New York University**. The aim of the study is to compare the decision making behaviors of students from different business schools. Please answer the following business scenarios. After you answer the questions regarding the scenario, there are a series of follow-up questions to answer. Please circle your answer or fill in the blank as requested. Please make sure to answer ALL questions provided.

### Decision Scenario

Rutgers has been given a trust of \$10,000 to be used at the leadership's discretion. As part of the business school's investment project, you have been given the responsibility of making investment decisions for school's trust. "Energy" Oil Company, a company that specializes in oil drills, recently found oil in a section called AREA A. Experts in oil drilling and in oil shares claim that there is a 50% chance of finding ANOTHER oil well in this area. With a 50% chance of finding oil, your full investment can yield \$20,000 for Rutgers. However, there is also a 50% chance that no oil will be found. If this is the result you will lose all the school's money and end up with \$0. You also have the option of only investing part of the school's trust.

Do you wish to:

- (1) Invest the full amount of your school's fund?
- (2) Invest only a portion (specify amount)\$\_\_\_\_\_?
- (3) Decide not to invest



## Appendix G: Final Questionnaire

*Please use the following scale to respond to the questions below.*

**1= Strongly Disagree 2=Somewhat Disagree 3=Neutral 4=Somewhat Agree 5 = Strongly Agree**

**How would you characterize the decision you faced as an investor in “Energy” Oil Company?**

The overall risk of the decision is high.	1	2	3	4	5
The probability of failure is high	1	2	3	4	5
Rutgers stands to lose a lot financially.	1	2	3	4	5
There is a lot of uncertainty when predicting how well Rutgers will do financially	1	2	3	4	5

*Please use the scale below to respond to the following questions.*

**1=Very Unlikely 2=Somewhat Unlikely 3=Neutral 4=Somewhat Likely 5=Very Likely**

**How would you rate your general tendency to...**

choose relatively risky alternatives based on the assessment of others on whom you must rely	1	2	3	4	5
choose relatively risky alternatives which rely on analyses high on technical complexity	1	2	3	4	5
choose relatively risky alternatives which could have a major impact on the strategic direction of your organization	1	2	3	4	5
initiate a strategic corporate action which has the potential to backfire	1	2	3	4	5
support a decision when I was aware that relevant analyses were done while missing several pieces of information	1	2	3	4	5

*Please use the following scale to respond to questions below.*

**1= Strongly Disagree 2=Somewhat Disagree 3=Neutral 4=Somewhat Agree 5 = Strongly Agree**

When someone criticizes Rutgers University it feels like a personal insult.	1	2	3	4	5
I am very interested in what others think about Rutgers	1	2	3	4	5
When I talk about this school, I usually say ‘we’ rather than ‘they’.	1	2	3	4	5
This school’s successes are my successes.	1	2	3	4	5
When someone praises this school it feels like personal compliment	1	2	3	4	5
If a story in the media criticizes the school, I would feel embarrassed.	1	2	3	4	5

*Please Use the following scale to respond to the questions below.*

**1= Strongly Disagree 2=Somewhat Disagree 3=Neutral 4=Somewhat Agree 5 = Strongly Agree**

Rutgers performed better than NYU in the investment competition	1	2	3	4	5
I think positively when I compare Rutgers to NYU	1	2	3	4	5
Rutgers is a higher ranked school than NYU	1	2	3	4	5
In the decision scenario I used my own money to invest	1	2	3	4	5
In the decision scenario I used my family's money to invest	1	2	3	4	5
My success or failure in the decision scenario only affected me	1	2	3	4	5

**1= Strongly Disagree 2=Somewhat Disagree 3=Neutral 4=Somewhat Agree 5=Strongly Agree**

I feel that I am a person of worth, at least on an equal plane with others	1	2	3	4	5
I feel that I have a number of good qualities	1	2	3	4	5
All in all, I am inclined to feel that I am a failure	1	2	3	4	5
I am able to do things as well as most other people	1	2	3	4	5
I feel I do not have much to be proud of	1	2	3	4	5
I take a positive attitude toward myself	1	2	3	4	5
On the whole, I am satisfied with myself	1	2	3	4	5
I wish I could have more respect for myself	1	2	3	4	5
I certainly feel useless at times	1	2	3	4	5
At times I think I am no good at all	1	2	3	4	5

### **Demographic Information**

- Race (1) African-American (includes Caribbeans of African decent)  
 (2) Asian-American/Pacific Islander (includes Pakistanis and Indians)  
 (3) Hispanic (non-Black)  
 (4) Multi-Racial  
 (5) Native American (includes Alaskan Natives)  
 (6) White (not of Hispanic origin; includes Arabian)

Age \_\_\_\_\_

Gender Female \_\_\_\_\_ Male \_\_\_\_\_

How many years of employment experience have you had? \_\_\_\_\_years

How many years of management experience have you had? \_\_\_\_\_years

School\_\_\_\_\_

Major: Accounting\_\_\_\_\_ Finance\_\_\_\_\_ Marketing\_\_\_\_\_ Info Systems \_\_\_\_\_

Insurance \_\_\_\_\_ International Business \_\_\_\_\_ Management \_\_\_\_\_

Other (Please specify) \_\_\_\_\_

## Appendix H: Pilot Study Pre-Treatment Questionnaire

### Instructions

*Please use the scale below to respond to the following questions.*

**1=Very Unlikely 2=Somewhat Unlikely 3=Neutral 4=Somewhat Likely 5=Very Likely**

**How would you rate your general tendency to...**

choose relatively risky alternatives based on the assessment of others on whom you must rely	1	2	3	4	5
Choose relatively risky alternatives which rely on analyses high on technical complexity	1	2	3	4	5
choose relatively risky alternatives which could have a major impact on the strategic direction of your organization	1	2	3	4	5
initiate a strategic corporate action which has the potential to backfire	1	2	3	4	5
support a decision when I was aware that relevant analyses were done while missing several pieces of information	1	2	3	4	5

*Please use the following scale to respond to questions below.*

**1= Strongly Disagree 2=Somewhat Disagree 3=Neutral 4= Agree 5=Strongly Agree**

I feel that I am a person of worth, at least on an equal plane with others	1	2	3	4	5
I feel that I have a number of good qualities	1	2	3	4	5
All in all, I am inclined to feel that I am a failure	1	2	3	4	5
I am able to do things as well as most other people	1	2	3	4	5
I feel I do not have much to be proud of	1	2	3	4	5
I take a positive attitude toward myself	1	2	3	4	5
On the whole, I am satisfied with myself	1	2	3	4	5
I wish I could have more respect for myself	1	2	3	4	5
I certainly feel useless at times	1	2	3	4	5
At times I think I am no good at all	1	2	3	4	5

*Please Use the following scale to respond to the questions below.*

**1= Strongly Disagree 2=Somewhat Disagree 3=Neutral 4=Somewhat Agree 5 = Strongly Agree**

When someone criticizes Rutgers University it feels like a personal insult.	1	2	3	4	5
I am very interested in what others think about Rutgers	1	2	3	4	5
When I talk about this school, I usually say 'we' rather than 'they'.	1	2	3	4	5
This school's successes are my successes.	1	2	3	4	5
When someone praises this school it feels like personal compliment	1	2	3	4	5
If a story in the media criticizes the school, I would feel embarrassed.	1	2	3	4	5

### **Demographic Information**

- Race (1) African-American (includes Caribbeans of African decent)  
 (2) Asian-American/Pacific Islander (includes Pakistanis and Indians)  
 (3) Hispanic (non-Black)  
 (4) Multi-Racial  
 (5) Native American (includes Alaskan Natives)  
 (6) White (not of Hispanic origin; includes Arabian)

Age \_\_\_\_\_

Gender Female \_\_\_\_\_ Male \_\_\_\_\_

How many years of employment experience have you had? \_\_\_\_\_years

How many years of management experience have you had? \_\_\_\_\_years

School \_\_\_\_\_

Major: Accounting \_\_\_\_\_ Finance \_\_\_\_\_ Marketing \_\_\_\_\_ Info Systems \_\_\_\_\_

Insurance \_\_\_\_\_ International Business \_\_\_\_\_ Management \_\_\_\_\_

Other (Please specify) \_\_\_\_\_

## Appendix I: Pilot Study 1 Treatment

### Instructions

*Please read all instructions carefully before you begin.*

- A. You are taking part in a study that is also being conducted with participants from the **Bergen County Community College**. The aim of the study is to compare the decision making behaviors of students from different business schools. Please answer the following business scenarios. After you answer the questions regarding the scenario, there are a series of follow-up questions to answer. Please circle your answer or fill in the blank as requested.
  
- B. You are taking part in a study that is also being conducted with participants from the **New York University**. The aim of the study is to compare the decision making behaviors of students from different business schools. Please answer the following business scenarios. After you answer the questions regarding the scenario, there are a series of follow-up questions to answer. Please circle your answer or fill in the blank as requested.

### Decision Scenario

*Please read the scenario below carefully before answering the subsequent questions. Before you read the scenario, please indicate below which school you presently attend.*

Last year you decided to invest \$10,000 in “Energy” Oil Company. You purchased shares of this company that specializes in oil drills in a location called AREA A. Recently, oil was found in this area. Consequently, the value of your shares increased by 50%, which brought your shares to a value of \$15,000. Experts in oil drilling and in oil shares claim that there is a 50% chance of finding another oil well in this area. That will further boost the value of your current shares to \$30,000. However, there is also a 50% chance that no oil will be found, which will lead your shares to lose all of their value. If this is the result, you will lose all your money and end up with \$0. You also have the option of partnering with another interested party and only investing a portion of your shares.

Do you wish to:

- (1) Stop and cash in your shares?
- (2) Partner with someone and invest \$\_\_\_\_\_?
- (3) Continue investing in the same shares?

How much confidence do you have in your decision?

- (1) Very high confidence
- (2) High confidence
- (3) Low confidence
- (4) Very low confidence

*Please use the following scale to respond to the questions below.*

**1= Strongly Disagree 2=Somewhat Disagree 3=Neutral 4=Somewhat Agree 5 = Strongly Agree**

How would you characterize the decision you faced as an investor in “Energy” Oil Company?

The overall risk of the decision is high. 1 2 3 4 5

The probability of failure is high 1 2 3 4 5

I stand to lose a lot financially. 1 2 3 4 5

There is a lot of uncertainty when predicting how well I will do financially 1 2 3 4 5

*Please use the following scale to respond to the questions below.*

**1= Strongly Disagree 2=Somewhat Disagree 3=Neutral 4=Somewhat Agree 5 = Strongly Agree**

My school is ranked higher than the other school participating in the study. 1 2 3 4 5

The other school participating in this study is more academically challenging than my school. 1 2 3 4 5

## Curriculum Vita

**Shalei V. K. Simms**

### Education

2010	Rutgers Business School, Newark, NJ Ph.D., Organization Management
2002	University of Connecticut School of Business, Storrs, CT Doctoral Student, Management
1996	Florida State University, Tallahassee, FL M. Ed candidate, Educational Research
1992	Wesleyan University, Middletown, CT BA, Psychology-Sociology

### Work Experience

2001-2002	SUNY Downstate Medical Center, Early Medical Education Program, <i>Program Coordinator</i>
2000-2001	Chubb Institute, <i>Academic Advisor</i>
1998-2000	Pace University, Computer Science and Information Systems Department, <i>Academic Advisor</i>
1996-1998	Concord Elementary School, <i>Second Grade Teacher</i>

### Publications

ogilvie, dt & Simms, S. V. K. (2009). "The impact of teaching creativity on accounting negotiations" *Group Decision and Negotiation Journal*

Kickul, J., Gundry, L. K., Barbosa, S., Simms, S. (2009). "One style does not fit all: The role of cognitive style in entrepreneurship education." *International Journal of Entrepreneurship and Small Business*

.  
"Activist or entrepreneur? An identity-based model of social entrepreneurship" (with Jeffrey A. Robinson), *International Perspectives on Social Entrepreneurship Research*, Palgrave, (Eds. J. A. Robinson, J. Mair, K. Hockerts) 2008.