GROUP REACTIONS TO RISKY PROSPECTIVE MEMBERS

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Most research on the consequences of rejection focuses on intrapersonal issues, such as an increased need to belong, negative affect, and decreased self-esteem. Rejected individuals often seek to cope with these problems by establishing new social bonds. However, there is no research on whether these efforts are successful. A prospective member rejected by one group may seem risky and thus unattractive to other groups he or she seeks to join. My research extended Sitkin and Pablo's (1992) model of risky decision-making from individuals to groups, so that group responses to such persons could be examined. A field experiment was carried out on small classroom groups ($N = 57$) that worked together on group activities throughout a semester. Students' course grades were partially determined by the performance of their groups. Five group characteristics were measured and correlated with risk propensity (the tendency for groups to take risks). Groups that were more cohesive, potent, ambitious, successful, and perceived that outside help was available and valuable, had lower risk propensities. Risk propensity was unrelated to how risky prospective members seemed, or how willing groups were to admit them. Rejected individuals were perceived as riskier than non-rejected individuals, and groups were less willing to admit rejected than non-rejected individuals. A 2 (Reason for rejection: task vs. social) x 2 (Expectancy: high vs. low) repeated measures design examined how the characteristics of rejected individuals affected how risky they seemed to groups, and how willing groups were to admit them. Groups perceived individuals who were rejected for reasons likely to occur again (high expectancy) as riskier, and they were less willing to admit

these individuals. Groups also perceived more risk among prospective members who were rejected for reasons relevant to their group's orientation (task or social). Rejection apparently makes it difficult for individuals to enter new groups, which could exacerbate the negative intrapersonal effects of rejection.

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INTRODUCTION

One of the tasks that many small groups face is choosing new members. Groups often have a pool of prospective members, from which they must choose some number of persons to admit. However, a prospective member is not always an ideal candidate for membership. One problem is that a person seeking membership in one group may have belonged to another group, but been rejected by that group. Such rejection can be stigmatizing, reducing the attractiveness of the person to the new group. This is especially true when the rejecting group is similar to the group that the person is trying to join. This research examines the conditions under which a group will admit someone who has been rejected by another, similar group.

Group Socialization: The Investigation Phase

According to Moreland and Levine's group socialization model (1982, 2000; Levine & Moreland, 1994), the relationships between a group and its members change over time. This change involves three reciprocal processes: evaluation, commitment, and role transition.

Evaluation is a cognitive process that involves the perceived rewardingness of the relationship between the group and the individual, in comparison to alternative relationships. Evaluations can focus on the past, present, or future. Thus, the group and the individual can compare their past, present, and future relationships to past, present, and future alternative relationships. To the extent that these comparisons are positive, feelings of commitment rise.

Commitment is an affective process that has important consequences for the relationship between a group and its members. When a group is highly committed to an individual, it will

accept that person's needs, work hard to fulfill those needs, and feel positively toward the person. When an individual is highly committed to a group, he or she will accept its goals and work hard to help achieve them (Levine & Moreland, 1994; Moreland & Levine, 1982; Moreland, Levine, & Cini, 1993). Commitment is dynamic, changing constantly over time. Sometimes, the commitment levels of both the individual and the group rise or fall far enough to reach their respective decision criteria. A decision criterion is a level of commitment at which one party wants to change its relationship with the other. When both the individual and the group reach their decision criteria, a role transition occurs.

A role transition is a behavioral process that can include (among other things) special ceremonies that signify the change in the relationship between the group and the individual. Role transitions mark the boundaries between different phases of group membership. For example, entry marks the boundary between the investigation phase, when the individual is a prospective member, and the socialization phase, when the individual is a new member. Acceptance marks the boundary between the socialization phase and the maintenance phase, when the individual is a full member. Divergence marks the boundary between the maintenance phase and the resocialization phase, when the individual is a marginal member. Finally, exit marks the boundary between the resocialization phase and the remembrance phase, when the individual is an ex-member. The role of prospective member is especially relevant to my research, as is the first phase of group membership, investigation.

During investigation, a prospective member engages in a reconnaissance of the groups he or she is considering joining, while those groups engage in the recruitment of that person, whom they might want to admit. The prospective member evaluates whether each group will help satisfy his or her needs, while each group evaluates whether the prospective member will help to

achieve its goals. If these evaluations are positive for a particular group, then levels of commitment on both sides will rise, and if they rise far enough to reach both party's entry criteria, then the prospective member will want to join the group, and the group will want to admit that person.

This analysis suggests that it is not enough for someone to want to join a group; the group must also want that person to be a member. It is unlikely that a group would offer membership to someone who was perceived as a risk to the group, because that person might interfere with group functioning. My research focuses on the risk posed by a prospective member who was rejected by another group. Such a rejection may evoke a negative evaluation from the new group. If that group evaluates the prospective member negatively, then it will not offer membership to that person. The purpose of this research is to learn whether prior rejection indeed produces negative evaluations, and how certain characteristics of groups make them more or less likely to admit a person who was rejected by another group.

Consequences of Rejection

Given the social nature of humans, every prospective member is probably a current and/or ex-member of several groups. When a group evaluates a prospective member, the group is thus likely to consider that person's relationships with other groups (cf. Levine, Moreland, & Ryan, 1997). The circumstances surrounding a prospective member's exit from one group may well influence his or her entry into other groups. For example, someone who once worked for Company A will be evaluated differently by Company B, depending on whether that person was fired from Company A or left it voluntarily.

Research has consistently shown that being rejected has negative intrapersonal consequences. These include decreases in feelings of belongingness (Williams, Cheung, & Choi,

2000; Williams, Shore, & Grahe, 1998), self-esteem (Leary, Springer, Negel, Ansell, & Evans, 1998; Stager, Chassin, & Young, 1983), prosocial behavior (Twenge, Ciarocco, & Baumeister, 2001), and intelligent thought (Baumeister, Twenge, & Nuss, 2002). Rejection has also been shown to increase aggressive behavior (Newcomb, Bukowski, & Pattee, 1993; Twenge, Baumeister, Tice, & Stucke, 2001), negative affect and anxiety (Baumeister & Tice, 1990; Leary, 1990; Leary, Koch, & Hechenbleikner, 2001; Leary et al., 1998; Williams, 1997), and a variety of self-defeating behaviors, including procrastination and risk-taking (Twenge & Baumeister, in press; Twenge, Catanese, & Baumeister, 2002).

Of particular interest here is the finding that rejection decreases feelings of belongingness. When that happens, a person often attempts to develop bonds with others by restoring old bonds and/or creating new ones (Snoek, 1962; Sommer, Williams, Ciarocco, & Baumeister, 2001; Williams et al., 1998; Williams et al., 2000; Williams et al., 2002; Williams & Sommer, 1997). But are these efforts successful? Past research has focused only on the behavior of the rejected person. So, although we know that a rejected person will *try* to establish bonds with others, we do not know how others react to such efforts. My research shifts the focus from the rejected person to how others evaluate that person and whether they are willing to have a relationship with him or her. Specifically, my research examines whether and how groups use a prospective member's prior rejection by another group as a component of their evaluations when deciding whether to admit that person.

Evaluation of Risky Prospective Members

Why would a group hesitate to admit a prospective member who has been rejected by another group? This can be conceptualized as an issue of risk. Broadly speaking, *all* prospective members pose risks to groups, because the outcomes associated with admitting them are always

uncertain (see Feldman, 1994; Levine & Moreland, 1985; Sutton & Louis, 1987; van Knippenberg, van Knippenberg, & van Dijk, 2000). But when someone has been rejected by another group, the risk associated with admitting that person is likely greater than the risks associated with other prospective members. There are three general ways in which it may seem risky to admit someone who has been rejected by another group. First, rejection itself is stigmatizing, making the person seem potentially risky and thus unattractive as a new member, regardless of why it occurred. Second, a rejected person may seem likely to cause internal trouble by weakening the group's task performance and/or disturbing its social life. Finally, a rejected person may raise issues involving intergroup relations. Admitting someone that another group has rejected may harm the new group's image or cause trouble with that other group. It is important to note that these reasons are not mutually exclusive. Any or all of them can affect how risky a rejected person seems.

Miller and Kaiser (2001) suggest that rejection itself is stigmatizing, and produces a devaluation of the rejected individual (Goffman, 1963; Jones et al., 1984). Stigma is a marker that leads other people to stay away from someone (Kurzban & Leary, 2001). So, if a person has been rejected by one group, then another group may find that person undesirable due to the stigma of rejection, even when the precise reasons for the rejection are unknown (see Freedman & Doob, 1968). And if the reasons for rejection are unknown, then a group may make attributions about the person. Sometimes, groups have existing norms about what attributions should be made; but sometimes groups have to construct these attributions instead (see Levine, 1989). Rejection could be attributed to some internal, global, and stable characteristic of the person (Rohlman, 1999), making it unlikely that he or she will be admitted. For example, if Joseph was rejected by one campus fraternity, then it is unlikely that another fraternity would

evaluate him positively as a prospective member, because the rejection stigmatizes him. The new fraternity may imagine that Joseph has a variety of negative qualities, even though there is no evidence of such qualities.

Once a person has been stigmatized, further rejection is likely (see Bogardus, 1933; Crocker, Major, & Steele, 1998; Hurtado & Carter, 1997; Miller & Kaiser, 2001). So, rejection by a group increases a person's need to belong, while at the same time stigmatizing him or her. An increased need to belong is likely to produce affiliative behavior, but given that the person has been stigmatized, other groups will probably reject his or her efforts to be admitted. This begins a cycle of rejection from which it may be difficult for the person to break free.

Rejection is not just stigmatizing, but may also lead a group to expect that the person will cause internal trouble. When evaluating a prospective member, many groups consider two broad qualities, namely task ability and sociability (Moreland & Levine, 1982). Although task groups and social groups differ in their emphases on these qualities (cf. Kipper, Bizman, & Einat, 1981), all groups prefer new members whose task ability *and* sociability are higher. A prospective member who was rejected by another group thus may be viewed as a risk, whether that rejection was due to task or social issues. Returning to Joseph, a campus fraternity might thus evaluate him negatively as a prospective member whether he was rejected because he seldom participated in community service projects (a task concern), or because he was not very friendly (a social concern). In both cases, Joseph was a poor group member. He was either a "slacker" or difficult to get along with (respectively), and both qualities increase the risks associated with admitting him. Depending on a group's task or social nature, these qualities may produce different levels of perceived risk. A task group would be more disturbed if someone was a "slacker," whereas a social group would be more disturbed if someone was difficult to get along with. Thus, the risk

associated with admitting a rejected person will seem greater insofar as the reason for the rejection is important for the new group.

In addition to disrupting a group's task performance and/or social atmosphere, admitting a rejected person can also negatively affect current group members. According to Social Identity Theory (Tajfel & Turner, 1986), people derive their self-concepts in part from the groups to which they belong, and membership in better groups leads to greater self-isteem. The social identities of group members may thus suffer if prospective members of poor quality are admitted to their groups (see also Luhtanen & Crocker, 1991).

Another way in which admitting a rejected person may seem risky involves the damage that person could cause to the group's relationships with other groups. Many groups, for example, are concerned about their public image (Dutton & Dukerich, 1991; Dutton, Dukerich, & Harquail, 1994). A group's image can affect its success, including the recruitment and retention of members and the ability to achieve group goals. The latter outcome often depends on contributions and support from the public (Cameron & Whetten, 1983; Sutton & Callahan, 1987), which includes individuals and other groups. Thus, groups strive to create and maintain an image that appeals not only to their own members, but also to the public. One way to accomplish this is by managing group membership (see Zander, 1976). Groups can manage their membership in several ways. For instance, groups can reject members who do not make valuable contributions and/or only invite the best applicants to become group members. Another way that admitting a rejected person can affect relationships with other groups involves the rejected person's relationship with his or her original group. If that group has strong negative feelings about its ex-member, then a strained relationship may arise between it and any new

group that admits the person (cf. Levine, et al., 1997). The new group may be "punished" by the old one for "harboring" its reject.

In sum, a prospective member may seem like a risk to the extent that a group believes he or she will cause trouble. Such trouble may simply reflect the stigma associated with the rejection, or it may reflect more specific concerns about intragroup or intergroup issues. Intragroup issues include uncertainty about how much the person will harm the task performance or social life of the group. Intergroup issues include uncertainty about how much the person will harm the group's image or strain relations with other groups.

Risk Assessment by Groups

Although much work on group decision making has been done (e.g., Baltes, Dickson, Sherman, Bauer, & LaGanke, 2002), there has been little work on *risky* decisions by groups, at least since the era of research on the risky shift and group polarization (e.g., BarNir, 1998; Brauer, Judd, & Gliner, 1995; Rodrigo & Ato, 2002; Teger & Pruitt, 1967; Wallach & Kogan, 1965). Organizational psychologists have shown the greatest interest in this topic. Their research includes studies of decisions involving risk by individuals who actually lead groups (MacCrimmon & Wehrung, 1990; Stine-Cheyne, 2002; Tabak & Barr, 1999), or who were asked to imagine themselves as group leaders (e.g., Sitkin & Pablo, 1992; Sitkin & Weingart, 1995; Slattery & Ganster, 2002). However, few researchers have examined risky decision making *by* groups. Some exceptions are Houghton, Simon, Aquino, and Goldberg (2000), Karakowsky and Elangovan (2001), Levine, Higgins, and Choi (2000), and van Knippenberg, et al. (2000). Houghton and her colleagues found that decision making in groups is not free from the biases that plague individual decision making. In fact, several biases, such as the law of small numbers and the illusion of control, influence group decision making even more than they influence

individual decision making. Karakowsky and Elangovan found that the risk preferences of groups are closer to the risk preferences of their male than their female members. Levine and his colleagues found that groups made riskier judgments when they focused on positive outcomes. And van Knippenberg and his colleagues found that risk-seeking and prototypical members take the lead in decision making when groups face ambiguous problems, whereas non-prototypical members take the lead when problems are not ambiguous.

Recently, Sitkin and his colleagues have developed a theoretical model that relates risky decisions to two broad factors, namely risk propensity and risk perception (Sitkin & Pablo, 1992; Sitkin & Weingart, 1995; see also MacCrimmon & Wehrung, 1985). This model was originally designed to explain how individuals make decisions, but Sitkin and Pablo (1992) argue that it can also explain how groups and organizations make decisions. Risk propensity is not the first construct to be converted from the individual to the group level. Other examples include the conversion of individual self-efficacy (Bandura, 1977) to collective efficacy (Bandura, 1997), and the conversion of individual self-esteem (Pelham 1995) to collective self-esteem (Luhtanen & Crocker, 1991). These and other conversions have produced valuable insights into group behavior. Our understanding of group decision-making may benefit as well if risk propensity is converted to a group-level construct.

One of the advantages of Sitkin and Pablo's (1992) model is its ability to explain previous findings that appeared to be contradictory. For example, some researchers have found a negative relationship between perceived risk and risk taking (Osborn & Jackson, 1988; Staw, Sandelans, & Dutton, 1981; Thaler & Johnston, 1990), whereas others have found a positive relationship (Kahneman & Tversky, 1974; Singh, 1986). Sitkin and Pablo argued that researchers studying risk perception and risky decision-making often failed to consider risk

propensity – everyone was treated as though they approached risky decisions in the same way. Sitkin and Pablo suggest that risk propensity moderates the relationship between perceived risk and risk taking – perceived risk increases risk-taking when risk propensity is high, but decreases risk-taking when risk propensity is low.

Risk propensity. Risk propensity is a general tendency to take or avoid risks (Sitkin & Weingart, 1995). It has also been labeled risk attitude (Dyer & Sarin, 1982; Kahneman & Tversky, 1979; MacCrimmon & Wehrung, 1990; Weber, Blais, & Betz, 2002; Weber & Milliman, 1997). I am especially interested in how a group's risk propensity influences its decision to admit a rejected person, which is one type of risk that a group might face.

Many variables could influence a group's risk propensity, including characteristics of the group and its environment. For example, Sitkin and Pablo (1992) suggested that outcomes associated with prior risky decisions can influence risk propensity, with more positive outcomes leading to greater risk propensity. And one might predict that groups with higher levels of collective efficacy (Gibson, Randel, & Earley, 2000; Guzzo & Dickson, 1996; Little & Madigan, 1997) have greater risk propensity because they feel more capable of handling any problems that arise. Similarly, groups with more ambitious goals, or groups that compete closely with other groups, may have greater risk propensity, because risk-taking is necessary for their success. The environment may also play a role in the risk propensity of groups. For example, if risk is valued in a group's social environment, then that group may have greater risk propensity (Sitkin & Pablo, 1992; Stine-Cheyne, 2002). If a group expects outsiders to provide help when it is needed (cf. Moreland & Levine, 1992), then the group may have a greater risk propensity, because it has less fear of failure. And when the consequences of failure are smaller, a group may be more

willing to take risks. This relationship may be moderated, however, by the availability and value of outside help.

Risk perception. Although risk propensity clearly plays a role in risky decision making, it is not the only important factor. Risk perceptions must also be considered, according to Sitkin and his colleagues (Sitkin & Pablo, 1992; Sitkin & Weingart, 1995). Risk perception is simply an assessment of how risky an action would be. In my research, risk perception refers to how risky a group believes it would be to admit someone who was rejected by another group. Risk perception could also vary as a function of group characteristics and characteristics of the prospective member. For instance, high levels of process interdependence within a group may make it seem riskier to admit a rejected person because group outcomes rely heavily on how well group members work together. Group cohesiveness (Hogg, 1992) may also play a role in risk perception. On one hand, highly cohesive groups may perceive a rejected person as riskier, because that person might be disruptive. On the other hand, highly cohesive groups may perceive such a person as less risky, because they can withstand disruption more easily.

Characteristics of the prospective member are likely to be important as well. Someone who has been rejected by several groups, for example, may be perceived as riskier than a similar person who has only been rejected by one group. Why? Because someone who has been rejected many times may seem more likely to cause trouble. Someone who was rejected recently may also be perceived as riskier than someone who was rejected a long time ago, because a recent rejection implies that the cause for rejection is still a problem for the individual.

Although the focus so far has been on negative individual characteristics that increase risk perception, positive characteristics should also be considered. These have the potential to reduce the perceived risk associated with admitting a rejected person to a group. If there is

something positive about the rejected person that could benefit the group, then the group might perceive that person as less risky, because the potential benefits of admitting him or her could help balance the costs. This suggests that risk perception can be analyzed in an expectancy-value framework (Atkinson, 1964; Feather, 1982, 1988, 1992). Every person has many characteristics, some positive and some negative. These characteristics vary in their probability of affecting the person's behavior. According to the expectancy-value framework, a person's utility for a group is the average of the expectancy x value products. A prospective member will thus have little utility if the overall probability that he or she will help the group is low (few positive characteristics, whose likelihood of affecting behavior is small), and/or the probability that he or she will harm the group is high (many negative characteristics, whose likelihood of affecting behavior is large). In terms of risk perception, admitting a rejected person will seem riskier to the group when his or her utility is lower.

Interdependence of risk propensity and risk perception. Sitkin and his colleagues (Sitkin & Pablo, 1992; Sitkin & Weingart, 1995) argued that risk propensity and risk perception both influence risky decision making. But the effects of these variables may not be independent. Sitkin and Pablo (1992) proposed that risk propensity has a direct effect on both risk perception (higher risk propensities lead to lower risk perceptions) and risk behavior (higher risk propensities lead to riskier decisions). They also proposed that risk perception can mediate the effect of risk propensity on risky decisions. There is, as yet, limited support for these claims (Sitkin & Weingart, 1995), and so one benefit of my research is to help clarify the interdependence between risk propensity and risk perception, and their effects on risky decision making.

Overview of the Research

My experiment examines how real groups make decisions about admitting risky prospective members. The groups in my research were small classroom groups whose members worked together in ways that affected their course grades. The research thus involved natural groups whose members were interdependent and had a history of working with each other.

This methodology is novel and potentially valuable – field experiments on small groups are seldom conducted. In one review of small groups research, for example, Moreland and his colleagues (Moreland, Hogg, & Hains, 1994) found that field experiments represented only 3% of published work, despite calls by many people (e.g., Frey, 1994) to study groups outside the laboratory more often.

The small classroom groups in my study engaged in several activities throughout the semester. These activities were designed to engage students socially while involving them in academic tasks. The groups were established on the first day of class, and there were four group activities during in the semester, three before the experimental session and one after. At the experimental session, groups were asked to consider admitting rejected people whose characteristics were experimentally manipulated. Each person was said to have been rejected by another classroom group for task or social reasons that seemed to have a high or low probability of occurring again. The experimental design was thus a within-groups 2 (Reason: task vs. social) x 2 (Expectancy of reoccurrence: high vs. low) factorial, with an appended control cell (a prospective member who was not rejected).

My research examines whether risk propensity and risk perception are interdependent and how each factor affects risky decisions (admitting prospective members who have been rejected by another group). The right side of Figure 1 depicts the relationships among risk propensity, risk perception, and risky decision-making, as predicted by Sitkin and Pablo's (1992) theory.

Based on the preceding discussion of group characteristics, environmental characteristics, and prospective member characteristics, I also examine how certain characteristics influence risk propensity, risk perception, and risky decision-making. The left side of Figure 1 depicts how I believe group, environmental, and prospective member characteristics will affect risk propensity and risk perception.

Based on the stigmatizing nature of rejection, I propose the following hypothesis:

H1: Groups will be less willing to admit someone who was rejected by another group than someone who was not rejected by another group.

Based on Sitkin and Pablo's (1992) model, I propose the following hypotheses:

H2: Groups with higher risk propensities will perceive a rejected person as less risky.

H3: Groups with higher risk propensities will be more willing to admit a rejected person. This effect may be direct and/or mediated by risk perception.

H4: Groups that perceive a rejected person as riskier will be less willing to admit that person.

Although no research has yet examined how group and environmental characteristics affect risk propensity at the group level, I propose the following hypotheses about how they influence risk propensity:

H5: Groups that are more successful will have higher risk propensities.

H6: Groups with greater collective efficacy will have higher risk propensities.

H7: Groups that are more ambitious will have higher risk propensities.

H8: Groups that believe more strongly that valuable outside help is available to them will have higher risk propensities.

My research also explores how group cohesiveness influences the perceived risk associated with admitting a rejected person. As noted earlier, cohesiveness could have either positive or negative effects on risk perceptions.

Within an expectancy-value framework, my research examines how certain characteristics of rejected persons will influence perceptions of the risks associated with admitting them. Because I have a special interest in people who were rejected by groups, my focus is on negative personal characteristics. The perceived nature (task or social) of such characteristics was manipulated, as was their perceived probability of occurring in the new group. The following two hypotheses were tested using data from a 2 x 2 (Reason x Expectancy) repeated-measures experimental design.

H9a: A rejected person will be perceived as riskier if the reason for rejection seems likely to occur again (high expectancy) than if it does not (low expectancy).

H9b: Groups will be less willing to admit a rejected person if the reason for rejection seems likely to occur again (high expectancy) than if it does not (low expectancy).

H10: Groups that are more task-oriented will perceive people who were rejected for task reasons as riskier than people who were rejected for social reasons; groups that are more social-oriented will perceive people who were rejected for social reasons as riskier than people who were rejected for task reasons.

METHOD

Participants

Fifty-seven small groups, containing 168 students from two undergraduate psychology courses at the University of Pittsburgh, participated in my research. Both courses (Introduction to Social Psychology and Psychology of Personality) were taught by graduate students. Classes for each course met once a week for two and a half hours. There were 85 students in the

Introduction to Social Psychology course and 83 students in the Psychology of Personality course. Students were randomly assigned to groups of three during the first class meeting, and their course grades were partially determined by the performance of those groups in several activities conducted throughout the semester. Because some students added or dropped a course later on, group size eventually varied. At the time of the experiment, 2 groups had 4 members, 50 groups had 3 members, 2 groups had 2 members, and 1 "group" had only a single member.

Materials

Several scales were administered to participants. A complete list of these scales and their items can be found in Appendix A. Groups completed each scale together, with members collectively agreeing, through discussion, on their group's response to each item.

Group characteristics. Group cohesion was assessed with a modified version of the Group Environment Questionnaire (GEQ; Carron, Widmeyer, & Brawley, 1985). The GEQ has been used in a number of studies of college students and their groups, always with acceptable reliability (Eys, Hardy, Carron, & Beauchamp, 2003; see also Carron, Brawley, & Widmeyer, 1998). The GEQ is an 18-item scale that assesses two dimensions of cohesion (task and social) at two levels of analysis (group and individual). For my research, only the task and social dimensions at the group level were of interest: Group Integration-Task (GI-T; 5 items), and Group Integration-Social (GI-S; 4 items). The GI-T measures beliefs about the degree of unity in the group as a whole regarding its goals and objectives (e.g., "We all take responsibility for any poor performance of our group"). The GI-S measures beliefs about the degree of social unity in the group as a whole (e.g., "Our group likes to spend time together outside of class"). Some GEQ items were reworded to be appropriate for classroom groups. Groups completed the GEQ together, rating their collective agreement with each item using 9-point Likert scales (1 =

strongly disagree, 9 = *strongly agree*). A task cohesion score and a social cohesion score were computed for each group by averaging its responses across the relevant GEQ items.

To measure whether each group was more task- or social-oriented, groups were also asked "Which is more important to your group, how well you do on the group activities or how well you get along with each other?" They collectively responded using a 9-point Likert scale (1 = *how well we do on group activities,* 5 = *both equally important*, 9 = *how well we get along with each other*). Higher scores indicated a more social orientation.

Collective efficacy was measured using the group potency scale developed by Guzzo, Yost, Campbell, and Shea (1993). This scale has been shown to have acceptable reliability in prior work using college students (Hecht, Allen, Klammer, & Kelly, 2002). One item ("This team expects to have a lot of influence around here") was dropped because it made little sense for classroom groups. The remaining scale items were reworded to be appropriate for such groups. Group members completed this measure together by rating their collective agreement with each item using a 10-point Likert scale (1 = *to no extent*, 3 = *to a limited extent*, 5 = *to some extent*, 7 = *to a considerable extent*, and 10 = *to a great extent*). Each group's score was computed by averaging its responses across the seven items.

To assess group ambition, group members were asked to rate their collective agreement with the following items (1) "It would upset our group if any of its members received less than an A in this course," (2) "We always try to be one of the best groups in the class," (3) "We monitor other groups' class performance so we know about our competition," (4) "Every member of our group has high goals for the group's performance," and (5) "We are one of the most ambitious groups in the class." Responses were made using a 9-point Likert scale (1 =

strongly disagree, 9 = *strongly agree*). A single ambition index was computed by averaging each group's responses across the five items, with higher scores indicating more ambition.

The success of each group was measured in three ways. One objective measure of success was based on the overall performance of group members in the course. At the end of the semester, both instructors provided me with their students' final course grades, measured as a percentage of the possible points they could have earned on exams, homework, and other course requirements. Within each course, I could thus average group member's grades to obtain a single group grade. I then standardized these group grades for each course separately. Standardizing the grades by course controlled for differences in how the two teachers evaluated their students. Another objective measure of success was calculated using each group's performance in several group activities (other than my experiment) conducted during the semester. For example, performance in one activity was measured by the number of unique and appropriate examples generated for different types of aggression, whereas performance in another activity was measured by the number of votes each group received from other groups for its performance of material-relevant skits. Because the nature of each activity and its evaluation were different, I first standardized performance for each activity separately. To obtain a single performance measure for each group, I then averaged these standardized performance scores across group activities. The third measure of success was more subjective – each group collectively rated how well it had performed in the class. Groups responded to this measure using a 9-point Likert scale (1 = *very poorly*, 9 = *very well*).

Environmental characteristics. An important environmental characteristic is whether groups believe that they can receive help from outsiders when help is needed. Outside help for classroom groups could come from an instructor or from classmates. Using 9-point Likert

scales, groups rated their collective agreement about the extent to which they might get help from each of these sources (1 = *very unlikely*, 9 = *very likely*), and the likely value of that help (1 = *not helpful at all*, 9 = *very helpful*). Based on expectancy-value theory, I multiplied the likelihood of receiving help from each source with the perceived value of that help. I then calculated a single score by averaging the belief x value products for both the instructor and fellow classmates. Higher scores indicated a more helpful environment, in the eyes of group members.

Risk propensity. To measure risk propensity, group members collectively responded to five scenarios that classroom groups might encounter. For example, one scenario read: "*Your group is meeting together on campus to study for an upcoming exam. Some members of your group suggest that they would rather go to a party they know about, instead of studying. What does your group decide to do?*" Each scenario offered several response options that differed in their levels of risk for the group. For each scenario, group members chose from a list of three options how the group as a whole would probably respond. For the scenario just described, the three options were "S*tay and study*," "S*tudy, but only for a little while, then go out*," and "S*tudy after the party*." These options differed in relative risk from low to high, as measured in a pilot study where small groups of students (similar to the participants in my research) collectively rated the riskiness of each option using a 10-point Likert scale (1 = *not at all risky*, 10 = *very risky*). (See Appendix B for a detailed description of this pilot study.)

The pilot study demonstrated variability in the choices that were made, suggesting that the scenarios indeed measured different risk propensities. However, when the high risk option was chosen, it was often rated as less risky than when it was not chosen. This suggested that high risk propensity is related to low risk perception, as Sitkin and Pablo (1992) proposed. It

also revealed a potential problem in measuring risk propensity, namely that making a decision about whether to engage in a risky behavior can alter the perceived risk associated with that behavior. Thus, it seemed unwise to have groups choose how they would respond in risky situations *and* rate the riskiness of those responses. To solve this problem, a scoring system similar to a Thurstone scale was developed; independent judges rated the riskiness of each behavioral option, without making choices among the options. Seventeen small groups (containing 74 students) in a Psychology of Small Groups course at the University of Pittsburgh rated the riskiness of each option on the same 10-point Likert scale. These students, like those in my research, worked in groups throughout the semester, with a portion of their final course grade determined by their groups' performance. And like the students in my research, these students also made their ratings collectively, as groups. For my research, each group's risk propensity score was thus calculated by averaging the ratings given to the risky options that it chose by the groups in the Small Groups course (see Appendix A for these ratings).

Prospective member characteristics. Participants were told that a few classroom groups were interested in removing one of their members, and that the instructor would allow this, if other groups were willing to admit those people. All groups were given information about five prospective members, and each group was asked how much it wanted to admit each of these persons. This information was manipulated to create an experiment with a 2 (Reason: task vs. social) x 2 (Expectancy: high vs. low) repeated measures design, and an appended control cell.

The information about prospective members was in the form of photocopied handwritten notes that seemed to have come from the groups that rejected those persons. On each note, the person's name and group number was blacked out, and there was no mention of gender. The notes explained why each group wanted to reject a member (*reason*), and suggested whether the

problem might occur again in a new group (*expectancy*). The reason was either task-related (e.g., "X was lazy) or social (e.g., "X was mean"). Expectations about whether the problem would occur again were manipulated by using words such as "Always" and "At every group activity" to suggest a high likelihood of re-occurrence, and words such as "Once," and "During the activity on…" to suggest a low likelihood of re-occurrence. For example, information about a prospective member from the high-expectancy, task reason condition read: "At every group activity we had, XXXX was uncooperative." The information in the notes was pretested to a) ensure that within expectation levels, people who were rejected for task and social reasons were equally attractive, and b) ensure the effectiveness of the expectancy and reasons manipulations (see Appendix C). In addition to the four prospective members who were rejected, groups were also asked to make decisions about a control person who was not rejected. This person ostensibly wanted to switch to a new group, although no reason was offered for that change ("XXXX wants to join a different group.").

Risky decisions and risk perceptions. After reading about all five prospective members, groups were asked to collectively answer several questions, using 9-point Likert scales. To assess risky decisions, group members rated their willingness to admit each person as a new member (1 = *definitely would not admit him/her*; 9 = *definitely would admit him/her*). Groups also completed a series of items to measure how much of a risk each prospective member might pose for them, for both intra- and inter-group issues. For intra-group issues, groups answered two questions by making ratings using a 9-point Likert scale (1 = *worse*¸ 5 = *no change*¸ 9 = *better*): "How would admitting this person cause our group's performance to change," and "How would admitting this person cause the social atmosphere of our group to change." For inter-group issues, groups made similar ratings to answer two other questions: "How would admitting

this person cause our relationship with his or her old group to change," and "How would admitting this person affect our reputation with other classroom groups." Finally, after each group completed these measures for all five prospective members, it rated the *overall* risk that each prospective member posed for the group, using a similar Likert scale (1 = n*ot very risky*, 9 = *very risky*).

Procedure

The instructors from both Introduction to Social Psychology and Psychology of Personality incorporated group activities into their course plans. Each activity provided an opportunity for groups to earn extra credit points. Students were given an alternative extra credit option if they did not want to participate in my research, but all of the students in both courses chose to participate. Participants signed an informed consent statement at the beginning of the semester, agreeing to participate in research on small group behavior in classrooms. Performance in the group activities had the same impact on students' grades in each course – group activities could increase a student's course grade by two-thirds of a letter grade. Throughout the semester, groups participated in five activities spread approximately three weeks apart. The fourth group activity, which occurred three months into the semester, was the experiment. This activity occurred before students learned about group dynamics in the Introduction to Social Psychology course, and group dynamics were never covered in the Psychology of Personality course. Thus, it is unlikely that the students' responses during the experiment were biased by their coursework.

In collaboration with the two instructors, I designed and conducted group activities that were both educational and interactive. Each activity engaged the students in some task, while also giving them an opportunity to interact socially. To maximize attendance at all group

activity sessions, each group received extra-credit points for merely participating in group activities. Additional points were awarded at the end of the semester to the five best groups in each class, as determined by their performance on each activity.

An example of one activity, scheduled during the week that psychodynamic theory was covered in Psychology of Personality, involved learning defense mechanisms. In this activity, each group was responsible for preparing a brief skit illustrating a defense mechanism. The groups had approximately 15 minutes to develop a 30-second skit on one (randomly assigned) defense mechanism. At the end of that time, each group presented its skit to the class. Because there were approximately 30 groups participating, there were multiple skits for each defense mechanism. After each group performed its skit, it answered any questions that other students or the instructor had about how the skit demonstrated that particular defense mechanism. After all of the groups performed their skits, all of the students ranked the groups into first, second, and third places, keeping in mind such criteria as knowledge of the defense mechanism, the creativeness of the skit, and the skit's appropriateness. Every time a group was ranked in first place, it earned five points. Second-place rankings earned three points, and third-place rankings earned one point. The total number of points received was used to evaluate the top groups on this activity. Similar rankings were conducted for each group activity. The analogous group activity in the Social Psychology course involved groups preparing and presenting skits on persuasion. The group activities for the Psychology of Personality course were a getting-to-know-you exercise, the defense mechanism skits, and an activity during which groups had to generate examples of social learning. The group activities for the Social Psychology course were a getting-to-know-you exercise, the persuasion skits, and an activity during which groups had to generate examples of aggression.

Awarding additional extra credit to five groups, rather than to just one or two, convinced more students that they had a chance to win, thereby strengthening their motivation. Students in the first-place group at the end of the semester had five extra credit points added to their final grade in the course; students in the second-place group received four extra credit points; students in the third-place group received three extra credit points, and so on. At the beginning of each class following a group activity, the instructor announced the current group standings. This information was also available on the course websites.

The fourth group activity was the experimental session. At the beginning of that session, each group completed the group and environmental characteristics measures. Each group also completed a series of decision-making tasks to measure its risk propensity. Groups were given approximately 15 minutes to complete all these measures.

Next, each group discussed the five prospective members in order to make decisions about them. To control for order effects, information about those members was presented using a balanced Latin square design. Groups were asked to review the materials about the prospective members and then rate their willingness to admit them. Afterwards, the risk perception measures were administered. Groups were given approximately 30 minutes to read about and rate the prospective members and to complete the risk perception measures. Afterwards, the instructor announced that before the next group activity, she would introduce the five selected groups to their new members. This never actually occurred.

At the fifth group activity, the students were debriefed about the experiment and its hypotheses. I began by asking participants what they thought I was studying. The majority said that they thought I was interested in how working in small groups affected students' class performance, interest in a class, and/or learning. Only two groups from each class questioned

whether the fourth group activity was real, but no one guessed the true purpose of my research or hypotheses. Participants were then told that the true purpose of the research was to examine how groups responded to the possibility of admitting risky members. Participants learned that the individuals they read about at the previous group activity were fictional – none of the groups actually wanted to remove any members. Participants received this information orally as well as in writing. They were also given information about who to contact if they had any questions about the experiment or its hypotheses.

RESULTS

Psychometric Evaluations of Scales

I began by examining the underlying factor structure of each scale, because even established scales can have altered factor structures when they are used with new samples. Based on suggestions from a recent review of factor analytic techniques (Russell, 2002), I conducted each factor analysis using principal axis factoring rather than principal components analysis. A more conservative method of extracting factors, involving a parallel analysis, was also used, as opposed to the traditional method of just extracting factors with eigenvalues greater than one. I considered an item to load on a factor if it had a loading greater than .40 on only one factor, and I retained only those factors on which at least three items loaded. Once I determined the final composition of each factor, I created factor scores by simply averaging across relevant items. Chronbach's alpha for each factor was then calculated to check each score's reliability. Finally, I examined each factor to make sure that the distribution of scores did not violate assumptions of normality. A number of the factor scores were indeed skewed and thus had to be transformed. Measures that involved just one item (e.g., task vs. social orientation, subjective success) were also checked for non-normality.

Group Environment Questionnaire (GEQ). Although the GEQ is supposed to have two factors, there proved to be only one. This factor, which explained 45% of the total variance, included all five of the task cohesion items, and one social cohesion item ("Members of our group would rather go out on their own than get together as a group."). The factor loadings of all the GEQ items can be found in Table 1. Based on this factor analysis, a new cohesion index was created by averaging ratings on the six items that loaded on the factor. This index had good reliability ($\alpha = .86$). Factor scores could have ranged from 1 to 9, but actually ranged from 1.2 to 9.0, with a mean of 7.05 ($SD = 1.60$). The scores were negatively skewed, but this was corrected using a power transformation (to the second power).

Social versus task orientation. Each group's social versus task orientation was measured using a single item. Scores on this item could have ranged from 1 (reflecting a task orientation) to 9 (reflecting a social orientation), and did actually range in that way. The average score was 4.86 ($SD = 1.56$). Scores were not skewed.

Group potency. All seven group potency items loaded on just one factor, which explained 76% of the total variance (see Table 2 for factor loadings). Based on this factor analysis, a group potency index was created by averaging ratings on all seven items. This index had good reliability ($\alpha = .95$). Factor scores could have ranged from 1 to 10, but actually ranged from 2.7 to 10.0, with a mean of 8.00 ($SD = 1.83$). The scores were negatively skewed, but this was corrected using a power transformation (to the second power).

Group ambition. All five group ambition items loaded on just one factor, which explained 59% of the total variance (see Table 3 for factor loadings). Based on this factor analysis, a group ambition index was created by averaging ratings on all five items. This index had acceptable reliability ($\alpha = .81$). Factor scores could have ranged from 1 to 9, but actually

ranged from 2.4 to 9.0, with a mean of 8.81 (*SD* = 1.82). The scores were negatively skewed, but this was corrected using a power transformation (to the second power).

Group success. The average group grade in Introduction to Social Psychology was 79% (*SD* = 6.3), and the average group grade in Psychology of Personality was 91% (*SD* = 3.9). These grades were later standardized within courses to account for possible instructor differences in evaluations.

The scoring of the activity-based success measure was discussed earlier. The first group activity, a getting-to-know-you exercise, was the same in both courses. Each group earned a point each time it correctly answered a question about one of its group members. The possible range of scores on this activity was from 0 to 10. Scores for groups in the Social Psychology course did range from 0 to 10, with a mean of 5.93 (*SD* = 2.27). Scores for groups in the Psychology of Personality course also ranged from 0 to 10, with a mean of 5.76 (*SD* = 2.23). The second group activity required groups to prepare skits and present them to one another. Groups earned points reflecting the evaluations of their skits by other classroom groups. The possible range of points for this activity was from 0 (if a group was never chosen as one of the top groups) to 145 (if a group was chosen as the best group by all the other groups in the class). The actual range of points in the Social Psychology course was from 0 to 76, with a mean of 14.97 (*SD* = 18.53). The actual range of points in the Psychology of Personality course was from 0 to 51, with a mean of 14.83 (*SD* = 12.69). The third group activity involved brainstorming unique examples, not proposed by any other group, of specific concepts from a course (aggression in Social Psychology and social learning in Psychology of Personality). Groups earned a point each time they provided an appropriate, unique example. The range of points in the Social Psychology course was from 1 to 7, with a mean of 2.79 (*SD* = 1.32). The

range of points in the Psychology of Personality course was from 0 to 16, with a mean of 4.93 (*SD* = 3.49). Group performance on each activity was standardized within each course, then the *z*-scores from each activity were averaged to produce a final success measure.

The average rating on the subjective assessment of success was 7.22 (*SD* = 1.77). Ratings could have ranged from 1 to 9, but actually ranged from 2 to 9. The distribution of ratings was negatively skewed. This was corrected using a power transformation (to the third power).

Perceptions of outside help. The four perception of outside help items all loaded on just one factor, which explained 58% of the total variance (see Table 4 for factor loadings). Based on this factor analysis, an index for perceptions of outside help was created by averaging ratings on all four items. This index had fair reliability (α = .76). Factor scores could have ranged from one to nine, but actually ranged from 3.3 to 9.0, with a mean of 6.98 (*SD* = 1.46). The scores were negatively skewed, but this was corrected using a power transformation (to the second power).

Risk propensity. A factor analysis of responses to the five risk propensity scenarios revealed only one factor, involving responses to three of the scenarios. This factor explained 37% of the variance (see Table 5 for factor loadings). Based on this factor analysis, a risk propensity index was created by averaging the risk values of the options chosen for those three scenarios. This index had low reliability (α = .58). Factor scores could have ranged from 1.07 to 8.39, but actually ranged from 1.31 to 7.10, with a mean of 3.96 (*SD* = 1.75). The scores were normally distributed.

Risk perception. A factor analysis of the five risk perception items (averaged across all of the prospective members) revealed a single factor involving responses to three of the items

(see Table 6). This factor explained 67% of the total variance. Based on the factor analysis, a risk perception index was created by averaging ratings on the three relevant items. This index had good reliability (α = .97). Factor scores could have ranged from 1to 9, and did range in that way, with a mean of 5.98 (*SD* = 1.58). The scores were normally distributed.

Risky decisions. A risky decision index was created by averaging each group's ratings of how much it wanted to admit the five prospective members. Index scores had good reliability (α = .90). Scores could have ranged from 1 to 9, and did range in that way, with a mean of 3.96 (*SD* = 2.5). Scores were positively skewed, but this was corrected using a log transformation.

General Description of Sample

The means, standard deviations, and ranges for group size, gender composition, and grades, as well as all my measures of group characteristics, can be found in Table 7. Taken together, these give a sense of my sample. The average group size was 2.93 (*SD* = .42). Most of the groups (n = 50, 87.7%) contained three members (as they were all meant to), but by the end of the semester, two groups had four members, two groups had two members, and one group had only one member. On average, the groups had fewer males than females, with the average proportion of males at .30 (*SD* = .30). The average course grade was 79% (*SD* = 6.30) in the Social Psychology course, and 91.56% (*SD* = 3.90) in the Psychology of Personality course.

The groups were very cohesive. The mean cohesion index score (7.05) was significantly higher than the midpoint (5) of the scale, $t(56) = 9.64$, $p < .01$. The groups were equally concerned with their social atmosphere and task performance. Their mean score (4.86) did not differ significantly from the midpoint (5) of the social vs. task orientation scale $t(56) = -.68$, $p > .05$.

The groups had strong feelings of potency. The average potency index score (8.00) was greater than the midpoint (5.5) of the scale, $t(56) = 10.27$, $p < .01$. The groups were also very ambitious, with an average score (8.81) on that index that was significantly higher than the midpoint (5) of the scale, $t(56) = 7.53$, $p < .01$. And the groups felt very successful, with a mean score (7.22) that was significantly higher than the midpoint (5) of the subjective success scale, $t(56) = 9.49$, $p < .01$. Groups generally believed that outside help was both available and useful, with a mean rating (6.98) that was significantly higher than the midpoint (5) of the scale, $t(56) = 10.25$, $p < .01$. However, groups were also risk-averse, with a risk propensity index score (3.96) that was significantly lower than the midpoint (5.51) of the scale, $t(56) = -6.70$, $p < .01$.

The means, standard deviations, and ranges for risk perception and risky decisions can be found in Tables 8 and 9. On average, groups perceived the prospective members as rather risky, with a mean index score overall (5.98) that was significantly higher than the midpoint (5) of the scale, $t(56) = 4.69$, $p < .01$. In fact, every one of the prospective members who was rejected by another group was perceived as risky; their average ratings were always significantly ($p < .01$) higher than the midpoint of the scale (see Table 8). However, the prospective member who was *not* rejected did not seem risky to the groups. That person's average rating was significantly ($p < .01$) *lower* than the midpoint of the scale. The average risk perception score overall for the rejected prospective members ($M = 6.43$, $SD = 1.69$) was also significantly higher, $t(56) = 10.24$, $p < .01$, than the risk perception rating of the non-rejected prospective member ($M = 4.17$, $SD = 1.80$).

Recall that the groups also rated their willingness to admit the prospective members. Although I did not time how long groups spent deliberating, decisions about whether to admit the prospective members seemed lengthy and very serious. Averaged across all five prospective

members, these ratings were low, indicating that the groups did not want to admit those members. In fact, the average score overall (3.96) was significantly lower than the midpoint (5) of the scale, $t(56) = -4.35$, $p < .01$. Groups did not want to admit *any* of the prospective members who were rejected by other groups. The average willingness rating for each of these persons was significantly ($p < .01$) below the midpoint of the scale (see Table 9). However, groups did not feel strongly about admitting the prospective member who was not rejected by another group. The average willingness rating for that person was not significantly different from the midpoint of the scale, $t(56) = 1.55$, $p > .05$.

Correlations among all the measures can be found in Table 10. A few trends are worth noting. First, the group characteristics of cohesion, potency, ambition, and perception of outside help were all positively correlated with one another (all rs > .50, ps < .01). Second, these same group characteristics were all *negatively* correlated with risk propensity. Finally, the risk perception index and the risky decision index were not correlated with any of the group characteristic measures. They were, however, correlated negatively with each other. All these findings, some of which were unexpected, will be discussed later.

Hypothesis Tests

Each of my hypotheses was tested with and without the control variables of group size, group grade, group gender composition, and course (Social Psychology or Psychology of Personality). The control variables were unrelated to the dependent measures, nor did they affect the outcomes of the hypothesis tests, so they will not be discussed further. In testing hypotheses involving correlations, I used hierarchical regression analyses to look for curvilinear effects. These results will only be presented when they were significant.

To test my first hypothesis, that groups would be less willing to admit a previously rejected person than someone who was not rejected, I conducted a *t*-test comparing the mean willingness ratings for rejected people with the mean willingness rating for the non-rejected person. The hypothesis was supported. Groups were indeed more willing, $t(56) = 7.34$, $p < .01$, to admit the non-rejected prospective member ($M = 5.63$, $SD = 3.08$) than the previously rejected prospective members ($M = 3.54$, $SD = 2.53$). As noted earlier, however, the former mean was not significantly different from the midpoint of the scale, meaning that groups were neutral about admitting even the non-rejected prospective member.

My second hypothesis, that groups with higher risk propensities would perceive previously rejected individuals as less risky, was tested by calculating the correlation between risk propensity index scores and the average risk perception scores for the four rejected prospective members. The hypothesis was not supported. There was no relationship between risk propensity and risk perception for the rejected members, either together, $r(55) = -.03$, $p > .05$, or individually, all ps $> .05$.

My third hypothesis, that groups with higher risk propensities would be more willing to admit previously rejected individuals, was tested by calculating the correlation between risk propensity index scores and the average willingness to admit the four previously rejected prospective members. This hypothesis was not supported either. There was no relationship between risk propensity and the average willingness to admit the prospective members, $r(55) = -.14$, $p > .05$. There was also no relationship between risk propensity and willingness to admit any of the individual prospective members, all ps $> .05$. Recall Sitkin and Pablo's (1992) suggestion that risk perception mediates the relationship between risk propensity and risky

decisions. Because risk propensity was not correlated with willingness to admit the prospective members, it was clear that there was no such mediation.

Tests of my fourth hypothesis, that groups that perceived more risk would be less willing to admit rejected prospective members, revealed some curvilinear relationships in a hierarchical regression analysis. The simple linear model, regressing scores for willingness to admit rejected prospective members on scores measuring the perceived risk associated with those members, was significant, $F(1, 55) = 70.40$, $p < .01$, and explained 56% of the variance. The regression coefficient for perceived risk was negative, suggesting that groups that perceived the prospective members as riskier were indeed less willing to admit them as new members. Adding a quadratic term to the model, however, improved its predictive power, $F(1, 54) = 5.58$, $p < .05$. The new model was also significant, $F(2, 54) = 40.23$, $p < .01$, and explained 60% of the total variance. The regression coefficient for the quadratic term was significant, $t(1, 54) = -2.23$, $p < .03$, and negative (-.91), suggesting a decrease in the willingness of groups to admit prospective members as the perceived risk associated with those members increased (see Figure 2). Adding a cubic term did not improve the model's predictive power, $F(1, 53) = .01$, $p > .05$. Risk propensity did not moderate the relationship between risk perception and risky decisions ($p > .05$).

My fifth hypothesis, that more successful groups would have higher risk propensities, was tested using all three measures of success: group grades, group standings, and success ratings. The two objective measures of success, group grades and group standings, were not related to risk propensity index scores. The correlation between group grades and risk propensity was -.08 ($p > .05$), and the correlation between group standings and risk propensity was .17 ($p > .05$). Analyses using the subjective measure of success revealed some curvilinear relationships in a hierarchical regression analysis. The simple linear model, regressing risk

propensity index scores on subjective success scores, was significant, $F(1, 55) = 9.21$, $p < .01$, and explained 14% of the variance. The regression coefficient for success was negative (-.38), indicating that groups that felt more successful had lower risk propensities. Adding a quadratic term to the model did not improve its predictive power, $F(1, 54) = .00$, $p > .05$. However, this new model was significant, $F(2, 54) = 4.52$, $p < .05$. The regression coefficient for the quadratic term was positive, but not significant. Adding a cubic term to the model *did* improve its predictive power, $F(1, 53) = 4.06$, $p = .05$. This new model was also significant $F(3, 53) = 4.48$, $p < .01$, and explained 20% of the variance. The regression coefficient for the cubic term was significant, $t(1, 53) = -1.98$, $p = .05$, and negative (-7.90). As Figure 3 shows, the negative relationship between success and risk propensity was strongest when groups were very unsuccessful or very successful. When groups were moderately successful, the relationship between success and risk propensity was weak.

My sixth hypothesis, that groups with greater potency would have higher risk propensities, was tested by correlating potency index scores with risk propensity index scores. The correlation was significant, but negative, $r(55) = -.47$, $p < .01$. Thus, my hypothesis was not supported. In fact, the opposite of what I predicted is what occurred – groups with greater potency had lower risk propensities.

My seventh hypothesis, that more ambitious groups would have higher risk propensities, was tested by correlating ambition index scores with risk propensity index scores. The correlation was significant and negative, $r(55) = -.27$, $p < .05$. Again, my hypothesis was not supported, and the results were the opposite of what I predicted – more ambitious groups had lower risk propensities.

My eighth hypothesis, that groups that believed more strongly in outside help would have higher risk propensities, was tested by correlating perception of outside help index scores with risk propensity index scores. The correlation was significant and negative, $r(55) = -.52$, $p < .01$. My hypothesis was not supported, and once again, the results were the opposite of what I predicted – groups that believed more in the availability and usefulness of outside had lower risk propensities.

I was unsure about the relationship between cohesion and risk perception. I explored that relationship by correlating cohesion index scores with risk perception index scores. There was no relationship between cohesion and risk perception (all *p*s > .05).

My last two hypotheses were tested using data from the 2 (Reason: task vs. social) x 2 (Expectancy: high vs. low) experiment involving the reactions of groups to different kinds of prospective members. To test my ninth hypothesis, that prospective members who were rejected by other groups would seem riskier if the reason for their rejection was likely to occur again (high expectancy), I conduced a repeated-measures ANOVA, in which both predictors (Reason and Expectancy) varied within groups. My hypothesis was supported by a significant main effect for Expectancy, $F(1, 56) = 5.94$, $p < .05$. Groups perceived prospective members who were rejected for reasons that were more likely to occur again ($M = 6.60$, $SE = .24$) as riskier than prospective members who were rejected for reasons that were less likely to occur again ($M = 6.26$, $SE = .23$). Note that the latter mean was still high, however. Even when the reason that someone was rejected was not likely to occur again, groups still perceived that person as risky. There was no main effect for Reason, nor any interaction between Reason and Expectancy.

I also tested whether the willingness of groups to admit prospective members depended on whether the reason for their earlier rejection was likely to occur again. A similar repeated-

measures ANOVA was conducted, this time using groups' ratings of their willingness to admit each prospective member as the dependent variable. As before, there was a significant main effect for Expectancy, $F(1, 56) = 6.81$, $p = .01$, showing that groups were indeed more willing to admit prospective members whose reasons for being rejected were less likely to occur again ($M = 3.84$, $SE = .36$) than prospective members whose reasons for being rejected were more likely to occur again ($M = 3.25$, $SE = .36$). Note that the former mean was still low, however, indicating that even when the reason for someone's rejection was not likely to occur again, groups still did not want to admit that person. There was again no main effect for Reason, nor any interaction between Reason and Expectancy.

My tenth hypothesis was that task-oriented groups would perceive prospective members who were rejected for task reasons as riskier than prospective members who were rejected for social reasons, and that socially-oriented groups would perceive prospective members who were rejected for social reasons as riskier than prospective members who were rejected for task reasons. To test this hypothesis, I first calculated (a) the correlation between the task vs. social orientation score and the risk perception index score for people rejected for task reasons, and (b) the correlation between the task vs. social orientation score and the risk perception index score for people rejected for social reasons. I expected the first correlation to be negative, and the second correlation to be positive. However, both correlations were negative and neither one was significant (both ps $> .10$). The first correlation was -.08, and the second was -.02. But even though neither correlation was significant, they might still be significantly different from each other. I thus compared the two correlations, following guidelines set forth by Meng, Rosenthal, and Rubin (1992). I expected the first correlation to be smaller (more negative) than the second. There was indeed a significant ($p < .05$) difference between the correlations. The correlation

between task vs. social orientation and risk perception was smaller for people rejected for task reasons than for people rejected for social reasons. This suggests that group orientation did have some effects on risk perception, based on the reason for rejection.

DISCUSSION

Groups are often faced with making membership decisions, which are influenced by the characteristics of both the groups and the individuals involved. My research examined how small groups react to prospective members who have been rejected by other groups. The groups that I studied were small classroom groups whose members worked together over an entire semester. Course grades were partially determined by group performance, so the students were probably invested in their groups and cared about them. Seven characteristics of groups that seemed likely to influence risky decision making were measured, namely cohesion, social versus task orientation, potency, ambition, success, perception of outside help, and risk propensity. Two characteristics of previously rejected prospective members were manipulated, namely the reason for their rejection (either task or social) and the likelihood that the problem would occur again (high or low).

The group characteristic scales were factor analyzed, and for the most part the index scores that I created from them had good reliability. The groups proved to be highly cohesive, potent, and ambitious. They also felt quite successful and believed strongly in the availability and value of outside help. These measures were all correlated positively with each other. Why? There are at least two possibilities. First, cohesion, potency, ambition, and success (if not belief in outside help) may all be measures of social integration (Moreland, 1987), or group "strength." In fact, when the index scores for these measures were entered into an exploratory factor analysis, all five of them loaded on a single factor (with loadings greater than .68 for all measures) that explained 69% of the variance. Potency had the highest factor loading, followed

by success, ambition, cohesion, and finally, perceptions of outside help. Another possibility is that the results reflect people's naïve theories about groups (cf. Guzzo, Wagner, Maguire, Herr, & Hawley, 1986) – if a group is potent, then people believe that it should also be successful, ambitious, and cohesive.

I found that groups viewed previously rejected prospective members as riskier to them than a prospective member who was not previously rejected. And groups were less willing to admit previously rejected prospective members than a prospective member who had not been rejected. This supports my contention that rejection has consequences that go beyond the intrapsychic harm studied by other researchers. Apparently, rejection also impedes acceptance into new groups. This is damaging to rejected individuals, because research has shown that they often seek new social bonds after being rejected. But when people who have been rejected try to repair their damaged sense of belonging, their threatened self-esteem, and their negative emotional states by joining new groups, they may well be rejected by those groups, especially when the groups perceive them as risky.

I found that higher risk perception was associated with less willingness to admit previously rejected prospective members. Recall that the groups were risk-averse, so it is not surprising that they did not want to admit prospective members who seemed risky. This lends support to Sitkin and Pablo's (1992) model of risky decision making. Somewhat surprisingly, though, risk propensity was not related to risk perception *or* willingness to admit risky prospective members. This is contrary to what Sitkin and Pablo proposed and what I expected. There are several possible reasons for this. One reason is that risk propensity at the group level may not act in quite the same way as it does at the individual level, at least in the context of admissions decisions. Admissions decisions can be made by the group as a whole or by a single

person in a group (e.g., a leader). When they make admissions decisions, groups may focus on different criteria than do individuals. For example, groups may focus on the characteristics of prospective members, whereas individuals may be more attuned to their personal risk propensities. Another reason for my findings may be that risk propensities were low in the groups that I studied. Although there was a decent range of scores, 72% of the groups had risk propensity scores lower than the midpoint of the scale. It is possible, then, that there was not enough variability on this measure to detect effects. A third reason for my findings may involve the quality of the risk propensity measure itself. Issues with that measure will be discussed later.

Risk propensity was related to most of the group characteristics that I studied, but in the opposite direction than I predicted. Groups that were highly cohesive, potent, ambitious, successful, and that believed in outside help, all had lower risk propensities. I predicted that such groups would have *higher* risk propensities, because they would feel capable of handling any problems that arose from making risky decisions. Perhaps groups with these characteristics had lower risk propensities because they wanted to remain in a "safety zone" where their success would not be jeopardized. Similarly, weaker groups (with less cohesion, potency, ambition, and so on) may have been more willing to take risks in an effort to reach that zone.

This explanation is consistent with Regulatory Focus Theory (Higins, 1997, 1998), which suggests that people use different strategies to regulate pleasure and pain. Levine, Higgins, and Choi (2000) extended that theory to the group level. They suggested that promotion-focused groups are concerned with the presence and absence of positive outcomes. These groups focus on their accomplishments, and are thus more likely to take risks. In contrast, prevention-focused groups are concerned with the presence and absence of negative outcomes. These groups focus on their safety, and are thus more likely to avoid risks. Levine and his colleagues reported

results that were consistent with this analysis – groups with a promotion focus were riskier in their judgments on a recognition task than were groups with a prevention focus. In my own research, groups that were highly cohesive, potent, ambitious, successful, and that believed in outside help, may have been prevention-focused groups that wanted to remain strong. Thus, they had lower risk propensities than groups where those characteristics were weaker – perhaps reflecting a promotion focus. My research is also reminiscent of findings that individuals in positive moods do not want to do anything that might threaten their moods, whereas those in negative moods are more likely to take risks to improve their moods (Isen, 1987; see also Salovey, Mayer, & Rosenhan, 1991).

A less interesting, but still possible explanation for the relationship between the group characteristics measures and risk propensity has to do with response bias. Groups may have been responding to demand characteristics or engaging in impression management tactics when they completed the various measures. For example, groups may have thought that I wanted them to report that they were cohesive, potent, ambitious, and so on. Similarly, they may have wanted their instructors to think that they possessed these qualities. If groups were indeed managing impressions, then that would explain why they said they would not take such risks as skipping class or not studying for an exam. However, if groups were engaging in impression management, then they also should have offered to admit the prospective members, which their teachers presumably wanted them to do. Yet none of the group characteristics measures was correlated with willingness to admit prospective members (all *p*s > .10), suggesting that impression management may not have been a powerful factor in the results.

Another surprising finding was that cohesion was unrelated to risk perceptions. I expected to find some relationship, although I was unsure of its nature. More cohesive groups

could have been less likely to perceive risks because they believed that they could successfully handle problem members, or they could have been more likely to perceive risks because they did not want to admit potentially problematic members. Neither of these was true – cohesion was not related to risk perception at all. But cohesion *was* related (negatively) to risk propensity. It appears, then, that group cohesion acts similarly to the other group characteristics, by affecting only risk propensity, not risk perception. The only factors that affected risk perception were the characteristics of the prospective members themselves.

Regarding the experimental results, prospective members who were rejected for reasons that were more likely to occur again were perceived as riskier than prospective members who were rejected for reasons that were less likely to occur again. The same pattern of results was observed for the willingness of groups to admit these members. These findings support my hypothesis.

I did not find any effect of the reason for rejection on risk perceptions or willingness to admit prospective members. I suspected that prospective members who were rejected for task reasons might be perceived as more risky, and be less likely to gain admission, because all of the groups worked on classroom activities that had an impact on their grades. That should have made them less open to people who had the potential to interfere with those activities and lower those grades. But the groups were more than just task groups; they were also social groups, as evidenced by the fact that they were equally concerned with their task performance and social atmosphere. Groups were just as unwilling to admit people who might cause social problems as people who might cause task problems. Of course, neither the task nor the social aspects of these groups were as strong as they might be in groups that are purely task-oriented (e.g., work teams) or purely social-oriented (e.g., drinking pals), so my results should be interpreted with caution.

I expected task-oriented groups to perceive people who were rejected for task reasons as riskier than people who were rejected for social reasons, and vice versa. Why? Because task-oriented groups should be more concerned about prospective members who might disrupt their work, whereas social oriented groups should be more concerned about prospective members who might disrupt their social atmosphere. Indeed, task-oriented groups often evaluate prospective members based on their task-related abilities, whereas social groups evaluate prospective members based on their chances of getting along well with current members (e.g., Kipper et al., 1981; Longino & Kart, 1973). It is possible, though, that some groups believed even social reasons for rejection could affect their task performance negatively. For example, someone described as "mean" might not only disrupt a group's social atmosphere, but also keep it from completing its tasks. The relationships between group orientation and risk perception for people rejected for social versus task reasons were not significant, but they *were* significantly different from each other. Prospective members who were rejected for task reasons seemed risky to all groups, but this relationship was stronger for more task-oriented groups.

Strengths and Weaknesses of My Research

My research had several strengths. First, it included both a field study *and* a field experiment, all in one. I embedded an experimental manipulation in a study of real groups in their natural setting. It is important for small groups researchers to study more groups outside the laboratory (Frey, 1994). Groups in the laboratory can behave differently than groups in their natural settings. The field experiment offered relatively high internal validity. Of course, even with the full cooperation of the classroom instructors, I had less control than a laboratory experiment would have offered. The field setting, though, allowed for high external validity and mundane realism. The experiment seemed so realistic, in fact, that only two groups in each

course expressed any suspicions about the nature of the experiment. Even then, no one guessed what I was really studying.

Participants gave every indication that the classroom groups were meaningful and important to them. To do research on membership decisions by groups, group members should feel strongly about those groups – otherwise, such decisions might not warrant much careful consideration. If I had created laboratory groups that met for less than an hour before making decisions about whether to admit new members, then it is unlikely that they would have placed the same importance on these decisions as did my real groups. Groups in my research had long-term goals, whose achievement depended in part on group performance. Thus, the important issue of membership was not taken lightly, but rather considered deeply, because admitting new members could have influenced the ability of the groups to earn good course grades.

Because the theory and hypotheses for this research were at the level of the group, it was important to measure everything at the group level (Rousseau, 1985). Assuming that groups are social entities that can possess such characteristics as cohesion and potency, several options are available for measuring those characteristics. One method is to have individual group members make judgments and then aggregate their responses, either averaging them or taking a weighted average based on such member characteristics as status within the group (see Moreland, Levine, & Wingert, 1996). This method can be problematic, because it ignores an important factor, namely whether group members are *aware* of their agreement or disagreement about an issue (Lindsley, Brass, & Thomas, 1995). I chose another option, namely to obtain consensus judgments based on group discussions. This method has problems of its own, of course. One must be cautious about committing the ecological fallacy –assuming that group responses necessarily reflect the beliefs of every group member. And group dynamics can distort

consensus judgments in a variety of ways. For example, a leader's opinion may overshadow those of other members, or the group's consensus may be biased toward the opinions of higher status members, or members who are more confident and vocal. Nevertheless, asking group members to produce consensus responses seemed advantageous to me (see Gist, 1987; Lindsley et al., 1995), and thus represents a strength of my research

Finally, another strength of my research was the sample size. I studied 57 groups, which is a relatively large sample for research involving real groups. Having a large sample was especially important because my level of analysis was the group, not individual group members. Despite my large sample, future research in this area would benefit from even larger samples. Why? Because it would enable causal modeling to test direct and indirect paths among the variables of interest. Although I was able to test all of my hypotheses, I was unable to test for indirect paths from group characteristics and prospective member characteristics to risky decisions through risk propensity and risk perception – there were simply too many parameters and not enough observations (Mueller, 1996). Causal modeling would also make it possible to test for missing paths, such as an effect of risk perception on risk propensity.

Like any other research project, mine also had some weaknesses. My main concern involves the pattern of results for risk propensity. The risk propensity index had low reliability ($\alpha = .58$). Despite extensive pilot testing, this measure did not behave as well as I hoped. It is possible, then, that the risk propensity index was not an accurate measure of risk-taking tendencies in small classroom groups. Another issue with the index is that it was scenario-based – groups responded on the basis of how they thought they would behave in hypothetical situations. Although I tried to develop realistic scenarios that classroom groups might actually encounter, it is often difficult for people (and groups) to predict their responses in a situation

without actually being in that situation. Finally, the scenarios and their options confounded risk-taking with unethical behavior. In every case, the riskier choices were less ethical (e.g., cheating on an exam or skipping class). This may have produced social desirability biases. Future research should develop a more reliable measure of risk propensity in classroom groups, one that does not confound ethics with risk-taking. An even better way to measure risk propensity might be to focus more on situations involving group membership, rather than on more general situations.

Another problem with my research was that all of the group characteristic measures seemed to measure the same underlying construct, even though previous research suggests that they are distinct characteristics. My results suggest that they are all aspects of the same construct, and affect risk outcomes similarly. I cannot be sure whether this is an interesting new look at group characteristics, or reflects efforts at impression management by the groups.

A final problem with my research is that group attendance varied across course activities. The activities were spaced approximately three weeks apart and were not announced to students ahead of time. Thus, attendance varied from one activity to the next. Sometimes, a group had only one member at an activity, and then later on, all three members were at another activity. Sometimes a group member attended the first activity and then never attended any other activities. This is problematic, because group composition at the experimental session was sometimes different from group composition at previous activities. Thus, responses on the group characteristics measures may not have been an accurate assessment of how the groups perceived themselves throughout the semester.

Directions for Future Research

My research suggests several new directions for future work. Aside from such methodological improvements as revising the risk propensity measure and seeking a larger sample, there are some theoretically interesting issues that ought to be explored. One such issue involves the attributions that groups make about previously rejected prospective members. If prior rejection is attributed to a negative characteristic or behavior on the part of prospective members, as was the case in my research, then those persons will probably be perceived as risky and groups will be unwilling to admit them. But if other kinds of attributions for rejection are made, then rejection may not be so stigmatizing and people might seem less risky. For example, someone who was rejected by a company because of incompetence (an internal attribution) may be evaluated more negatively than someone who was rejected because of downsizing (an external attribution). It may be that rejection itself is so stigmatizing that no attribution can repair its damage. But certain attributions could buffer the negative effects of rejection, or even cause a rebound effect, such that people who were rejected for reasons they could not control receive sympathy from groups, making them *more* likely to be admitted.

In addition to whether internal or external attributions are made for someone's rejection, researchers should also consider whether internal attributions are global or specific, and stable or unstable. A global attribution would suggest that the reason for someone's rejection might affect every area of that person's life, or encompass that person's whole personality. A global attribution for rejection would thus make someone seem riskier and less appealing as a prospective member. In contrast, a specific attribution would allow the group to "compartmentalize" the person's rejection, perhaps minimizing its impact on their decision about whether to admit him or her. Similarly, if a stable attribution were made, then the group would believe that the reason for the rejection had not changed, which would again make the person

seem riskier and less appealing as a prospective member. In a way, my research manipulated the stability of the reasons for rejection. This was accomplished by varying how often the reason occurred (e.g., "always" vs. "once"). Instead of manipulating stability in this way, one could choose personal characteristics that are perceived as more or less stable. For example, a stable attribution for rejection might be that a person did not have the ability to complete group tasks, whereas an unstable attribution might be that a person did not put much effort into group tasks. Of course, pretesting would have to be conducted to identify characteristics that vary in their perceived stability (without also varying in valence).

The similarities and differences between the group that rejects a person and the group that he or she wants to join should also be studied. I studied whether groups would admit prospective members who had been rejected by similar groups – all of the groups in my research were classroom groups. There was thus a "match" for group type between the groups. It would be interesting to see how groups make decisions about admitting prospective members who were rejected by *different* types of groups. There are many ways in which groups can be similar to each other. They can have similar activities or purposes, for example. Or they can be similar in less obvious ways that might still affect admissions decisions about people who were rejected by one group and try to join another. Consider, for example, group diversity. People rejected by very homogenous or very heterogeneous groups may seem especially risky because their rejection implies an inability to get along with others. Other similarities that could be studied include group size and group history (length of existence). It is not enough, though, to simply measure the degree of similarity between groups. Researchers should also consider how attributions interact with similarity. When prospective members are rejected by one group for

something that is relevant to another group, they are unlikely to be offered membership in that group, even when the two groups are different from each other.

The nature of the relationship between the group that rejects a person and the group that he or she seeks to join should be studied as well. If the two groups have a good working relationship, then the new group may not want to admit someone who was rejected by the old group. Such an act could be seen as disloyal and disrupt the relationship between the groups (cf. Levine et al., 1997). Conversely, if the two groups are adversarial, then the new group might admit the prospective member as a way of gaining inside information about the old group. It is also possible, however, for adversarial groups to disdain rejected members, because admitting them could be perceived as a desperate act – no group wants to admit a competitor's "rejects." Once again, however, the attribution for the rejection could play a role in how the relationship between groups affects a group's admissions decisions. If the attribution for rejection were external rather than internal, for example, then a group might be more likely to admit someone who was rejected by a "friendly" group, because it would trust that group's opinions of the person, despite the fact that he or she was rejected.

Another characteristic of groups that might affect their decisions about admitting prospective members who were rejected by other groups is staffing levels. Groups with too few members for optimal performance are understaffed, groups with too many members for optimal performance are overstaffed, and groups with just as many members as they need are adequately staffed. How might staffing levels influence risk perception and willingness to admit risky prospective members? Cini, Moreland, and Levine (1993) studied college groups' responses to prospective members as a function of their staffing levels. They found that understaffed groups were more open to prospective members; not only did such groups recruit less selectively, they

also admitted prospective members at any time. Understaffed groups also had lower acceptance criteria – they were quicker to accept new members. These results suggest that the need for more members may override some or all of the concerns that understaffed groups have about prospective members. As a result, they might disregard the risks associated with admitting people who were rejected by other groups, or perceive all prospective members as relatively low in risk. But understaffed groups could also be sensitive to the riskiness of prospective members. Because such groups *need* new members in order to perform optimally, they may weigh a prospective member's riskiness against the benefits of gaining another group member. If risky individuals seem likely to disrupt an already strained group, then that group may decide it would be better to remain understaffed.

In my research, groups were asked to make admissions decisions even though they were not actively recruiting members. This may have played a role in their unwillingness to admit any of the prospective members. Groups that are recruiting prospective members should be more willing to admit people than groups that are not recruiting such members. Actively recruiting groups may be able to assess the riskiness of prospective members more objectively because they have a clearer image the type of person they are seeking. With that image in mind, recruiting groups have a standard against which prospective members can be compared. Groups that are not actively recruiting probably do not have such a standard. As a result, they may process information about prospective members less systematically, focusing on rejection and its stigma without considering other characteristics of the prospective members.

So far, my suggestions for future research have all focused on the characteristics of groups. Characteristics of prospective members should also be studied further. I examined the reason for someone's rejection and expectations about whether that reason would occur again.

There are a variety of other characteristics that could also influence how risky prospective members seem and how willing groups are to admit them. Consider, for example, the amount of time that has passed since the person was rejected. In my experiment, the rejection had just occurred, but what if someone were rejected a week, a month, or even a year prior to seeking membership in a new group? As noted earlier, the effects could be complex and might depend on whether the reason for rejection is still a problem for the individual. People who were rejected recently may be perceived as especially risky, because the reason for their rejection is likely to still be a problem. But people who were rejected a long time ago, and yet are *still* seeking a new group, may be perceived as risky too, because the reason for their rejection is probably why they have not yet been offered membership in other groups. Conversely, rejection might lose some of its stigma if it happened long enough in the past. Is there a critical period during which rejection has the greatest stigma? If so, then can the person's rejection ever become problematic again, even after that period? That might happen if something in the group's environment made a prospective member's rejection more salient. Imagine that a current member of the group caused trouble in ways related to why the prospective member was rejected. Even if that rejection occurred a long time ago, the group might then be wary about admitting the person, because they are experiencing similar problems with a current member.

Another important characteristic of prospective members may be the number of times they have been rejected in the past. The more often someone has been rejected, the riskier that person should seem – *all* of those other groups could not have been wrong about the person! It would be interesting, though, to see if the reasons for someone's rejections moderate the effects of how often he or she was rejected. Does the frequency of rejections overshadow the reasons for those rejections, or can some reasons minimize or maximize the harmful effects of frequent

rejection? Is being rejected twice because of laziness different from being rejected once for laziness and once for dishonesty? What about being rejected once because of laziness and once because of company downsizing? And what are the effects of being rejected by several groups that are similar to or different than one another? It is possible that being rejected by different kinds of groups is more harmful than being rejected by several, similar groups. If someone was rejected many times, by different kinds of groups, then those rejections may reflect a pervasive (stable and global) problem for him or her. But if the person was rejected many times, by similar kinds of groups, then that might seem even worse, unless those groups are unlike the group that the person seeks to join.

This suggests another direction for future research, namely whether prospective members offer excuses for their prior rejection. Research has shown that offering excuses for misbehavior often weakens the negative reactions that such behavior would have otherwise evoked (Snyder & Higgins, 1988). When someone is rejected by a group, would a "noncausation defense" – an excuse denying responsibility for the rejection (Schlenker, 1980) – be accepted by the new group? Or would a justification, in which the person admits responsibility, but minimizes the undesirability and severity of the rejection (Schlenker, 1980), be more appropriate? Individuals should be careful not to make excuses that seem too self-serving (Tetlock, 1981). People who seek membership in a group often have the opportunity to present themselves to the group's decision-makers, whether in writing (e.g., a résumé and cover letter) or in person (e.g., a job interview). Future research should examine different types of explanations to learn whether some of them are more effective than others at buffering the harmful effects of prior rejection.

In my research, prospective members had no chance to present themselves to groups. One way to examine the effects of excuses might be to provide groups with more information

than I did. Groups could receive "applications" from prospective members that included excuses for rejection that varied across applicants. Some of these excuses could indicate acceptance of the rejection by a prospective member, whereas others could deny any wrongdoing. Such research could even lead to the development of strategies that people might use to overcome the harmful effects of their rejection. This focus on the people who were rejected might also lead to research on their decision-making processes. For example, how do rejected individuals decide which groups (if any) to approach for membership? They may not seek membership in the best groups, because they realize that their rejection is stigmatizing, and thus lower their expectations. And how do rejected people decide whether to disclose their rejection to new groups? Does it depend solely on whether they think new groups will discover the rejection anyway? Or might it depend on the nature of the rejection and whether there is a suitable excuse for it? And if they decide to reveal their rejection, when will they do so? Will they hide their rejection until they have been admitted to the new group, and then reveal it once they feel "safe," or will they reveal their rejection from the start, hoping to somehow overcome its stigma?

Many of these ideas for future research can be viewed in terms of an expectancy-value framework. Recall that a prospective member has little utility for a group if the probability that he or she will help the group is low, and/or the probability that he or she will harm the group is high. In my experiment, I manipulated the expectancy component of this framework by suggesting that the probability of a negative behavior reoccurring was either high or low. Future research that examines the length of time since rejection, the frequency of rejection, and whether excuses are offered for rejection, fits the expectancy component too. Some of my other suggestions for future research fit the value component instead. For example, internal, global, and stable attributions for rejection (e.g., the person was rejected because of a general lack of

intelligence) will probably make groups less willing to admit a person because he or she has little perceived value. What sort of attribution would increase a person's value? Perhaps one that is external, specific, and unstable (e.g., the company was downsized and the person had little seniority). Likewise, the relationship between groups can affect a prospective member's value. As noted earlier, a previously rejected prospective member may have either high or low value for a group, depending on whether the groups involved are friendly or unfriendly to each other and whether the admitting group believes it is helping the rejecting group or being treasonous to it. Finally, the similarity between groups is relevant to both the expectancy and value components. If someone is rejected by one group for something related to that group's activities, then another, similar group is likely to believe that it might happen again (high expectancy) and see little value in a person who was not able to survive in a similar group. However, that same person, rejected for the same reasons, may try to join a different type of group. In that case, the person might seem unlikely to misbehave in the new group (low expectancy), and so his or her value will not be diminished.

Of course, value could be examined more directly, perhaps by manipulating the valence of the reasons for rejection. Although it is unlikely that someone would be rejected for a clearly positive reason (e.g., "he was hardworking"), it is possible to vary the degree of negativity associated with reasons for rejection. For example, my pilot testing demonstrated that being insecure was better than being annoying, and being demanding was better than being unproductive. Another way of manipulating value is to vary the number and/or types of positive characteristics that a person possesses, characteristics unrelated to his or her rejection. Such characteristics may seem more important than the rejection, especially if the reason for rejection seems irrelevant to the new group. As noted before, it is also possible for someone to be rejected

by one group for reasons that are be viewed positively by another group. For example, a person rejected by a conservative campus group for believing in ideology counter to theirs may be valued by a liberal group. Research on subjective group dynamics supports this idea – people like an outgroup member who violates norms that are contrary to the norms of their ingroup (see Abrams, Marques, Bown, & Dougill, 2002; Marques, Abrams, Paez, & Martinez-Taboada, 1998).

My research, the first of its kind, examined how groups respond to prospective members who had been previously rejected by other groups. The unique features of my research (using real groups in the field, with the group as the level of measurement and analysis) allowed me to evaluate the factors that affect groups' risk propensity, risk perception, and willingness to admit prospective members. Although this was an important first step, more needs to be done before we can fully understand how risk propensity develops in groups and the factors that influence risk perceptions when membership decisions are made. Research in this area should also be extended beyond classroom groups. Other groups, such as self-managed work groups, legal and medical partnerships, and political groups, face similar membership decisions. Research on these issues has important consequences for groups, which live and die by their membership. It also seems important for individuals, many of whom combat rejection at some point in their lives.

Table 1

Factor Loadings for the GEQ

	Factor Loadings
We all take responsibility for any loss or poor performance by our group.	.89*
Our group is united in trying to reach its goals for performance.	.86*
If members of our group have problems in class, everyone wants to help them so we can do well as a group.	.76*
Our group members do not communicate freely about each student's responsibilities during class or activities. (R)	.70*
Our group members have conflicting aspirations for the group's performance. (R)	.63*
Members of our group would rather go out on their own than get together as a group. (R)	.47*
Members of our group do not stick together outside of class. (R)	.06
Our group members rarely party together. (R)	-.07
Our group likes to spend time together outside of class.	-.07

Note. Items are listed in order of decreasing factor loadings. Items with an (R) were reverse-scored. Items with an asterisk (*) were retained for the final factor score.

Table 2

Factor Loadings for the Group Potency Measure

	Factor Loadings
Our group believes it can be very productive.	.96
Our group has confidence in itself.	.88
Our group can solve any problem it encounters.	.86
No task is too tough for our group.	.85
Our group believes it can become unusually good at producing high-quality work.	.85
Our group expects to be known as a high-performing group.	.81
Our group can get a lot done when it works hard.	.74

Note. Items are listed in order of decreasing factor loadings.

Table 3

Factor Loadings for the Group Ambition Measure

	Factor Loadings
We always try to be one of the best groups in the class.	.88
We are one of the most ambitious groups in the class.	.85
Every member of our group has high goals for the group's performance.	.77
It would upset our group if any of its members receive less than an A in this course.	.53
We monitor other groups' class performance so we know about our competition.	.42

Note. Items are listed in order of decreasing factor loadings.

Table 4

Factor Loadings for Perceptions of Outside Help

	Factor Loadings
Perceived likelihood of receiving help from the instructor	.88
Perceived usefulness of help received from classmates	.63
Perceived likelihood of receiving help from classmates	.62
Perceived usefulness of help received from the instructor	.54

Note. Items are listed in order of decreasing factor loadings.

Table 5

Factor Loadings for the Risk Propensity Scenarios

	Factor Loadings
Your group is trying to schedule a study session for an upcoming exam, but it is difficult to find a time when everyone can attend the session. What does your group do?	.65*
There is an upcoming classroom activity that guarantees a few extra credit points for each group member if everyone in the group is present. The exact date for this activity has not yet been announced. What does your group do?	.51*
At the beginning of class, your instructor announces that she will be showing a video after the break. Some members of your group suggest that the group leave during the break and skip the rest of class. What does your group decide to do?	.49*
A week before an exam, someone who has a work-study job in the psychology department takes a copy of the exam and offers it to your group. What does your group do?	-.19
Your group is meeting together on campus to study for an upcoming exam. Some members of your group suggest that they would rather go to a party they know about, instead of studying. What does your group decide to do?	.21

Note. Items are listed in order of decreasing factor loadings. Items with an asterisk (*) were retained for the final factor score.

Table 6

Factor Loadings for the Risk Perception Measure

	Factor Loadings
How would admitting [Person A] cause the *social atmosphere of our group* to change?	1.03*
How would admitting [Person A] cause our group's performance to change?	.93*
Overall, how risky would it be for our group to admit [Person A]?	.74*
How would admitting [Person A] cause our *relationship with his or her old group* to change?	-.13
How would admitting [Person A] affect our *reputation with other classroom groups?*	.19

Note. Items are listed in order of decreasing factor loadings. Items with an asterisk (*) were retained for the final factor score.

Table 7

Descriptive Statistics for Measures

	Alpha	Mean	SD	Range
Group Environment Questionnaire	.86	7.05	1.60	1.2 – 9.0
Social vs. Task Orientation	–	4.86	1.56	1.0 – 9.0
Group Potency	.95	8.00	1.83	2.7 – 10.0
Group Ambition	.81	8.81	1.82	2.4 – 9.0
Subjective Success	–	7.22	1.77	2.0 – 9.0
Perception of Outside Help	.76	6.98	1.46	3.3 – 9.0
Risk Propensity	.58	3.96	1.75	1.3 – 7.1
Group Size	–	2.93	.42	1.0 – 4.0
Gender Composition (proportion of males)	–	.30	.30	0.0 – 1.0
Group Grade – Social Psychology	–	79.07%	6.30	59.83 – 88.25%
Group Grade – Psychology of Personality	–	91.56%	3.90	82.80 – 97.45%

Table 8

Risk Perception by Experimental Cell

		Expectancy	
		High	Low
Reason	Task	*M* = 6.59 *SD* = 1.96 Range: 1 to 9 *t*(56) = 6.15*	*M* = 6.13 *SD* = 2.02 Range: 1 to 9 *t*(56) = 4.22*
	Social	*M* = 6.61 *SD* = 1.78 Range: 1 to 9 *t*(56) = 6.84*	*M* = 6.38 *SD* = 1.78 Range: 1 to 9 *t*(56) = 5.85*
Control Cell		*M* = 4.17 *SD* = 1.80 Range: 1 to 9 *t*(56) = -3.46*	

* $p < .01$

Note: T-tests examined whether the mean was significantly different from the midpoint (5) of the scale.

Table 9

Willingness to Admit Prospective Members by Experimental Cell

		Expectancy	
		High	Low
Reason	Task	*M* = 3.07 *SD* = 2.73 Range: 1 to 9 *t*(56) = -5.33*	*M* = 3.89 *SD* = 2.96 Range: 1 to 9 *t*(56) = -2.82*
	Social	*M* = 3.42 *SD* = 2.98 Range: 1 to 9 *t*(56) = -4.00*	*M* = 3.79 *SD* = 3.05 Range: 1 to 9 *t*(56) = -3.00*
Control Cell		*M* = 5.63 *SD* = 3.08 Range: 1 to 9 *t*(56) = 1.55	

* $p < .01$

Note. *T*-tests examined whether the mean was significantly different from the midpoint (5) of the scale.

Table 10

Correlations among Measures

	1	2	3	4	5	6	7	8	9	10
1. Cohesion	–									
2. Potency	.62**	–								
3. Ambition	.54**	.65**	–							
4. Outside Help	.59**	.55**	.51**	–						
5. Risk Propensity	-.50**	-.47**	-.27*	-.52**	–					
6. Risk Perception	.03	.04	-.08	.04	-.03	–				
7. Risky Decisions	-.03	-.06	-.00	-.01	-.15	-.75**	–			
8. Group Size	.06	-.02	-.16	-.02	.05	.12	-.12	–		
9. Gender Composition	-.06	-.07	.24	.04	.05	-.11	-.06	.14	–	
10. Group Grade	.11	-.05	-.16	-.11	-.08	.07	-.07	.03	-.22	–
11. Class (1 = Social, -1 = Personality)	.14	.17	.18	.21	.08	.10	-.25	-.00	.02	.00

* $p < .05$ ** $p < .01$

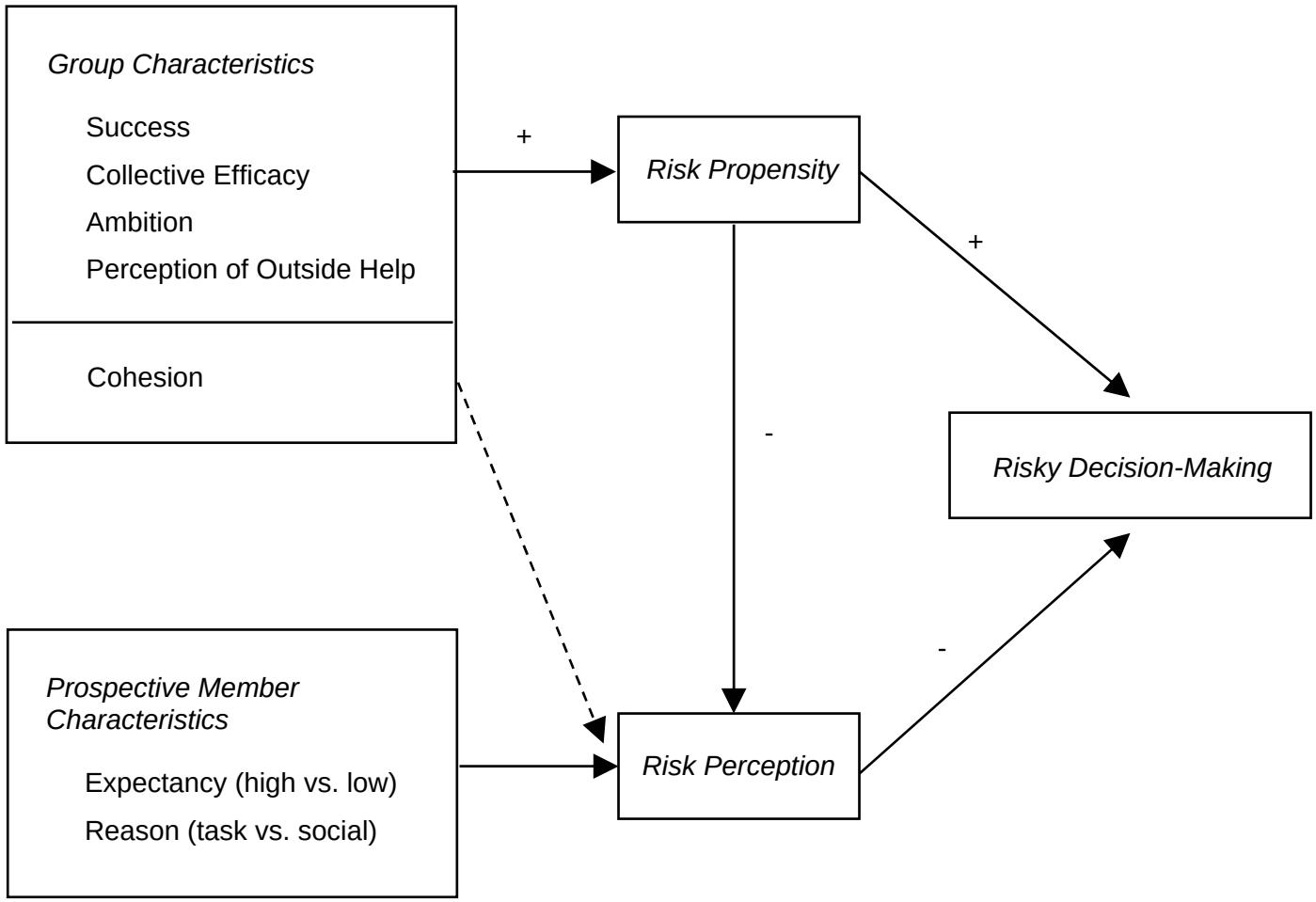

Figure 1. A model of risky decision making by groups (adapted from Sitkin and Pablo, 1992).

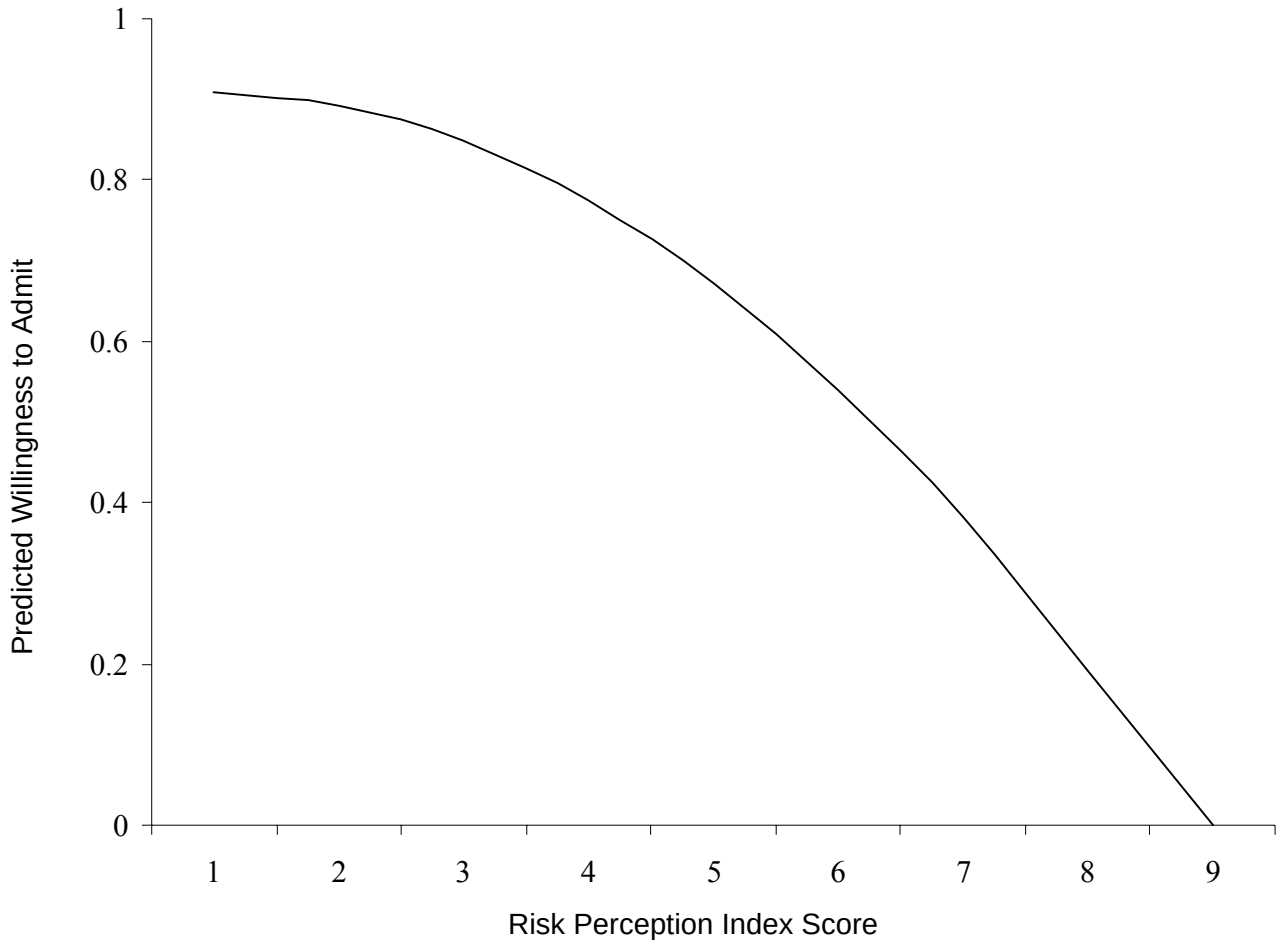

Figure 2. Quadratic relationship between risk perception and willingness to admit prospective members.

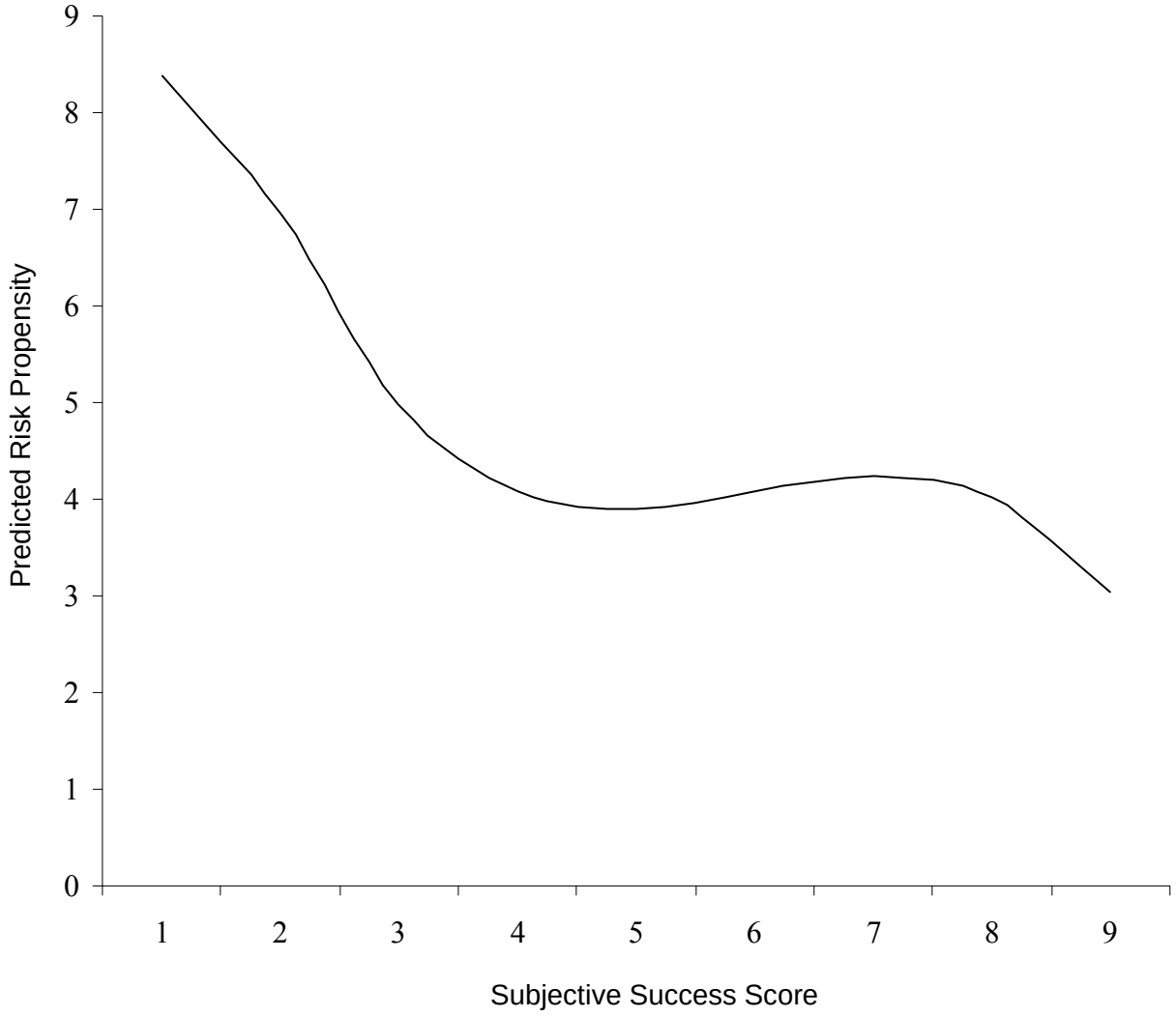

Figure 3. Cubic relationship between subjective success and risk propensity.

APPENDIX A

Scale Items

This appendix contains all the scales and items that participants were asked to complete. Participants did not receive the italicized information identifying the purposes of the scales.

[Modified Group Environment Questionnaire (Carron, et al., 1985) – task and social cohesion]

1 2 3 4 5 6 7 8 9

Strongly disagree Strongly agree

1. Our group is united in trying to reach its goals for performance. [task]
2. Members of our group would rather go out on their own than get together as a group. [social]
3. We all take responsibility for any loss or poor performance by our group. [task]
4. Our group members rarely party together. [social]
5. Our group members have conflicting aspirations for the group's performance. [task]
6. Our group likes to spend time together outside of class. [social]
7. If members of our group have problems in class, everyone wants to help them so we can do well as a group. [task]
8. Members of our group do not stick together outside of class. [social]
9. Our group members do not communicate freely about each student's responsibilities during class or activities. [task]

[Social vs. Task orientation]

1. Which is more important to your group, how well you do on the group activities or how well you get along with each other?

1	2	3	4	5	6	7	8	9
How well we do on group activities				both equally important				How well we get along with each other

[Modified Group Potency Scale (Guzzo, et al., 1993) – collective efficacy]

1	2	3	4	5	6	7	8	9	10
to no extent		to a limited extent		to some extent		to a considerable extent			to a great extent

1. Our group has confidence in itself.

2. Our group believes it can become unusually good at producing high-quality work.

3. Our group expects to be known as a high-performing group.

4. Our group can solve any problem it encounters.

5. Our group believes it can be very productive.

6. Our group can get a lot done when it works hard.

7. No task is too tough for our group.

[Ambition]

1 2 3 4 5 6 7 8 9

Strongly disagree Strongly agree

1. It would upset our group if any of its members receive less than an A in this course.

2. We always try to be one of the best groups in the class.

3. We monitor other groups' class performance so we know about our competition.

4. Every member of our group has high goals for the group's performance.

5. We are one of the most ambitious groups in the class.

[Subjective Success]

1 2 3 4 5 6 7 8 9

Very poorly Very well

1. Overall, how well does your group think it has performed in class?

[Perception of Outside Help – Likelihood]

1 2 3 4 5 6 7 8 9

Very unlikely Very likely

1. How likely is it that your group would receive help from the instructor, if help was needed?

2. How likely is it that your group would receive help from fellow classmates, if help was needed?

[Perception of Outside Help – Value]

1 2 3 4 5 6 7 8 9

Not helpful at all Very helpful

1. If you did receive help from the instructor, how helpful do you think she would be?

2. If you did receive help from other classmates, how helpful do you think they would be?

[Risk Propensity]

Note. The numbers preceding each option are the risk ratings provided by the groups in the Psychology of Small Groups course. These risk ratings were used to calculate risk propensity scores for the groups in my research.

Instructions: As a group, please consider the following scenarios that classroom groups like yours might encounter during a typical semester. Read each scenario and mark with an X the option that best matches what you imagine your classroom group would do in that situation.

1. Your group is meeting together on campus to study for an upcoming exam. Some members of your group suggest that they would rather go to a party they know about, instead of studying. What does your group decide to do?

_5.18_ study, but only for a little while, then go out

_1.06_ stay and study

_8.94_ study after the party

2. Your group is trying to schedule a study session for an upcoming exam, but it is difficult to find a time when everyone can attend the session. What does your group do?

_1.76_ have several sessions so we can all study at least once

_5.06_ decide not to have a study session at all

_2.59_ break into smaller groups to study

3. There is an upcoming classroom activity that guarantees a few extra credit points for each group member if everyone in the group is present. The exact date for this activity has not yet been announced. What does your group do?

_8.47_ play it by ear – if we're all there, we're there

_1.18_ make sure all group members are in class every day

_6.94_ get everyone's cell phone number and make sure at least one group member is in class to call everyone else if it's the group activity day

4. A week before an exam, someone who has a work-study job in the psychology department takes a copy of the exam and offers it to your group. What does your group do?

_2.82_ don't accept the offer, take the exam as scheduled

_4.47_ turn the student in who stole the exam

_7.71_ accept the offer and study from the exam

5. At the beginning of class, your instructor announces that she will be showing a video after the break. Some members of your group suggest that the group leave during the break and skip the rest of class. What does your group decide to do?

_4.41_ let some students leave, but make sure at least one group member stays for the video

_7.76_ leave at the break, skipping the video

_1.00_ stay and watch the video

[Risk Perception – answered after groups read about all prospective members]

1. How would admitting **Person A (B, C, D, or E)** cause our group's performance to change?

1 2 3 4 5 6 7 8 9

worse no change better

2. How would admitting **Person A (B, C, D, or E)** cause the social atmosphere of our group to change?

1 2 3 4 5 6 7 8 9

worse no change better

3. How would admitting Person **A (B, C, D, or E)** cause our relationship with his or her old group to change?

1 2 3 4 5 6 7 8 9

worse no change better

4. How would admitting **Person A (B, C, D, or E)** affect our reputation with other classroom groups?

1 2 3 4 5 6 7 8 9

worse no change better

[Overall Risk Perception]

1 2 3 4 5 6 7 8 9

Not very risky Very risky

1. Overall, how risky would it be for our group to admit Person A?

2. Overall, how risky would it be for our group to admit Person B?

3. Overall, how risky would it be for our group to admit Person C?

4. Overall, how risky would it be for our group to admit Person D?

5. Overall, how risky would it be for our group to admit Person E?

[Risky Decision – answered after all prospective members were considered]

1 2 3 4 5 6 7 8 9

Definitely would not admit him/her

Definitely would admit him/her

1. Overall, how willing are you as a group to admit Person A?

2. Overall, how willing are you as a group to admit Person B?

3. Overall, how willing are you as a group to admit Person C?

4. Overall, how willing are you as a group to admit Person D?

5. Overall, how willing are you as a group to admit Person E?

APPENDIX B

Risk Propensity Pilot Study

I conducted a pilot study to develop a method for assessing the risk propensity of classroom groups. No such measure existed for groups of this sort. My review of the literature suggested that one good way to measure risk propensity was to give participants the opportunity to react to several risky scenarios. This approach has been widely used in I/O psychology and business/economics research on risk propensity (e.g., Macrimmon & Wehrung, 1985; Stewart & Roth, 2001), but never before with classroom groups. So, I wanted to see how classroom groups might react in a variety of risky situations. Risk propensity was their average risk ratings for the choices that a group made across scenarios.

The first step in developing my risk propensity measure was to generate risky scenarios relevant to classroom groups. I developed 11 such scenarios. Then I wrote several response options for each scenario, options that I felt ranged from low to high risk. The number of options ranged from three to six for each scenario. All 11 scenarios and their response options (from low to high risk) are listed below.

> Your group is meeting together on campus to study for an upcoming exam. Some members of your group suggest that they would rather go to a party they know about, instead of studying. What does your group decide to do?
>
> - Stay and study.
> - Study, but only for a little while, then go out.
> - Don't study at all, go out instead.

Your group is trying to schedule a study session for an upcoming exam, but it is difficult to find a time when everyone can attend the session. What does your group do?

- Have several sessions so we can all study at least once.
- Hold a session and whoever can come will come.
- Decide not to have a study session at all.
- Figure out a time when most of us can attend.

There is an upcoming classroom activity that guarantees a few extra credit points for each group member if everyone in the group is present. The exact date for this activity has not yet been announced. What does your group do?

- Make sure all group members are in class every day.
- Get everyone's cell phone number and make sure at least one group member is in class to call everyone else if it's the group activity day.
- Play it by ear – if we're all there, we're there.

Your group feels that its performance in class is being evaluated unfairly by the instructor. What does your group do?

- Try harder.
- Ask the instructor why our group is being treated unfairly.
- Complain to each other about it.
- Bring our complaints to the department chair.

A week before an exam, someone who has a work-study job in the psychology department takes a copy of the exam and offers it to your group. What does your group do?

- Don't accept the offer, take the exam as scheduled.
- Tell the professor someone has a copy of the exam.
- Accept the offer and study from the exam.

Your group does not like the way the instructor is teaching the course. What does your group do?

- Talk to other students about how much we don't like the class.
- Talk to the instructor about the class.
- Talk to another faculty member about the class.
- Nothing, just do our best.
- Withdraw from the class.
- Stop coming to class.

A few students in the class talk a lot during lectures and are disruptive in other ways too. Your group has trouble understanding the lectures as a result. What does your group do?

- Move to a new part of the room.
- Talk to the instructor about it after class.
- Ask the other students to be quiet.

At the beginning of class one day, one of your group's members shows the others his completed homework assignment. Other group members did not realize the assignment was due that day. What does your group do?

- Ask the instructor if you can turn the assignment in late.
- Copy the answers from the completed assignment.
- Don't turn the homework in, and later tell the instructor that she must have lost your assignments.

At the beginning of class, your instructor announces that she will be showing a video after the break. Some members of your group suggest that the group leave during the break and skip the rest of class. What does your group decide to do?

- Stay and watch the video.
- Let some students leave, but make sure that at least one group member stays for the video.
- Leave at the break, skipping the video.

Imagine that you are given time in class to finish up a group project. One member of your group has some gossip that she really wants to share with the others. What does your group do?

- Finish the group project and hear the gossip later.
- Hear the gossip, but be sure to leave time to finish the project after.
- Hear the gossip instead of working on the group project.

While studying for an exam, your group realizes that there are a few concepts from the lectures that nobody understands. The exam is in two days. What does your group do?

- Ask the instructor for help.
- Ask another group for help.
- Hope that those concepts are not on the exam.

The risk propensity measure was piloted in two waves. The first wave involved 58 participants from two courses that were held the semester before my study: Introduction to Social Psychology and Psychology of Personality. Participants were asked to imagine that they belonged to a classroom group and that their course grade depended in part on how well that group performed. Over 90 percent of the participants (n = 53) reported that they had belonged to such groups in the past.

A special questionnaire was developed for the pilot test. There were two versions of this questionnaire; participants in both courses were randomly assigned to questionnaire conditions. Approximately half of the students were asked to read the scenarios and then choose the options that best described what they imagined their classroom group would do in those situations. The other half of the students did not make these choices. All participants then completed three other tasks. First, they rated the riskiness of the options associated with each scenario, using 10-point Likert scales (1 = *not at all risky*, 10 = *very risky*). Next, they were invited to generate any reasonable options that were not listed. Participants who did so were also asked to rate the

riskiness of those new options, again using 10-point Likert scales. All 58 participants generated at least one option, and for each scenario, an average of 42 new options were generated across participants. Finally, participants were asked to list any other risky situations that classroom groups might encounter. A total of 87 alternate scenarios were generated in this way.

My first step in analyzing the pilot data was to make sure there were no consistent differences in ratings between students from the two courses. There were none. I was thus able to analyze the data from all participants together. To see if there were options for each scenario that could be categorized as low, moderate, and high risk, I averaged the risk ratings across participants for each of the options for each scenario. Some scenarios had options that were obviously low, moderate, and high in risk, given their average ratings, and these were marked for consideration as final scenarios. Other scenarios did not fare as well, but they were not discarded, because the participant-generated material had not yet been reviewed.

The next step was to see whether the participant-generated options could improve upon the options that I presented to participants. For scenarios in which the risk ratings of the options were not widely distributed, I searched the participant-generated options for ones that were mentioned by several participants. When there were such options, I averaged the risk ratings for them to see if they could help fill the gaps among the options that were presented. For example, in the second scenario listed earlier, the initial risk ratings were 2.29, 3.01, 5.47, and 8.84 for the four options that I presented to the participants. A common student-generated option for this particular scenario was to break the group into smaller subgroups for study sessions. This option was generated by eight individuals, with an average risk rating of 4.25. I therefore decided to use the student-generated option as the moderate-risk response for two reasons. First, among the original options, the rating of 3.01 was too close to the lowest 2.29 rating. Second, the option

with the 5.47 rating was only selected by one participant. So, the rating of 4.25 for an option generated by eight students seemed to fit well between the 2.29 and 8.84 ratings for low- and high-risk.

Before deciding which response options to use in the final measure, one more step was necessary. Recall that only half of the participants actually made decisions about how they imagined their group might react in each scenario. For these participants, I tallied the number of times each option was chosen for each scenario. This frequency count revealed whether the different options were similarly attractive to students, independent of their risk levels. When a scenario had an option that was chosen by very few participants, I examined the participant-generated options for a possible substitute. For example, the moderate-risk option for the second scenario ("*Hold a session and whoever can come will come*") was only selected by one person. So, I decided to use a popular participant-generated option instead ("*Break into smaller groups to study*"), because it was perceived as moderate in risk. Scenarios that had good distributions of risk ratings *and* options that were chosen by multiple participants were selected for inclusion in a new measure. Three of these final five scenarios included participant-generated options. These five scenarios and their options are listed below (student-generated options are in bold).

> Your group is meeting together on campus to study for an upcoming exam. Some members of your group suggest that they would rather go to a party they know about, instead of studying. What does your group decide to do?
>
> - Stay and study.
> - Study, but only for a little while, then go out.
> - **Study after the party.**

Your group is trying to schedule a study session for an upcoming exam, but it is difficult to find a time when everyone can attend the session. What does your group do?

- Have several sessions so we can all study at least once.
- **Break into smaller groups to study.**
- Decide not to have a study session at all.

There is an upcoming classroom activity that guarantees a few extra credit points for each group member if everyone in the group is present. The exact date for this activity has not yet been announced. What does your group do?

- Make sure all group members are in class every day.
- Get everyone's cell phone number and make sure at least one group member is in class to call everyone else if it's the group activity day.
- Play it by ear – if we're all there, we're there.

A week before an exam, someone who has a work-study job in the psychology department takes a copy of the exam and offers it to your group. What does your group do?

- Don't accept the offer, take the exam as scheduled.
- **Turn the student in who stole the exam.**
- Accept the offer and study from the exam.

At the beginning of class, your instructor announces that she will be showing a video after the break. Some members of your group suggest that the group leave during the break and skip the rest of class. What does your group decide to do?

- Stay and watch the video.
- Let some students leave, but make sure that at least one group member stays for the video.
- Leave at the break, skipping the video.

A second wave of pilot testing was later conducted to test the appropriateness of the final five scenarios and their options (see Appendix C).

One last set of analyses on the first wave of data tested whether simply making decisions about risky situations influenced how risky the options were perceived. Using *t*-tests, I compared the risk ratings for each option from students who made choices among the options with the risk ratings for each option from students who were not asked to make such choices. Although a few significant differences emerged, there was no clear pattern to the results. Next, I examined whether choosing one option would influence how risky it seemed, compared to participants who chose other options. Thus, I conducted a second series of *t*-tests using only the data from participants who were asked to make choices. I examined whether the risk ratings for each option made by the participants who chose it differed from the risk ratings for that option made by participants who chose one of the other options. Again, only a few significant findings emerged. This time, however, there *was* a pattern – people who chose the riskiest option tended to rate it as less risky than those who chose one of the other options. This may reflect Sitkin and Pablo's (1992) suggestion that high risk propensity is related to lower risk perception. That is, groups that are more likely to make risky decisions are less likely to perceive their decisions as risky. Because of this finding, a scoring system similar to a Thurstone scale was developed.

APPENDIX C

Manipulation Pilot Study

The second wave of pilot testing had two goals. First, I wanted to choose descriptors for the reason manipulation and phrases for the expectancy manipulation. Second, I wanted to make sure that the revised risk propensity scenarios and options were appropriate. For this pilot study, 14 groups were created using 37 participants from the Introductory Psychology subject pool at the University of Pittsburgh. All participants received credit toward their introductory psychology research requirement.

After signing an informed consent form to participate in research on decision-making in small groups, each group of participants was given an opportunity to talk together without the experimenter present, so that group members could get to know each other. After approximately five minutes, each group was asked to complete the Winter Survival Task, working together as a group. Once participants completed this task, they were asked to imagine that they were a classroom group, whose members had worked together in the past. Keeping this in mind, the group filled out the GEQ, subjective success, and potency measures, while I scored their performance on the Winter Survival Task. On each measure, group members were asked to reach a consensus on each item. Because scores on the Winter Survival Task were ambiguous, all groups were told that they had performed above average compared to other groups. Each

group was then asked to complete the modified risk propensity measure as described in Appendix B.

Next, each group was asked to rate, using a 9-point Likert scale (1 = *only a little*, 9 = *a lot*), how much it would like to admit a new person if that person were described in a certain way. The group was presented with a list of 51 words that described various negative characteristics. I obtained some of these words from Anderson's (1968) large list of personality traits, which had been rated for positivity/negativity and meaningfulness by other college students, and brainstorming words that I felt described people who might cause problems in small classroom groups. After rating how much they would like to admit people described in these ways, each group was then asked to review the same list of words again, this time rating whether admitting such a person would affect the group's task performance or social atmosphere. Group members responded using a 9-point Likert scale (1 = *affect only social atmosphere*, 5 = *affect both equally*, 9 = *affect only task performance*). Finally, each group was given a set of statements that reflected what classroom groups might say about members they no longer wanted (e.g., "he was always late to class" and "once, she wouldn't stop talking"). The group was asked to rate, on a 9-point Likert scale (1 = *not likely to continue*, 9 = *very likely to continue*), how likely it was that each statement would continue to describe that person, after he or she was admitted to a new group.

Each group was then thanked and told the true nature of the study. Participants were debriefed orally and in writing. I explained that this was a pilot study, used to develop materials for future research. To that end, I asked participants if they had any suggestions for changing the wording of the expectancy manipulation, so that it would stand out more to participants in the

experiment. Many participants suggested underlining or highlighting such phrases as "always" and "once."

To choose the final wording of the reason and expectancy manipulations, *t*-tests were used to determine which words were perceived as social versus task descriptors. Recall that low scores on the 9-point scale reflected social descriptors and high scores reflected task descriptors, with scores of five as a neutral midpoint. Social descriptors thus had to be rated significantly lower than five, and task descriptors had to be rated significantly higher than five. Of the 51 descriptors, 36 had mean ratings significantly different from five, reflecting either a task or social impact (see Table C1).

For each of the 36 task and social words, I calculated how much the groups would like to admit a person described by those words by averaging the ratings of that person across groups on the nine-point willingness scale. Low scores on that scale reflected less willingness to admit a person. To choose the four descriptors for the experiment, I selected two task and two social words that were (a) rated significantly below the midpoint of the willingness scale, indicating that they described a negative quality in a prospective group member, and (b) *not* rated significantly differently from each other in terms of how much the groups would like to admit such a person (See Table C2). The final four words for the reason manipulation were *lazy* (task), *uncooperative* (task), *mean* (social), and *annoying* (social).

I examined the ratings for the expectancy manipulation and considered participants' suggestions. For the high likelihood of reoccurrence condition, the phrases were "…ALWAYS…at every group activity" (e.g., "XXX was ALWAYS mean at every group activity") and "at <u>every</u> group activity we've had…" (e.g., "At <u>every</u> group activity we've had, XXX was mean"). The low likelihood of reoccurrence conditions included the phrases "Once,

… during a group activity" (e.g., "Once, XXX was mean during a group activity") and "During the activity on…" (e.g., "During the activity on aggression, XXX was mean").

Finally, to determine whether the revised risk propensity scenarios and options were appropriate, I examined the frequency with which groups chose each option for each risky scenario. The distribution was acceptable – all of the options were chosen by some groups.

Table C1

Pilot Ratings of the Social vs. Task Nature of the 51 Original Descriptors

Task Descriptors	Rating	Social Descriptors	Rating
Unskilled	8.62*	Shy	2.46*
A slacker	8.62*	Gloomy	2.54*
Unproductive	8.54*	Conceited	2.54*
Inefficient	8.46*	Grumpy	2.62*
Lazy	7.85*	Smug	2.85*
Unimaginative	7.69*	Sarcastic	2.85*
A daydreamer	7.62*	Mean	2.85*
Illogical	7.62*	Unsociable	3.00*
A short attention span	7.54*	Rude	3.46*
Dumb	7.38*	Insecure	3.54*
Inattentive	7.31*	Temperamental	3.62*
Careless	7.31*	Moody	3.69*
Indecisive	7.15*	Pompous	3.77*
Forgetful	7.15*	Annoying	3.85*
Sloppy	7.15*	Deceitful	4.08*
Cautious	7.08*	Irritable	4.23*
Absent-minded	7.08*	Withdrawn	4.23
Overly-critical	6.77*	Obnoxious	4.23
Uncooperative	6.62*	Sly	4.31
Demanding	6.00*	Selfish	4.46
Stubborn	5.92	Inconsiderate	4.46
Clownish	5.62	Untrustworthy	4.69
Opinionated	5.38	Anxious	4.92
Domineering	5.15		
Unruly	5.15		
Outspoken	5.08		
Argumentative	5.08		

Note. Ratings were made on a 9-point Likert scale (1 = *Affect only social atmosphere*, 5 = *Affect both equally*, 9 = *Affect only task performance*). Ratings significantly different from the midpoint are marked with an *.

Table C2

Pilot Ratings of the Desirability of People Described by the 36 Social and Task Descriptors

Task Words	Desirability Rating	Social Words	Desirability Rating
A slacker	1.07*	**Mean**	*1.43**
Unproductive	1.21*	**Annoying**	*1.57**
Uncooperative	*1.50**	Rude	1.57*
Lazy	*1.50**	Deceitful	2.07*
Unskilled	1.93*	Pompous	2.57*
Inattentive	2.00*	Temperamental	2.64*
Careless	2.07*	Moody	2.71*
Dumb	2.07*	Irritable	2.71*
Absent-minded	2.29*	Grumpy	2.83*
Inefficient	2.29*	Conceited	3.14*
Forgetful	2.64*	Smug	3.21*
Illogical	2.79*	Gloomy	3.21*
A short attention span	3.00*	Unsociable	3.50*
Sloppy	3.42*	Insecure	4.14
A daydreamer	3.43*	Shy	5.29
Unimaginative	3.79*	Sarcastic	5.36
Indecisive	4.64		
Overly-critical	4.14		
Demanding	4.93		
Cautious	7.14		

Note. Items with an * are significantly lower than the midpoint (5) on the desirability scale. The final four words are in bold.

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