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Why Do High Self-Monitors Emerge as Group Leaders?

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WHY DO HIGH SELF-MONITORS EMERGE AS GROUP LEADERS?

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ABSTRACT

WHY DO HIGH SELF-MONITORS EMERGE AS GROUP LEADERS?

By

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Previous research has shown that high self-monitors are more likely to emerge as leaders in initially leaderless groups compared to low self-monitors. The present study offers an explanation for why this effect occurs. It is expected that group members who are high self-monitors will engage in more communication behavior that is congruent with the group's goal than low self-monitors; this goal-congruent communication behavior is expected to mediate the relationship between self-monitoring and leader emergence. To test this prediction, participants worked in three-person groups containing one high, one medium, and one low self-monitor to generate ideas where either a task performance or social support goal was emphasized. Results indicated that high self-monitors felt more leader-like than low self-monitors even though other members did not see them as such. Although high and low self-monitors communicated goal-congruent messages to an equal extent, these messages helped low but not high self-monitors to emerge as leaders. Implications of the present study and suggestions for future research are offered.

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Why Do High Self-Monitors Emerge as Group Leaders?

For many years researchers have attempted to determine the traits and processes that facilitate the emergence of leaders. For the most part, researchers have been largely successful in understanding this leader emergence process. For example, researchers have been able to determine much about how leaders emerge (Smith & Foti, 1998), which skills make leaders more effective (Mumford, Zaccaro, Harding, Owen Jacobs, & Fleishman, 2000), and how to classify leader behaviors (Hemphill & Coons, 1957) among many other things. Volumes have been written about researchers' advances in understanding leadership (e.g., Bass, 1990; Stogdill, 1974). This is not to imply that researchers have come to uniform agreement about the exact nature of leadership emergence. For example, some researchers claim that leadership is consistently predicted by some constellation of personal characteristics. Others hold that leadership is predicted by virtue of situational influences alone.

Early researchers held what was referred to as an interaction hypothesis (Sherif, 1948). Essentially, this hypothesis posited that individuals did not emerge as leaders on the basis of any common trait. Rather, researchers speculated that leader emergence was simply a function of the needs that a particular group had, and what resources a member had to offer. Thus, a member was chosen as a leader based on traits, but that leader's traits were in no way a causal agent that facilitated leader emergence. The traits of individuals who emerged as leaders of groups were simply the constellation of traits that the group needed from a leader figure given the situation (Sherif). In short, this view held that leaders are simply individuals who hold the right

set of traits and are at the right place at the right time; the situation in and of itself determines who will emerge as a leader.

More recently, other researchers have questioned this interaction hypothesis of leader emergence (Kenny & Zaccaro, 1983; Lord, de Vader, & Alliger, 1986). They held that if traits play no role in determining leader emergence, then trait factors should not account for any of the variability in leader emergence. Kenny and Zaccaro (1983) found, however, that between 49% and 82% of the variance in leader emergence was due to a trait or constellation of traits. Many traits that may belong to this proposed constellation have interested researchers; one of these traits is self-monitoring.

Researchers speculated that the personality trait of self-monitoring could be predictive of leader emergence (Anderson & McLenigan, 1987; Cronshaw, & Ellis, 1991; Dobbins, Long, Dedrick, & Cheer Clemons, 1990; Eby, Cader, & Noble, 2003; Ellis, 1988; Ellis, Adamson, Deszca, & Cawsey, 1988; Ellis, & Cronshaw, 1992; Zaccaro, Foti, & Kenny, 1991). This research has shown a positive relationship between self-monitoring and leadership; higher self-monitors are more likely to emerge as leaders of groups than low self-monitors. However, while the literature has shown consistent empirical evidence of this relationship and much attention has been paid to thoroughly understanding this relationship, fewer studies attempt to offer a theoretical mechanism that explains why higher self-monitors are more likely to emerge as leaders. The present paper extends work done by previous researchers (Eby et al., 2003; Cronshaw & Ellis, 1991) and offers a theoretical explanation for this relationship rooted in understanding the different communication behaviors that may

contribute to an individual's emergence as a group leader. Additionally, this paper proposes a study to test the provided explanation.

Leadership Emergence

What is leader emergence? In order to answer this important question, it seems wise to begin with some understanding of how researchers have defined leadership. While researchers have not adopted one standardized definition of leadership (Stogdill, 1974), there are several common features of these definitions (Fleishman, Mumford, Zaccaro, Levin, Korotkin, & Hein, 1991). All share some variation of the general idea that a leader is an individual that, through some channel, moves a group toward a shared goal. Similarly, the present paper will conceptualize leadership as the role of an individual who, through the communication of socially influential messages, moves a group toward a mutually shared goal.

It is a logical step, then, to understand the issue of leader emergence in these terms, as well. This research builds upon the posited conceptual definition of leadership and further conceptualizes leader emergence as the process by which individuals are, by other group members, identified as having these leadership qualities. That is, those individuals whose fellow group members trust them to lead the group toward a shared goal through the use of social influence. This paper now turns to a discussion of two factors that predict leader emergence: communication behavior and member congruency with task type.

One factor that predicts leader emergence is the quantity of communication an individual contributes to group discussion. Past research and theory of leader emergence has demonstrated some support for the idea that those who participate most

are the most likely to emerge as leader of a group (Bass, 1949). This is commonly referred to as the 'babble hypothesis.' This hypothesis has been a highly verified predictor of leader emergence (see Bass, 1990; Riggio, Riggio, Salinas, & Cole, 2003). Other past research has suggested that the quality of an individual's participation, in addition to the quantity of their participation, causes leader emergence (Cronshaw & Ellis, 1991; Eby et al., 2003; Garland & Beard, 1979). These studies demonstrated that leaders emerge not only by the amount of participation that they contribute to a group discussion, but also by the type of participation they contribute. The concept that leader emergence is predicted not only by the quantity, but also the type or quality of an individual's communication contributions to a group discussion, has interesting ramifications for the study of leader emergence. By further extending Bass' (1949) babble hypothesis, this suggests that leaders may emerge not only by virtue of their voluminous participation, but also their contribution of valuable and important communication.

A second factor that has been demonstrated to predict leader emergence is consistency between gender typing of the task and sex (Eagly & Karau, 1991). According to gender role theory (Eagly, 1987) women and men are expected to behave consistently with their specified gender roles. Eagly and Karau (1991) found support for this theory in a meta-analysis that examined the role of sex in the emergence of leaders. Specifically, they found that in groups given a stereotypically feminine-typed task, women were more likely to emerge as leaders than men, whereas men were more likely than women to emerge as leaders in stereotypically masculine-typed tasks. Those individuals who were placed in settings consistent with the social

expectations that govern behavior—in this case consistency between sex and gender typing of the task—are more likely to emerge as leaders. Group members who are perceived by other fellow group members to be task competent (i.e., such as when their sex and task type appear to be congruent) may be afforded the opportunities to demonstrate their competence and guide the group; thus, they may emerge as group leader.

Both the babble hypothesis and gender role theory have been fruitful resources for leadership researchers. Kenny and Zaccaro (1983) specified that the search for traits that cause individuals to be able to behave in a manner that is situationally appropriate could provide further insight into the constellation of traits that predict leader emergence. Self-monitoring is one such trait that may offer insight into how individuals quantitatively and qualitatively contribute to a group discussion, and perceive the social norms that govern behavior in varying situations. Thus, it seems quite plausible that self-monitoring facilitates leader emergence.

Self-Monitoring

Snyder's theory of self-monitoring describes the way individuals are able to control their expressive behavior (1974, 1979, 1987). Snyder described expressive behavior as non-verbal or verbal behaviors such as "language behaviors...voice quality, body motion, touch, and the use of personal space" (1974, p. 526). Further, Snyder held that having some ability to alter one's own expressive behavior is one determining factor in successful interpersonal and social functioning. Lennox and Wolfe (1984) further honed self-monitoring into a more parsimonious and valid construct. The present paper will adopt a similar conceptual definition as the one

forwarded by Lennox and Wolfe (1984). That is, self-monitoring is defined as the degree to which individuals are able to sense the expressive behavior of others and alter their own self-presentation of expressive behavior in order to be deemed socially acceptable.

Even though self-monitoring is considered to vary along a continuum, its measurement is typically dichotomized into two categories: high self-monitors (HSMs) and low self-monitors (LSMs). An HSM is an individual who has both of the qualities offered in the conceptual definition: ability to sense the expressive behavior of others, and ability to alter their own self-presentation of expressive behavior (Lennox & Wolfe, 1984). HSMs are able to successfully alter their behavior so that they have some level of incongruence between their attitudes and their behaviors (Snyder, 1974, 1979, 1987). That is, their behavior is dictated to a greater degree by situational factors relative to their attitudes when compared to the behavior of an LSM. HSMs are more likely to alter their behavior in situations where, if their attitudes alone were to inform their behavior, the resultant behavior would not bring about the most felicitous results. For example, HSMs who are in a state of negative affect would be more likely than an LSM to alter their expressive behavior so that they would appear to be in a good mood if they found themselves in a situation where the social demands indicated the need for positive expressive behavior.

Conversely, LSMs have less ability to perceive the expressive behavior of others and alter their self-presentation of expressive behavior so that they may be deemed socially acceptable. The LSM is likely to behave in a manner that is more congruent with her or his implicit attitudes regardless of the demands of the social

environment (Snyder, 1974, 1979, 1987). That is, LSMs are more likely to display expressive behaviors consistent with their attitudes. For example, LSMs in a negative mood will be more likely than HSMs in the same mood disposition to exhibit expressive behavior that is consistent with that negative mood when situational cues would suggest that expressive behavior consistent with a positive mood is most appropriate. LSMs cannot alter their expressive behavior to match situational demands as easily as HSMs.

Despite various alterations and challenges to Snyder's (1974) version of self-monitoring (see, e.g., Briggs, Cheek, & Buss, 1980; Dillard & Hunter, 1989; Gangestad & Snyder, 1985; Lennox & Wolfe, 1984; Snyder & Gangestad, 1986), it remains one of the most hailed personality dimensions in the social sciences. In an overview of the literature, a veritable treasure trove of research that uses self-monitoring as a predictor of social behavior can be found (see Gangestad & Snyder, 2000).

One interesting and pertinent line of research has been the connection of self-monitoring to the ability to perceive social cues (e.g., Hosch, Leippe, Marchioni, & Cooper, 1984; Mill, 1984). One direction for the study of an individuals' ability to attend to social indicators is to examine the relationship between self-monitoring and perceiving the need to be empathic as well as communicating empathy (Mill, 1984). Mill found that HSMs were more likely than LSMs to correctly decode vocal cues. That is, HSMs were more adept than LSMs at interpreting the emotional states of individuals to whom they were listening. The ability to interpret social cues seems

vital to the ability to lead a group toward a shared goal. This connection has led to the use of self-monitoring as a trait that determines leader emergence.

Self-Monitoring Predicts Leader Emergence

Self-monitoring has often been used by researchers to predict leader emergence in groups. Since the earliest studies linking self-monitoring to leader emergence, different aspects of this relationship have been studied. A sizable body of research has successfully shown a significant positive relationship between self-monitoring and leader emergence (Cronshaw, & Ellis, 1991; Dobbins et. al., 1990; Eby et al., 2003; Ellis, 1988; Ellis, Adamson, Deszca, & Cawsey, 1988; Ellis, & Cronshaw, 1992; Garland & Beard, 1979; Zaccaro, Foti, & Kenny, 1991). Because this relationship has been so well demonstrated, it seems wise to sketch two facilitating conditions under which self-monitoring predicts leader emergence.

One necessary condition for the self-monitoring – leadership emergence relation to be found is that the given task must not include information about group members' task competence (Cronshaw & Ellis, 1992; Eby et al., 2003). Another condition under which researchers have observed the association of self-monitoring and leader emergence is that the group task must include some social interaction among group members (e.g., Eby et al, 2003; Ellis, 1988; Garland & Beard, 1979; Hollander, 1964). Both facilitating conditions illustrate how the type of task that a group is asked to perform has an impact on the self-monitoring – leader emergence relationship. This paper now turns to a discussion of some of the findings that have examined the effects of different task variables.

Garland and Beard (1979) used two distinctly different task types in their study. One task type was a brainstorming task. In this task, Garland and Beard stated that participants were given low competence feedback. That is, it was not comparatively easy to determine the competence of fellow group members based on their task performance. In the high competence feedback condition, participants were given an anagram solving task. Under this condition it was relatively easy for group members to assess their fellow group members' task competence. Garland and Beard found that in the low competence feedback (brainstorming task) condition HSM women were more likely to emerge as leaders. Ellis and Cronshaw (1992) also found that when no task competence feedback is readily accessible to group members HSMs are more likely than LSMs to emerge as group leaders. Furthermore, this study indicated that the relationship between self-monitoring and leader emergence is more strongly correlated when group member task competence is difficult to assess, than when group member task competence is more readily accessible. In sum, these findings suggest that the association between self-monitoring and leader emergence is strongest when individuals have no other reference points by which to determine leadership (i.e., intelligence, skill at task, etc.) Conversely, when group member competence is relatively simple to determine, self-monitoring has less bearing on leader emergence. In these groups, members likely judge the most competent member to be the leader, regardless of her or his level of self-monitoring.

Related to these findings about member task competence, is the suggestion from some researchers that the effect of self-monitoring best predicts leader emergence when a group task includes enough time and opportunity for members to

interact (Eby et al, 2003; Ellis, 1988; Garland & Beard, 1979; Hollander, 1964). Through this interaction, members presumably acquire information about which members seem most leader-like. If a great degree of group discussion and no indicators of member task competence are necessary conditions for self-monitoring to predict leader emergence, what behaviors are taking place during group discussions that facilitate an individual's emergence as a leader of their group? Exploring an answer to this question requires an examination of the mediating role of communication behavior in the relation between self-monitoring and leader emergence.

Some researchers have examined the role that behavior may play in the leader emergence process as it is predicted by self-monitoring. One such study, conducted by Cronshaw and Ellis (1991), proposed that HSMs engaged in behavior that was consistent with social cues more often than LSMs. Specifically, they hypothesized that HSMs would attend to cues instructing them to initiate structure in a group. This, they hypothesized, should allow HSMs to attend to that cue and alter their behavior so that they participate in more structure-initiating behaviors, thus facilitating their emergence as leaders. Their data were consistent with this hypothesis.

Further, the explanation offered presently seems plausible in light of the findings of Hall, Workman, and Marchioro (1998) that behavioral flexibility, as measured by self-monitoring among other things, was strongly predictive of leader emergence in groups. Hall et al. presumed that the relationship between self-monitoring and leader emergence was mediated by behavior; however they stopped

short of measuring behavior. The present study will add to the body of literature in this area by measuring behavioral message production in these groups.

Another study that examined the behavioral process of self-monitoring and leader emergence was Eby et al. (2003). This study extended work done by Cronshaw and Ellis' (1991) process investigation of the relationship between leader emergence and self-monitoring. Specifically, Eby et al. held that the self-monitoring – leader emergence relationship could be better understood by examining task-related, and relationship-oriented behavior. Based on this assertion, Eby et al. hypothesized that HSMs would engage in more leader behaviors (both task-related and relationship-oriented) than LSMs. These hypotheses seem particularly plausible in light of the babble hypothesis (Bass, 1949, 1990). Specifically, it seemed likely that HSMs would emerge as leaders by simply contributing more leadership behavior, both task and relationship specific, to a group discussion. However, the data offered mixed support for this hypothesis. Eby et al. found that HSMs engaged in more task-related leader behaviors but not more relationship-oriented leader behaviors than LSMs. In order to explain this finding, the present paper seeks to develop a model that describes the process by which HSMs emerge as leaders of groups.

A Conceptual Model

The present paper offers a model that explains why HSMs are more likely than LSMs to emerge as group leader, conceptually integrating the literature. The model, shown in Figure 1, proposes that self-monitoring predicts leadership emergence through goal-congruent messages.

The logic of the conceptual model is outlined here. According to Lennox and Wolfe's (1984) conceptual definition of self-monitoring and the conceptual understanding of the present paper, HSMs are more sensitive to situational demands than LSMs, and HSMs are more able to adjust their behaviors to fit these situational demands than LSMs. One such situational demand is a group's goal. For example, if a group's goal is to perform a task, HSMs should adjust their behavior to aid the accomplishment of that group's goal. Likewise, if a group's goal is to maintain relations with group members, HSMs should be more likely to adjust their behavior to aid in the accomplishment of that goal. Whatever the group goals are, HSMs should be more sensitive to them than LSMs, and HSMs should be more likely to engage in behavior that is congruent with group goal accomplishment. Thus, the model proposes a positive relationship between self-monitoring and goal-congruent messages (GCM). GCMs will be conceptualized by this paper as those messages that are consistent with the primary goal of a group. That is, if a group had a goal of accomplishing a particular task, then a GCM would be a message that in some way facilitated the group's completion of that task while messages that were more social in nature would be somewhat ancillary to the group's shared goal.

From the definition of leadership adopted by this paper, leaders are individuals who help the group to attain its shared goals. Because HSMs are more likely than LSMs to engage in communication congruent with group goal accomplishment, it is not surprising that they are seen as more leader-like than LSM group members. Thus, the second relationship the present model proposes is an overall positive relationship between GCMs and leadership emergence. Finally, the present conceptual model

offers a mechanism by which researchers can understand the process of the observed relationship between self-monitoring and leadership. Namely, the model holds that the relationship is mediated by GCMs.

This process holds when two conditions are met. First, member task-competence must be ambiguous; that is, other members must not be able to perceive that one member is better than all the others at the group's task. Second, groups must be given a task that includes ample opportunity to discuss, and come to a consensus. In short, settings where social interaction among group members has been limited have not proven optimal settings whereby to observe the relationship between self-monitoring and leader emergence.

This model explains the recent findings of Eby et al. (2003). Eby et al. found that HSMs engaged in more task-oriented leader behaviors, but not more relationship-oriented leader behaviors when compared with LSMs. Eby et al. were surprised that HSMs did not engage in more of all types of leadership behaviors—both task and relationship—than LSMs. However, given the current conceptual model, their findings are not surprising. In the Eby et al. study, the stated group goal was to perform a fund-allocation task. HSMs were more sensitive to this stated group goal than LSMs. Therefore, HSMs used more GCMs, which, in this case, were task-oriented. Had the task demanded relationship-oriented behavior, HSMs would have engaged in more relationship-oriented leader communication behaviors than LSMs.

The Present Study

The present study tested the proposed conceptual model. In order to show that HSMs adjust their behavior depending on the group's goals, the present study varied

group goals to be either task-performance oriented or social-support oriented. An idea generation task was chosen for three reasons. First, it lent itself toward being framed as either task-performance, or socially oriented. Second, it allowed for the selection of a topic that fit the model's two limiting conditions—opportunity to discuss being maximized and member task competence being ambiguous. Finally, the self-monitoring—leader emergence relationship has been shown with an idea generation task in past research (Garland & Beard, 1979).

In Garland and Beard's (1979) study, self-monitoring predicted leader emergence for an idea generation task, but only for all-female groups. Additionally, Anderson and McLenigan (1987) found that self-monitoring was correlated with task-oriented leadership only for female groups. Other studies have also found sex differences in the self-monitoring—leader emergence relationship (e.g., Ellis, 1988; Ellis & Cronshaw, 1992). Therefore, the present study utilized all-female groups working on an idea generation task. This promoted a partial replication of Garland and Beard's study, and tested the proposed model while holding sex and task type constant.

Self-monitoring rank was operationalized as an individual's score on Lennox and Wolfe's (1984) revised self-monitoring scale. The highest third of individuals were pre-selected as HSMs, the middle third as mid-range self-monitors (MSMs), and the bottom third as LSMs. Each three-person group was composed of one of each type of member (i.e., one HSM, one MSM, and one LSM). Other studies that have examined the leader emergence of high and low self-monitors in situations where member task competence is ambiguous and the task includes a great degree of

discussion have found that HSMs emerge as leaders of groups more frequently than LSMs (e.g., Cronshaw & Ellis, 1991; Eby et al., 2003). Thus, in order to test the first proposition of the conceptual model the present study offers the replication hypothesis:

H1: HSMs will be more likely to emerge as group leaders than LSMs.

GCMs are operationalized as messages that match the goal of the group. That is, if the group has a social-support goal, GCMs are messages that are relationally-oriented leader behavior. Likewise, if a group has a task-performance goal, a GCM is communication behavior that is task-oriented leader behavior. Goal ancillary messages (GAM) are any communication behaviors that are inconsistent with the primary goals of the group. This behavior may be consistent with secondary or tertiary group goals; however, it is inconsistent with the primary group-goal stated in the experimental induction. For example, task-oriented leader behavior in a group with a social-support group goal would be classified as a GAM. Likewise, relationship-oriented communication behaviors in a group with a task-performance goal would be classified as a GAM. These communication behaviors should be observable during the group's discussion. Based on these operationalizations and according to the second proposition of the conceptual model, it is hypothesized that:

H2: The tendency to prefer goal-congruent messages over goal-ancillary messages, during a group discussion, is stronger for HSMs than for LSMs.

Finally, the conceptual model posits that communication behavior that is consistent with the goals of the group should allow an individual to become a leader of

a group because that individual would have proven that they are capable in helping the group to attain its goals.

In order to test the proposition that communication behavior consistent with attaining group goals leads to leader emergence, leader emergence was operationalized as an individual's score on the GLI (Cronshaw & Lord, 1987; Lord, Foti, & deVader, 1984). The GLI measures the perceptions of group members about the leadership of other individuals in the group. Additionally, a separate five-item, goal-facilitation scale was developed for this study that measures participants' perceptions of their group members' ability to help the group to achieve its goals. The following hypothesis uses these leadership measures to test the model's third proposition.

H3: Goal-congruent messages are positively correlated with leader emergence.

Method

Participants and Design

One hundred five female undergraduate students at a large Midwestern university participated in exchange for course credit. The design of the study was a Self-Monitoring Type (high vs. low) x Group Goal (support vs. performance) mixed factorial design, with the Self-Monitoring Type factor occurring within groups. Participants were assigned to 3-person groups based on their Self-Monitoring Type and randomly assigned to one of two experimental conditions. Eighteen groups were tested in the performance condition and seventeen groups were tested in the support condition of the Group Goal factor.

Measures

Self-monitoring. Prior to participating in the study, participants completed Lennox and Wolfe's (1984) revised self-monitoring scale (see Appendix A). The revised self-monitoring scale has been demonstrated to have sufficient reliability in a number of studies examining leadership and self-monitoring. Lennox and Wolfe found a Cronbach's alpha of $\alpha = .75$ for the total scale. Additionally, Ellis and Cronshaw (1992) found a Cronbach's alpha of $\alpha = .77$; similarly Eby et al. (2003) demonstrated a Cronbach's alpha of $\alpha = .70$. Some controversy surrounds the measurement of self-monitoring. Briggs, Cheek, and Buss (1980) as well as Gabrenya and Arkin (1980) questioned the validity of Snyder's (1974, 1979) 25-item self-monitoring scale. Further, Dillard and Hunter (1989) questioned the 18-item scale revised by Snyder and Gangestad (1986), and suggested that future researchers should use the Lennox and Wolfe (1984) revised self-monitoring scale. For this reason, the

Lennox and Wolfe scale was chosen to measure self-monitoring in the present study. In this study, the Cronbach's alpha reliability estimate for the Lennox and Wolfe (1984) revised self-monitoring scale was acceptable and consistent with the reliability estimates from past research, $\alpha = .77$.

Participants were designated as high, medium, and low self-monitors based upon their scores on the revised self-monitoring scale. The scale was given to participants at the beginning of the semester as part of a mass pretest, then individuals scoring in the top third were invited back to participate in the second part of the study and designated as HSMs (individuals with raw scores on the revised self-monitoring scale between 61 and 78, inclusive), individuals in the bottom third were invited back and designated as LSMs (scores were between 13 and 55, inclusive), and individuals in the middle third of scores were invited back and designated as MSMs (scores were between 56 and 60, inclusive). This technique, rather than a median split to designate self-monitoring status, was used to increase the variability between HSMs and LSMs within groups.

Further, to expedite data collection, a second method of administering the self-monitoring scale was used. Participants, upon arrival to the laboratory, were given the same version of the self-monitoring scale as those who participated in the mass pre-test. Then, the tests were scored while participants waited, and they were assigned to groups according to their self-monitoring scores. Participants were designated as high, low, or mid-level self-monitors according to the same score increments used for the mass pretest administration of the self-monitoring scale. An independent samples t-test was conducted in order to determine if there were significant differences among

the two different administrations of the self-monitoring scale. The difference between the means for the mass self-monitoring administration ($M = 55.98$, $SD = 7.33$) and the pre-experimental administration ($M = 56.22$, $SD = 6.68$) was not statistically significant, $t\ (103) = -0.18$, $p = .86$, $\eta^2 = .003$. Further, Levene's test to determine the equality of variances revealed that the two variances were not significantly different, $F\ (1, 103) = 0.00$, $p = .99$. Thus, all of the data in both the mass self-monitoring administration and the pre-experimental administration were aggregated for all analyses reported in this paper.

Leader emergence. Leader emergence was measured by utilizing the Group Leader Impression scale (GLI; Cronshaw & Lord, 1987; Lord, Foti, & deVader, 1984). Each member was asked to rate themselves and each other member on the 5-item GLI (see Appendix B; items 2,3,5,6, and 8), as well as an additional 5-item goal facilitation scale (see Appendix B; items 1,4,7,9, and 10) designed to tap the degree to which an individual helped the group achieve its goals—to this point an untapped dimension of the GLI. This scale was developed because, while many conceptual definitions of leadership involve some aspect of an individual helping a group to achieve group goals, few studies have actually measured this component of leadership. It was determined that for the present study, measuring the degree to which group members perceive that their fellow group members helped the group achieve its goals was essential.

The GLI has been demonstrated to have a sufficiently high reliability in order to merit its use as well. For example, Ellis and Cronshaw (1992) found a Cronbach's alpha of $\alpha = .96$ for a human relations task, as well as $\alpha = .95$ for a marketing task.

While some studies have used only other group members' ratings of leadership ability as measured by the GLI (i.e., Ellis & Cronshaw, 1992), it is unclear whether this was the case for each study present in the literature that used the GLI for assessments of leader emergence in groups. For this reason, the present study utilizes both others' ratings of fellow group members on the GLI as well as a member's self-ratings on the GLI in order to determine leader emergence. Cronbach's alpha reliability estimates were acceptable for both GLI ratings made by others (α = .82), and those made about the self (α = .83).

While scores on the GLI demonstrated acceptable reliability, scores on the goal attainment leadership scale developed specifically for this study were less reliable. Self ratings of an individual's goal attainment behavior were relatively unreliable (α = .59). Others' ratings of group members' goal attainment behavior were similarly unreliable (α = .43). Therefore the GLI will be used as the sole measure of leader emergence, and the goal attainment leadership scale will be disregarded in the analyses.

Procedure

Upon arrival to the laboratory, participants were divided into groups based on Self-Monitoring Rank (i.e., each group consisted of one HSM, one MSM, and one LSM). At this point, each group was introduced to the study (see Appendix C), and asked to sign an informed consent form if they wished to participate (see Appendix D).

Next, each group was randomly assigned to one of two levels of the Group Goal factor. Most features of the task remained constant for both conditions. All

participants discussed the topic—challenges facing students transitioning between high school and college—for 25 minutes, generated ideas for the topic, and came to a consensus about the top 10 challenges (see Appendix E). This potentially sensitive topic is one to which all participants were expected to relate, and lends itself toward being framed as either performance or support-oriented. The main goal of the task and the stated criterion on which groups were evaluated varied across conditions.

In the *performance goal* condition, the group was given instructions (see Appendix F) that framed the group's goal as a brainstorming task. In this condition, the instructions emphasized task performance and productivity in idea generation. Specifically, in instructions read to the groups by an experimenter, the groups were informed that they would be participating in a "brainstorming task" in order to "generate ideas." Groups were instructed that their primary goal was "to produce the top ten challenges."

In the *support goal* condition, the group was given instructions (see Appendix F) that framed the group's goal as a team-building task, providing member support as well as possible. In this condition, group members discussed their ideas on the sensitive topic to get to know and support one another. Specifically, in instructions read to the groups by an experimenter, the groups were informed that they would be participating in a "team building discussion" in order to "build closeness". Groups were instructed that their primary goal was "to support and bond with one another." In both conditions, groups were given 25 minutes to discuss the topics. Also, discussions were video-taped so that group members' messages could be coded at a later time.

Following the group task, each group member was given a questionnaire that requested the rating of each group member on the two leadership inventories, in order to determine group member perceptions of leader emergence, and a manipulation check in order to confirm that the intended group goals were successfully manipulated in the support and performance conditions. The performance concern and relational concern measures were used to assess the degree to which group goals were successfully manipulated. Performance concern items (see Appendix B; Items 32, 34, 36, and 38) measured the degree to which group members perceived that their group's primary aim was to successfully complete the task. Relational concern items (see Appendix B; Items 31, 33, 35, and 37) measured the degree to which group members perceived that their group's primary aim was to become a more cohesive, supportive group. To create both the performance and relational concern measures, member scores were computed by averaging across items, and a group mean was computed by averaging member scores within groups. The Cronbach's alpha reliability estimate for the performance concern measure was $\alpha = .55$, while the reliability estimate for the relational concern measure was $\alpha = .59$.

Additional measures were included to ensure that groups across conditions did not vary on member task-competence (see Appendix B; Items 40, 41, and 43), opportunity for social interaction (see Appendix B; Items 39, 42, and 44), perceived task difficulty (see Appendix B; Items 45, 46, and 47), and liking (see Appendix B; Items 48, 49, and 50). These additional measures can be used as covariates in future analyses and are excluded from this report. After completing the post-discussion

questionnaire, participants were debriefed, given informational sheets including information as to how to obtain a copy of the completed study, and dismissed.

Coding Behavior

In order to quantify behavioral measures of leader behavior, a coding scheme (see Appendices G & H) was developed. The developed coding scheme was similar in structure to Bales' interaction process analysis (Bales, 1950, 1970). Such a scheme measuring task and relational behaviors is quite common in the social science literature, thus it was altered to meet the demands of the present study. Two general types of verbal messages were coded: messages that displayed concern for task performance, and messages that displayed concern for bettering group member relations.

Task performance messages were those types of messages that were framed in such a way that they led group members toward successfully completing the idea generation task present. These messages included utterances that were focused on task completion rather than cohesion building. Relational concern messages were those that led group members toward a better understanding of one another through self-disclosure, and promoted a feeling of greater cohesion among group members. These messages were those that allowed group members to reveal to others or seek from others information about their own personal lives. For both task-oriented and relational-oriented utterances, coders classified four subtypes: generation of opinions, the making of suggestions, the asking of questions, and providing information.

Opinions that were generated by participants were coded as either task-oriented opinions, or self-oriented opinions. *Task-oriented opinions* were

conceptualized as opinions that were personal beliefs, attitudes, or judgments about anything that furthered the group toward its goal of completing the idea-generation task. An example of a task-oriented opinion, characterized by its generality, is the utterance, "It's so weird to live with a stranger." *Self-oriented opinions* were conceptualized as beliefs, attitudes, or judgments that were about the self or a close personal other. For example, the utterance, "I'd have trouble living with a stranger," is an opinion that is an evaluation of the self, rather than a more general opinion.

Similarly, suggestions that participants generated were coded either as task suggestions or relation-oriented suggestions. *Task-oriented suggestions* were conceptualized as communication behaviors that offered suggestions about how to complete the group task. Such suggestions included messages about how a group should rank an idea, combine one or more ideas, or word a particular idea in the response form. An example of a task-oriented suggestion is the utterance, "Let's write down our ideas first and then share them with the group." This utterance describes a method by which to complete the task. *Relation-oriented suggestions* were conceptualized as suggestions that offered a course of action for a group to become a more cohesive. One example of such a suggestion would be the more relationally directive, "Let's say one thing about ourselves in order to get to know one another better."

Group members' questions were coded into either task-oriented questions or relationship-oriented questions. For this study, *task-related questions* were conceptualized as those questions that sought information about an idea, the treatment of an idea, or a task procedure. An example of a task-related question that clarifies

how best to complete the idea-generation task is: "How should we order these ideas?" *Relationship-oriented questions* were conceptualized as those questions that sought information about the personal details of another group member. An example of a question that seeks personal information, presumably increasing group cohesion, is: "How many siblings do you have?"

Finally, group members could provide information that was either task-oriented, or personal. *Task-oriented information* was conceptualized as potentially verifiable information that informed group members about the requirements of the nature of the task, stated what the group had accomplished, or offered other task-related information. An example of a task-oriented informational utterance is: "I wrote 'difficulty living with a stranger' on our list." *Personal information* was conceptualized as a message that offered a potentially verifiable story or other piece of information about that participants' self or a closely-related other. An example of a personally informative utterance is: "I was paired with a stranger for a roommate."

Two trained observers, who were blind to study hypotheses, independently watched the videotaped discussions and classified verbal utterances into the eight coding categories. Coders recorded those codes on a coder response sheet (see Appendix I). Coders were trained using several experimental groups (these training groups were excluded from study analyses) over a period of four weeks. Each coder coded an approximately equal number of groups from both the performance-goal and support-goal conditions. Seventeen of the groups were coded by both coders in order to estimate reliability, while 18 of the groups were coded by one of the two coders.

Because the present study was concerned with the overall amount of both task and relational utterances, the numbers of both types of utterances were aggregated across subtypes (i.e. opinions, suggestions, questions, and information). Group members' task utterances across each of the four task sub-categories were summed into one task-utterance raw score. Similarly, group members' relational utterances for each of the four relational sub-categories were summed into one relational-utterance raw score. Group members' task utterance sums in the performance goal condition were identified as GCMs, while relational utterance sums were identified in this condition as GAMs. Conversely, group members' task utterance sums in the support goal condition were identified as GAMs, while relational utterance sums were identified as GCMs.

In order to determine GCM and GAM scores for group members coded by both coders, the mean of both codings was taken and assigned to each group member. Also, the 17 groups jointly coded by both coders were used to assess inter-coder reliability. This reliability was calculated by correlating the two codings for group members' GCM and GAM scores. A Spearman-Brown correction was performed on these correlations to estimate the reliability of the average of the two codings. Reliability estimates were acceptably high for GCM scores. These values were .94, .92, and .97 for HSMs, MSMs, and LSMs, respectively. Likewise, reliability estimates for GAM scores were acceptable at .90, .97, and .93 for HSMs, MSMs, and LSMs, respectively.

Results

Member Interdependence

It is likely that members' perceptions and behaviors were positively interdependent within groups. To test for interdependence and to determine the appropriate unit of analysis for the data (either group or individual), the intraclass correlation was computed for each dependent variable. Because the test of interdependence has low statistical power, a critical alpha level of .20 was utilized as advised by Kashy and Kenny (2000). The data showed significant interdependence on several variables. Others' ratings of individual group members on the GLI, (ICC = .39, F [34, 70] = 2.89, $p < .001$) and the relational concern measure, (ICC = .32, F [34, 70] = 2.42, $p < .01$) were determined to be significantly positively interdependent. Additionally, the behavioral measures GCM (ICC = .75, F [34, 70] = 6.91, $p < .001$) and GAM (ICC = .67, F [34, 70] = 4.98, $p < .001$) were also determined to be significantly positively interdependent. Individuals' self-ratings on the GLI, (ICC = .02, F [34, 70] = 1.06, *ns*) and the performance concern measure, (ICC = .04, F [34, 70] = 1.16, *ns*) were determined not to be significantly interdependent. Because of these significant interdependencies, the data of the present study were analyzed using the group as the unit of analysis.

Manipulation Checks

Group goal. Performance groups were expected to be more concerned with performance than support groups, whereas support groups were expected to be more concerned with member relations than performance groups. In order to assess whether the group goal induction was successful, an independent samples t-test assessed

differences in mean group scores across task conditions on both the performance concern and relational concern measures. For the performance concern measure, groups assigned a task performance goal ($M = 5.64$, $SD = 0.58$) and groups assigned a support goal ($M = 5.35$, $SD = 0.70$) did not differ significantly, $t\ (33) = 1.32$, *ns*, $\eta^2 = .05$, though the means tended to differ in the expected direction.

For the relational concern measure, groups with a support goal ($M = 5.63$, $SD = 0.82$) reported a higher concern with establishing member relations as compared to groups with a task performance goal, ($M = 5.11$, $SD = 0.73$), $t\ (33) = -1.99$, $p < .05$. These manipulation checks suggest that the main difference between the group goal conditions was a concern with member relations, whereas both types of groups were equally concerned with task accomplishment.[1]

A similar pattern emerged when examining task and relational utterances as a check on the group goal manipulation. Participants made a similarly high number of task related utterances in both the performance goal condition ($M = 28.15$, $SD = 15.05$) and support goal condition ($M = 26.71$, $SD = 10.47$), $t\ (33) = 0.33$, $p = .75$, $\eta^2 = .03$. However, participants made higher numbers of relational utterances in the support goal condition ($M = 18.63$, $SD = 13.25$), than in the performance goal condition ($M = 11.09$, $SD = 8.27$), $t\ (33) = -2.03$, $p = .05$. Support groups, compared with performance groups, not only reported more concern with developing relations with other members, they actually did so.

[1] In order to determine if there was an interaction effect between group goal and self-monitoring on the performance and relational concern measures, two 3 x 2 mixed factorial ANOVAs were conducted. There was no significant interaction effect for either the performance concern measure ($F\ (1, 33) = 0.33$, $p = .57$) or the relational concern measure ($F\ (1, 33) = 1.36$, $p = .25$). Therefore, sensitivity to the group goal induction did not depend on members' level of self-monitoring.

Self-monitoring. In order to determine that self-monitoring was successfully manipulated, a one-way analysis of variance was conducted to assess the differences in self-monitoring scores between HSMs, MSMs, and LSMs. The result was significant, $F(2, 102) = 94.20$, $p < .001$. To ensure that each of the three member types were different from one another, a Tukey post-hoc analysis was performed. HSMs ($M = 62.66$, $SD = 3.24$), MSMs ($M = 56.66$, $SD = 2.65$), and LSMs ($M = 49.00$, $SD = 5.89$) were all significantly different from each other at a critical alpha level of .001.

Hypothesis Tests

Hypothesis one. Hypothesis one posited that self-monitoring (high vs. low) would predict GLI scores (as rated by other group members) such that HSMs would be more likely to emerge as leaders than LSMs. A one-way within-groups analysis of variance was used to assess differences among group members within their groups. HSMs ($M = 5.44$, $SD = 1.01$), MSMs ($M = 5.54$, $SD = 0.90$), and LSMs ($M = 5.46$, $SD = 0.86$) did not differ significantly with regard to others ratings of their leadership, $F(2, 68) = 0.16$, *ns*, $\eta^2 = .005$. In order to more directly test Hypothesis one a contrast analysis was performed to analyze any potential differences between HSMs and LSMs. The contrast analysis revealed that the means for HSMs and LSMs were not significantly different from one another, $F(2, 68) = 0.01$, *ns*. Thus, others' ratings on the GLI do not support Hypothesis one.

This inconsistency notwithstanding, the data were further analyzed with regard to members' self-ratings of their own GLI leadership scores. Another one-way within-groups analysis of variance was used to assess differences among group members

within their groups regarding these self-ratings. This analysis of the data revealed that HSMs ($M = 5.90$, $SD = 1.11$), MSMs ($M = 5.51$, $SD = 0.92$), and LSMs ($M = 5.29$, $SD = 1.38$) did differ in the predicted directions at a marginally significant level, $F(2, 68) = 2.66$, $p = .08$, $\eta^2 = .07$.

In order to further assess this marginally significant difference in the data, a contrast analysis was used to determine whether the differences between HSMs and LSMs were consistent with hypothesis one. The contrast analysis did reveal a significant difference between HSMs' and LSMs' self-rating on the GLI in the expected direction, $F(1, 34) = 5.28$, $p < .05$, $\eta^2 = .05$.

In sum, other group members did not judge HSMs to be more leader-like compared to LSMs. Rather, HSMs judged themselves to have emerged as a group leader more than LSMs judged themselves to have emerged as a group leader.

Hypothesis two. Hypothesis two predicted that during a group discussion the tendency to prefer goal-congruent messages over goal-ancillary messages would be stronger for HSMs than for LSMs. In order to test this hypothesis, a difference score was calculated by subtracting GAM from GCM for all participants. This difference score represented the tendency to either prefer GCMs (as indicated by a positive difference score) or GAMs (as indicated by a negative difference score).

A one-way within groups analysis of variance tested the effect of self-monitoring on members' preference for GCMs over GAMs. Results showed that HSMs ($M = 4.76$, $SD = 19.88$), MSMs ($M = 6.34$, $SD = 20.08$), and LSMs ($M = 3.44$, $SD = 16.46$) did not differ in their bias toward GCMs over GAMs, $F(2, 68) = 0.67$, $p = .51$. To directly test Hypothesis two, a paired-samples t-test showed that HSMs and

LSMs did not differ in their preference for GCMs over GAMs, t (34) = 0.60, p = .55. Thus, the data were not consistent with Hypothesis two. Additionally, a one-sample t-test showed that LSMs (t (34) = 1.24, p = .11, one-tailed) did not significantly prefer more GCMs than GAMs. However, HSMs (t (34) = 1.42, p = .08, one-tailed) and MSMs (t (34) = 1.87, p = .04, one-tailed) did prefer GCMs over GAMs at a marginally significant, and significant level, respectively. In sum, although HSMs did not favor GCM to GAM more than LSMs, only HSMs and MSMs tended to communicate significantly more GCMs than GAMs.

Hypothesis three. Hypothesis three predicted that goal congruent messages would be positively related to a participant's emergence as a group leader. In order to test this hypothesis, correlation coefficients were calculated for high, medium, and low self monitors' number of GCMs and others' ratings of their leadership on the GLI. HSMs displayed a positive, but statistically insignificant, relationship between their GCM and others' ratings of their leader emergence, r (33) = .13, p = .47. MSMs displayed a positive and a marginally statistically significant relationship between their GCM and others' ratings of their leader emergence, r (33) = .31, p = .07. LSMs showed a statistically significant positive relationship between their GCM and others' ratings of their leader emergence, r (33) = .36, $p < .05$. Thus, for MSMs and LSMs, the data were consistent with Hypothesis three.

Because the test of Hypothesis one revealed that self-monitoring influenced self-ratings on the GLI and not others' GLI ratings, additional correlational analyses were conducted in order to determine the relationships between members' GCMs and their self-rating on the GLI. For HSMs, GCMs were not significantly related to their

self-ratings on the GLI, r (33) = .16, p = .37. For MSMs, GCMs were not significantly related to their self-ratings on the GLI, r (33) = .25, p = .15. And, for LSMs, GCMs were not significantly related to their self-ratings on the GLI, r (33) = .28, p = .11.

In sum, GCMs were predictive of leadership emergence for MSMs and LSMs, as determined by others' ratings on the GLI. However, GCMs did not predict members' self-ratings on the GLI.

Discussion

This study sought to shed light on the question of why self-monitoring predicts leader emergence in small group interactions. A conceptual model (see Figure 1) was advanced, which suggested that HSMs are more likely to emerge as leaders than LSMs because the former engage in appropriate communication behavior to best achieve group goals.

Hypothesis tests

Self-monitoring predicts leader emergence. Hypothesis one, the replication hypothesis, predicted that self-monitoring would facilitate leader emergence as determined by others' ratings of an individual on the GLI. Because of the lack of support present in the data for the replication hypothesis, some discussion is due this topic. One explanation for this finding is the possible confounding of self and other ratings of a group member's leadership score on the GLI. The present work sought to extend work done by Eby et al. (2003). However, it is unclear whether Eby et al. determined leader emergence by utilizing only others' ratings of group members or whether they combined self and others' ratings to generate a GLI. Because of this paper's finding that self-monitoring predicted self-scores on the GLI but not others' scores, it seems plausible that if self and others' ratings of group members' leadership were aggregated, self-monitoring might predict leader emergence if the effect of self-ratings on the GLI was strong enough.

This supposition is further supported by earlier research that found, for men (but not for women), a strong relationship between scores on the revised self-monitoring scale (Lennox & Wolfe, 1984) and GLI scores as rated by others in the

group (Ellis, 1992). This finding, along with the present data, suggests an interesting possibility. For men, self-monitoring may predict others' GLI ratings whereas for women, self-monitoring may predict self GLI ratings. This possibility suggests that aggregating self and other ratings into the GLI measure may inflate the relation between self-monitoring and leadership scores for women.

Another possible explanation for the lack of support for the replication hypothesis regards the topic that the idea-generation task seemed relatively easy for all participants. Task simplicity was measured on a scale of 1 to 7; the mean rating for task simplicity was $M = 6.21$ ($SD = 0.86$). Given the relative simplicity of the task, most members seemed to have equal competence, and it may have been quite clear when one member was less competent than other members (i.e., some group members stated at the outset of the group discussion that they had life experiences that were less relevant than other group members in order to complete the task). Such an overt statement by a group member threatens one of the necessary conditions for the success of the proposed model, namely that the task be of such a nature that it is difficult to assess member task-competence.

One final explanation for the lack of support for Hypothesis one lies in the learned self-concept of HSMs. It seems possible that HSMs may have internalized beliefs about their leadership potential from past experiences, even if they did not engage in the specific leader behaviors measured in the present study. If this was, indeed, the case, HSMs may have relied on this self-concept more than their actual communication behavior in rating themselves to be more leader-like than LSMs. However, other group members—unaware of the HSM's self-concept—may have

only had others' behavior as a basis on which to judge their leadership, thus resulting in a lack of support for Hypothesis one.

Self-monitoring predicts goal-congruent communication. The data did not support the hypothesis that self-monitoring predicts the degree to which an individual contributes messages that help the group to attain its shared goals. However, while the data did not support this hypothesis, the data did yield some interesting findings. Namely, MSMs significantly favored GCMs to GAMs, and HSMs favored GCMs to GAMs at a marginally significant level. Such results hint that there may be differences in preference for GCMs over GAMs due to self-monitoring.

Even though the difference was not significant, MSMs appeared to favor GCMs over GAMs to a greater degree than HSMs. One might expect that HSMs would display a greater preference for GCMs than MSMs displayed for GCMs. The apparent opposite pattern may be the result of random error or a confounding of self-monitoring with seating assignment. MSMs were always seated at the head of the table whereas HSMs and LSMs sat on the sides. Therefore, there may have been a slight head-of-the-table effect. Forsyth (2006) defines this effect as "the tendency for group members to associate the leadership role and its responsibilities with the seat located at the head of the table; as a result, individuals who occupy such positions tend to emerge as leaders in groups without designated leaders" (p. 508). Although MSMs were not more likely than others to emerge as leader, favoring GCMs over GAMs showed that they acted like leaders.

Goal-congruent messages are related to leader emergence. The present study advanced the important finding that contributing goal-congruent messages to a group

discussion is related to an individual's emergence as leader of that group. The results reveal that it was especially important for LSMs and MSMs to contribute GCMs to the group discussion in order that the group would view them as more leader-like. This finding supports the primary aims of this study to contribute to the understanding of the types of communication that help group members to emerge as leader.

Interestingly, contributing GCMs did not help HSMs to emerge as group leader. If the quality of HSMs' communication did not help them to be seen by others as group leader, might the quantity of their talk have influenced their leadership emergence? To answer this question, an admittedly crude estimate of participation rates was obtained by summing GCMs and GAMs. Additional correlation analyses revealed that there was a relationship between participation rates, and others' rating on the GLI for LSMs (r [33] = .52, $p < .01$), but not for MSMs or HSMs (r [33] = .26, p = .13, and r [33] = .06, p = .71, respectively). These data support the conclusion that LSMs, and to a lesser degree MSMs, tended to emerge as leaders by virtue of the volume of communication they contributed to a group discussion. For HSMs, neither what they said nor how much they said it, seemed to help them to emerge as group leader.

Alternatively, the type and/or quantity of communication exhibited by HSMs may have influenced others' perception of their leadership, but the coding system did not classify or count these messages. Some examples of unmeasured message types were simple affirmations such as "Yeah", "Oh, me too", or "Same here", which were, for the sake of simplifying the coding scheme, not coded. Additionally, non-verbal communication was entirely excluded from the present analysis. Furthermore, this

study collapsed several of the coding categories to establish composite measures of task and relational utterances. It is possible that by examining specific types of qualitative components of the coding scheme the present study may have been able to determine which types of task and relational utterances were particularly responsible for contributing to others' perceptions of how leader-like a particular group member was. Measuring a greater variety of messages may reveal which ones, if any, contribute to HSMs' perception of being leader-like.

Study limitations

The present study had a number of limitations. First, in order to avoid potential confounds noted in the past literature (see Eby et al., 2003) examining leader emergence and self-monitoring, same-sex groups of women were examined. Thus, generalizing the results of this study to groups with mixed sex-composition, and groups of all men may not be possible. Future studies should examine the nature of the relationship between self-monitoring, message behavior, and leadership among groups of men and mixed-sex groups.

Also, this study's sample size was small. That fact, coupled with analyses at the group level compromised the statistical power of hypothesis tests. Future studies should endeavor to employ larger sample sizes in order to be able to have sufficient statistical power to show evidence for proposed relationships.

Another limitation of the present study was the artificiality of the context. Participants were placed into short-term, ad-hoc, zero-history groups for an experimental task in a laboratory. While this method was chosen because it allowed a greater degree of internal validity, it is possible that the present findings are less

generalizable to groups outside of these constraints. Further, it is possible that the self-monitoring – leader emergence relation is particularly salient when groups are given more time to observe the behavior of other group members. Some other studies examining the effect of self-monitoring on leader emergence employed natural groups that interacted for between three to four months (e.g. Ellis, 1988; Ellis et al., 1988; Ellis & Cronshaw, 1992). These studies tended to find an effect for self-monitoring on leader emergence, an effect not replicated by the present study. Future researchers should seek to employ longer term groups while studying the effects of self-monitoring in groups.

Conclusion

The main strength of this study lies in its behavioral observation of the communicative contributions to leader emergence. Only a few past studies (i.e., Cronshaw & Ellis, 1991; Eby et al., 2003) have examined member messages as an explanation for why self-monitoring and leader emergence relate. Other studies have speculated that there is a behavioral mediator for the often-observed relationship between self-monitoring and leader emergence, but have not directly measured communication behavior (e.g., Hall et al., 1998). Thus, this study not only examines the messages that contribute to an individual's emergence as a group leader, but also, hopefully inspires other researchers to do the same.

Appendix A

Revised Self-Monitoring Scale

Personality Inventory

Instructions: Please answer the following questions by choosing a scale value that best represents how you would rate yourself. As you proceed please fill in the corresponding circle on the provided scan-tron sheet. Please note: **This questionnaire only utilizes six of the circles for each question.**

Please answer each question according to this numerical scale:

1. Certainly, always false
2. Generally false
3. Somewhat false, but with exception
4. Somewhat true, but with exception
5. Generally true
6. Certainly, always true

Please ignore options 7, 8, 9, and 10 on your scantron sheet.

#1. In social situations, I have the ability to alter my behavior if I feel that something else is called for.

#2. I am often able to read people's true emotions correctly through their eyes.

#3. I have the ability to control the way I come across to people, depending on the impression I wish to give them.

#4. In conversations, I am sensitive to even the slightest change in the facial expressions of the person with whom I am conversing.

#5. My powers of intuition are quite good when it comes to understanding others' emotions and motives.

#6. I can usually tell when I've said something inappropriate by reading it in the listener's eyes.

#7. When I feel that the image I am portraying isn't working, I can readily change it to something that does.

#8. I can usually tell when others consider a joke to be in bad taste, even though they may laugh convincingly.

#9. I have trouble changing my behavior to suit different people and different situations.

#10. I have found that I can adjust my behavior to meet the requirements of any situation I find myself in.

#11. If someone is lying to me, I usually know it at once from that person's manner of expression.

#12. Even when it might be to my advantage, I have difficulty putting up a good front.

#13. Once I know what the situation calls for, it's easy for me to regulate my actions accordingly.

Instructions: Please answer the following questions by choosing the numerical option that best represents yourself. As you proceed please fill in the corresponding circle with the number you chose on the provided scan-tron sheet.

14. What year in school are you?
    1. First year
    2. Second year
    3. Third year
    4. Fourth year
    5. Five or more years
15. Where are you from?
    1. Michigan
    2. Another US State
    3. Another country
16. What is your age?
    1. 18
    2. 19
    3. 20
    4. 21
    5. 22
    6. 23
    7. 24
    8. 25+

17. What is your race?

    1. White/European
    2. Chicano/Latino
    3. Black/African American
    4. Asian/Pacific Islander
    5. Native American
    6. Middle Eastern

18. What is your sex?

    1. Male
    2. Female

PLEASE TURN THE PAGE -→

Instructions: The following two questions ask for your name and email address so that we may invite you to participate in the second part of this investigation. You may write directly on this sheet. We will rip it off when you turn in your questionnaire so that it is not stored with your questionnaire responses.

First Name: _____

Email address: (PLEASE WRITE CLEARLY)

_____

Appendix B

Group Leader Impression Scale and Goal Facilitation Scale

Post-Discussion Questionnaire

Instructions: Please answer the following questions by choosing a value from the following scale that best represents your judgment.

Disagree	1	2	3	4	5	6	7	Agree

Mark your responses on your scantron sheet by filling in the bubble containing the number on which you decided next to the appropriate item number. Be sure to mark your judgment ratings about each group member, including yourself, on your scantron sheet and not on this questionnaire! If you have any questions about what to do, please ask the experimenter.

Please answer each of the following questions according to this scale:

Please ignore options 8, 9, &10 on your scantron sheet!

Please answer the following questions about Member #1. If you are Member #1 please answer these questions about yourself:

1. Member #1 helped the group achieve its purpose.
2. Member #1 exhibited a lot of leadership.
3. I would be very willing to choose Member #1 as leader of our group.
4. The group's success in achieving its goal is because of Member #1.
5. Member #1 is not a typical leader.
6. Member #1 engaged in a lot of leader behavior.
7. Member #1 helped the group achieve its goals.
8. Member #1 does not fit my image of a leader.
9. Member #1 was aware of the objectives of the group.

10. Member #1 did not assist the group in achieving its goals

Please answer the following questions about Member #2. If you are Member #2 please answer these questions about yourself:

11. Member #2 helped the group achieve its purpose.
12. Member #2 exhibited a lot of leadership.
13. I would be very willing to choose Member #2 as leader of our group.
14. The group's success in achieving its goal is because of Member #2.
15. Member #2 is not a typical leader.
16. Member #2 engaged in a lot of leader behavior.
17. Member #2 helped the group achieve its goals.
18. Member #2 does not fit my image of a leader.
19. Member #2 was aware of the objectives of the group.
20. Member #2 did not assist the group in achieving its goals

Please answer the following questions about Member #3. If you are Member #3 please answer these questions about yourself:

21. Member #3 helped the group achieve its purpose.
22. Member #3 exhibited a lot of leadership.
23. I would be very willing to choose Member #3 as leader of our group.
24. The group's success in achieving its goal is because of Member #3.
25. Member #3 is not a typical leader.
26. Member #3 engaged in a lot of leader behavior.
27. Member #3 helped the group achieve its goals.

28. Member #3 does not fit my image of a leader.

29. Member #3 was aware of the objectives of the group.

30. Member #3 did not assist the group in achieving its goals.

The next portion of the questionnaire regards your perceptions of the task you completed. Please answer these questions about your group and the task as a whole.

31. The goal for our group in this discussion was to become a more cohesive group.

32. The most important aim of our group was to make sure that our top 10 list was the best.

33. Our group goal was team building.

34. Producing the top-10 challenges was the primary aim of our group.

35. Members of my group tried to support one another.

36. First and foremost, our group cared about generating the top 10 challenges.

37. I felt like I got to know other group members on a personal level.

38. Our group was more focused on generating the top 10 challenges rather than getting to know one another.

39. I felt that our group had ample time to discuss the challenges facing first-year college students.

40. More or less, I had about the same degree of expertise level as my group members about the difficulties of students transitioning from high school to college.

41. One group member had more knowledge about challenges facing first-year college students than others.

42. I felt that we had to 'get down to business' in order to complete the discussion in time.
43. It was easy to tell which group member was 'the best' at the discussion task.
44. Our group was not pressed for time.
45. Our task was simple.
46. Our group found the task fairly difficult.
47. The task did not really challenge our group.
48. I like my fellow group members.
49. I get along with the people in my group.
50. I would be likely to choose the people in my group as friends.

Appendix C

Group Communication Experimenter Instructions

Welcome to the Adjustment to College study. Groups communicate differently in a variety of contexts, with differing results. This experiment examines the nature of group communication in some of those contexts. In this study, you will be asked to participate in a group task, and respond to some questionnaire items. In order that we may clearly understand the group processes that take place in discussions like these, your discussion sessions will be video-taped. We require that you sign this consent form if you wish to participate in this study. [Experimenter passes out the consent form.] Please read this consent form, if you wish to participate in this study please sign and date the form. I will return in a moment to collect your forms. Are there any questions at this point? [Experimenter leaves room.]

Adjustment to College Experimenter Instructions

[Experimenter enters room and collects informed consent forms.] The next portion of this experiment involves a [team building exercise / idea generation task]. [Experimenter hands each participant a copy of either the team building exercise or the brainstorming task].

Brainstorming task – task performance goal condition

Groups are regularly required to participate in a practice commonly known as brainstorming in order to generate ideas. This group will be given a brainstorming task.

The topic we would like you to discuss as you generate ideas is something that presumably all of you can relate to: the most significant challenges that first year students experience when transitioning from high school to college. Not only are we interested in your group's communication during this exercise, but also the Office of Residence Life at MSU will use your ideas to generate solutions to improve the transition to college for first year students.

Generate as many ideas as you can for this topic. Then, reach a group consensus on the 10 that represent the most difficult challenges – the top 10. Remember, your group need not come up with a list of solutions to these challenges just a list of the top 10 challenges themselves.

Some ideas that group members raise may be sensitive as they draw on

difficult and personal experiences. So, to successfully generate the top 10 challenges, it is necessary to facilitate an environment of openness and support so that members can perform the task well. We will evaluate your group based on how well members are able to produce the top 10 challenges.

You will have 25 minutes to discuss this topic, please record the ideas you generate on this response form.

[Experimenter leaves response form and a writing utensil on the center of the table equidistant from each group member.] Does anyone have questions?

Team building exercise – social support goal condition

Groups are regularly required to participate in a practice commonly known as team building in order to build closeness. This group will be given a team building exercise.

The topic we would like you to discuss as you build cohesion is something that presumably all of you can relate to: the most significant challenges that first year students experience when transitioning from high school to college. Not only are we interested in your group's communication during this exercise, but also the Office of Residence Life at MSU will use your ideas to generate solutions to improve the transition to college for first year students.

Generate as many ideas as you can for this topic. Then, reach a group consensus on the 10 that represent the most difficult challenges – the top 10. Remember, your group need not come up with a list of solutions to these challenges just a list of the top 10 challenges themselves.

Some ideas that group members raise may be sensitive as they draw on difficult and personal experiences. So, to successfully build a cohesive team, it is necessary to facilitate an environment of openness and support so that members feel comfortable sharing ideas and experiences. We will evaluate your group based on how well members support and bond with one another.

You will have 25 minutes to discuss this topic, please record the ideas you generate on this response form.

[Experimenter leaves response form and a writing utensil on the center of the table equidistant from each group member.] Does anyone have questions?

[Experimenter starts video camera, leaves room, and starts timer.]

[Experimenter enters the room, stops video camera, and collects the task descriptions and response sheets.]

Thank you for participating in the group discussion portion of the study. The next portion of the study is the Post-Discussion Questionnaire.

Please answer the following questions by choosing a scale value that best represents your judgment.

Mark your responses on your scantron sheet by filling in the bubble containing the number on which you decided next to the appropriate item number. Be sure to mark your judgment ratings about each group member, including yourself, on your scantron sheet and not on this questionnaire!

Please ignore options 8, 9, &10 on your scantron sheet!

You need not fill in your name or ID number. You will receive credit even though you should not fill in these sections of your scantron.

When you finish the questionnaire, please sit quietly.

Does anyone have questions at this point?

[Experimenter passes out questionnaire and scantron sheets.]

[Experimenter enters room and collects Post-Discussion Questionnaire.]

Thank you for taking part in the adjustment to college study. This completes your involvement with the study. This study has examined the way that individuals communicate in groups and the way that that communication facilitates group dynamics.

If you wish, you may give your email address to me so that you can receive a copy of the findings of this investigation. Additionally, this sheet [experimenter hands out a debriefing sheet] contains more details of the exact aims of the study.

In order that this study can continue, it is important that the aims and procedures of this study remain confidential. Will you agree not to discuss this investigation with any of your fellow classmates or other students?

[Experimenter waits for confirmation.]

Thank you again!

Appendix D

Informed Consent Forms

Informed Consent Form – Adjustment to College – Pt. I

Welcome to the ADJUSTMENT TO COLLEGE – Pt. I study. In this research project, you will be asked to report your thoughts and behaviors across different interpersonal situations. You must be 18 years or older to participate in this study. If you choose to participate in this study, you will complete a short questionnaire that measures different aspects of your interpersonal behavior.

On the final page of the survey, we ask for your name and email address so that we may invite you to participate in the second part of our investigation about adjustment to college. After data collection, we will rip out the page that identifies your name and email address and will store your data so that your questionnaire responses and identity are separated. The data will be kept under lock and key, only to be viewed by the principle investigators. All results will be reported in aggregate, averaged across all participants. If you participate in this study, your survey data will remain confidential and your privacy will be protected to the maximum extent allowable by law.

Participation in this study is voluntary and will take one half-hour or less. You will receive credit electronically that will automatically indicate to your instructor that you have completed one half-hour of research credit in your communication course. Because participation in this study may produce mild stress associated with answering some questions, please note that you may withdraw from the experiment at any time or refuse to answer questionnaire items without penalty.

The experimenter can answer any questions you have about the study. Please contact Dr. Gwen Wittenbaum (phone: 517-353-8120; office: 559 CAS; email: gwittenb@msu.edu) or Brandon Van Der Heide (email: vande329@msu.edu) if you have any further questions or concerns regarding this study. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of the study, you may

contact—anonymously if you wish—Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: 517-355-2180; fax: 517-432-4503; email: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

Thank you,

Brandon Van Der Heide

If you choose to participate in the ADJUSTMENT TO COLLEGE – Pt. I study and feel that the procedures have been explained to your satisfaction, please complete the information below.

_____ _____/_____/_____

Your Signature Today's Date

_____

Print your name

Informed Consent Form – Adjustment to College – Pt. II

Welcome to the ADJUSTMENT TO COLLEGE – Pt. II study. This research project examines communication in three person groups that discuss the issue of adjustment to college life. You must be 18 years or older to participate in this study. If you choose to participate in this study, you will engage in a group discussion with two other students. After the discussion, you will be asked to complete a questionnaire that assesses your impression of the study, the task, yourself, and other members.

Additionally, we will videotape your group's discussion so that we know what you talked about. Because your identity will be apparent from the recordings, the tapes will be kept under lock and key, only to be viewed by the principle investigators and research assistants. All results will be reported in aggregate, averaged across all participants. If you participate in this study, you can be assured that the tapes will remain confidential and that your privacy will be protected to the maximum extent allowable by law. However, if you feel uncomfortable about your group's discussion being taped, please let the experimenter know. You may opt to work on a task individually, with no discussion, for the same amount of class credit.

Participation in this study is voluntary and will take one hour or less. You will receive credit electronically that will automatically indicate to your instructor that you have completed one hour of research credit in your communication course. Because participation in this study may produce mild stress associated with participating in a group discussion and filling out response forms, please note that you may withdraw from the experiment at any time or refuse to answer questionnaire items without penalty. At the end of today's session, you may sign up to receive a full description of the study design and results when the data have been collected and analyzed.

The experimenter can answer any questions you have about the study. Please contact Dr. Gwen Wittenbaum (phone: 517-353-8120; office: 559 CAS; email: gwittenb@msu.edu) or Brandon Van Der Heide (email: vande329@msu.edu) if you have any further questions or concerns regarding this study. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of the study, you may contact—anonymously if you wish—Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: 517-355-2180; fax: 517-432-4503; email: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

Thank you,

Brandon Van Der Heide

If you choose to participate in the ADJUSTMENT TO COLLEGE – Pt. II study and feel that the procedures have been explained to your satisfaction, please complete the information below.

_____ _____/_____/_____

Your Signature Today's Date

_____

Print your name

If you choose to participate in the videotaped group discussion, please complete the information below.

_____ _____/_____/_____

Your Signature Today's Date

Appendix E

Group Discussion Response Sheets

Team Building Response Sheet

Instructions: Please record your top-10 ideas on this sheet. You may use the provided scratch paper to jot down ideas if you wish. If you run out of room on the front, you may flip this sheet over and continue on the back.

TOPIC: develop a list of the 10 most significant challenges that first year students experience when transitioning from high school to college.

REMEMBER:

1. Feel free to build on the ideas of others
2. State any idea that comes to mind.
3. As a group, identify the top 10 challenges.
4. *Your group will be evaluated based on how well members support and bond with one another.*

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

Brainstorming Task Response Sheet

Instructions: Please record your top-10 ideas on this sheet. You may use the provided scratch paper to jot down ideas if you wish. If you run out of room on the front, you may flip this sheet over and continue on the back.

TOPIC: develop a list of the 10 most significant challenges that first year students experience when transitioning from high school to college.

REMEMBER:

1. Feel free to build on the ideas of others
2. State any idea that comes to mind.
3. As a group, identify the top 10 challenges.
4. *Your group will be evaluated based on how well members are able to produce the top 10 challenges.*

1.
2.
3.
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9.
10.

Appendix F

Group Goal Instructions

Team Building Instructions

Groups are regularly required to participate in a practice commonly known as **team building in order to build closeness**. This group will be given a team building exercise.

The topic we would like you to discuss as you build cohesion is something that presumably all of you can relate to: the most significant challenges that first year students experience when transitioning from high school to college. Not only are we interested in your group's communication during this exercise, but also the Office of Residence Life at MSU will use your ideas to generate solutions to improve the transition to college for first year students.

Generate as many ideas as you can for this topic. Then, reach a group consensus on the 10 that represent the most difficult challenges – the top 10. Remember, your group need not come up with a list of solutions to these challenges just a list of the top 10 challenges themselves.

Some ideas that group members raise may be sensitive as they draw on difficult and personal experiences. So, to successfully build a cohesive team, it is necessary to facilitate an environment of openness and support so that members feel comfortable sharing ideas and experiences. ***We will evaluate your group based on how well members support and bond with one another.***

You will have 25 minutes to discuss this topic, please record the ideas you generate on this response form.

Brainstorming Task Instructions

Groups are regularly required to participate in a practice commonly known as **brainstorming in order to generate ideas**. This group will be given a brainstorming task.

The topic we would like you to discuss as you generate ideas is something that presumably all of you can relate to: the most significant challenges that first year students experience when transitioning from high school to college. Not only are we interested in your group's communication during this exercise, but also the Office of Residence Life at MSU will use your ideas to generate solutions to improve the transition to college for first year students.

Generate as many ideas as you can for this topic. Then, reach a group consensus on the 10 that represent the most difficult challenges – the top 10. Remember, your group need not come up with a list of solutions to these challenges just a list of the top 10 challenges themselves.

Some ideas that group members raise may be sensitive as they draw on difficult and personal experiences. So, to successfully generate the top 10 challenges, it is necessary to facilitate an environment of openness and support so that members can perform the task well. ***We will evaluate your group based on how well members are able to produce the top 10 challenges.***

You will have 25 minutes to discuss this topic, please record the ideas you generate on this response form.

Appendix G

Behavioral Coding Instructions

Instructions for Coding

Overview

Three-person groups of female, MSU undergraduate students discussed some of the most difficult challenges facing students as they transition between high school and college. Group members collectively generated ideas and decided between them to produce the top ten challenges in making the transition from high school to college. Each group was given 25 minutes to complete their discussion. Some groups used the entire 25 minutes, others did not. Coding these discussions involves classifying the verbal utterances made by each group member.

General Instructions

This coding system preserves the temporal order of the discussion and codes opinions, suggestions, questions, and informational utterances (all other utterances will be ignored). To begin, when one member says something that fits into one of the above categories, that utterance will be coded on the first line of the coding sheet. The next member's utterance is coded on the second line of the coding sheet, and so on. Each speaker's utterance is coded for the speaker and the action of the speaker. As such, two columns are included on the coding sheet: SPEAKER and ACTION.

Determining Discussion Time

Code the tapes using a VCR that keeps track of time elapsed. Set the counter to zero when a group's discussion begins and note the time when the group completes its task. Count the ending time as the moment when the group finishes the task rather than

when the experimenter stops the tape for that group. Using the latter criteria for ending time generally would include unwanted time when the group is waiting for the experimenter to return to the room. Record the discussion time in minutes and seconds (i.e., 5:38, meaning 5 minutes and 38 seconds) at the top of the coding sheet.

Determining Speaker

It is necessary to determine whether the speaker is Member 1, 2, or 3. Member 1 is always sitting on the LEFT side of the video screen. Member 3 is always sitting on the RIGHT side of the video screen. Member 2 always sits in the middle. To code for speaker, write a "1" in the speaker column if the speaker is Member 1, a "2" in the speaker column if the speaker is Member 2, and a "3" in the speaker column if the speaker is Member 3.

Unit of Analysis

In this coding scheme you will be coding thought units, spoken by a group member, that convey an opinion, question, suggestion, or information. Thus, you should not be attempting to code each word or sentence spoken by members, rather you should code the thought unit. A thought unit may last for an extended time (i.e. several sentences) or it may be quite short (i.e. A one word answer to another's question). Regardless of its length, the thought unit conveys one cohesive thought.

Sometimes, a thought unit may be interrupted by another group member. In this case, the other group member's utterance should be coded, and you should decide whether the first group member (whose thought was interrupted) goes back to explaining her thought, or moves on. If the interrupted group member continues talking about her original thought unit, you should NOT recode this as another thought unit. However, if after the interruption the interrupted member starts a new thought unit you should code that unit accordingly.

A thought unit need not be defined by a change of speaker. That is, sometimes group members may, within one speaking turn, during which they are not interrupted, have more than one thought unit that should be coded. For example, a group member may provide personal information and then ask a question of another member (e.g., "I'm from Kalamazoo. Where are you from?"). This should be coded as two distinct thought units.

Coding two thought units, that were stated back-to-back by the same speaker, does not require that the two thought units fall into different coding categories. For example, a member could say, "I listed privacy issues and missing friends and family." In this case, the member has provided two different idea suggestions within the same sentence (i.e., privacy and missing loved ones). Because the speaker communicated two distinct ideas for the top ten list, they would be coded as two back-to-back task-oriented suggestions. (code 20).

Coding Task and Relational Communication

The primary aim of this coding scheme is to classify group members' utterances into one of two broad categories: Task-oriented utterances and relational utterances. Task-oriented utterances are those that are intended to further the group toward completing the top-10 list. Though these task-oriented utterances vary in nature, their general goal is to move the group forward in completing the top-10 list. Relational utterances, on the other hand, attempt to help group members get to know one another better and become more cohesive. Again, like their task-oriented counterparts, these utterances come in a variety of forms—discussed at length later—but their primary aim is to help the group accomplish a goal of connection and relational development. These comments often come in the form of offering or requesting self-disclosure.

Within each of these categories—task and relational utterances—there are four types of utterances to distinguish: opinions, suggestions, questions, and information. In total, there are eight coding categories: task-oriented opinions, suggestions, questions,

and information and relationally-oriented opinions, suggestions, questions, and information. These eight categories are discussed in detail below.

Coding Categories

Provide an Opinion.

As a part of the task, the groups were instructed to generate a list of challenges for incoming college students. One type of communication behavior that you will code is the providing of opinions. An opinion is a statement of belief, judgment, or evaluation about a group, person (including one's self), issue, or thing. Opinions include statements of belief or judgment about an attitude object. Opinions are statements that are not verifiable as fact, but rather, are subjective and differ from person to person. Opinion utterances differ from informational utterances in that information is easily verifiable as true or false. Two types of opinions should be distinguished: Task-oriented opinions and self-oriented opinions.

Task-Oriented Opinion – Code 10

Task-oriented opinions include personal beliefs, attitudes, or judgments about campus issues, situations, experiences, other people in general, the experimental task, or anything that advances the group toward creating the top-10 list. All task-oriented opinions reflect beliefs of the speaker about something other than themselves, such as the campus bus system or dining hall food. Task-oriented opinions differ from self-oriented opinions in that the former are about general things or people whereas the latter are opinions about the self and close personal others (i.e., friends, family members, intimate

partner). An example of a task-oriented opinion would be, "I don't think people do a very good job of managing their finances," whereas an example of a self-oriented opinion would be, "I don't think I do a good job of managing my finances." The evaluative nature of the statement (i.e., doing a "good job") prevents it from being easily verified as true or false. Instead, others may disagree with the speaker believing instead that students, including the speaker, do manage their finances well.

Some examples task-oriented opinions are:

"It's really hard for students to manage their time."

"Students go crazy with the freedom they have in their first year."

"Weight gain is a huge problem."

"Knowing how to navigate the party scene is pretty important."

"They should make the IM free again."

"It's going to be hard to come up with ten ideas."

"I think discipline is different from time management. Time management is making the time but discipline is sticking to it."

Self-Oriented Opinion – Code 15

Self-oriented opinions are opinions, judgments, attitudes, and evaluations about the self or close personal other (i.e., friends, family members, intimate partner). Use this coding category when a speaker makes a subjective judgment about herself with which others could potentially disagree (and thus such statements are not verifiable as true or false). For example, a participant may make an utterance such as, "I don't think I could live with a stranger." In this statement, the speaker evaluates or judges some aspect of her self. Furthermore, whether the speaker actually could live with a stranger would be difficult to establish empirically (and is thus not an informational utterance).

Often, self-oriented opinions occur when a speaker expresses issues or situations that she personally finds easy or difficult or tasks that she performs well or poorly. The key to recognizing these statements is that the speaker makes an evaluation or judgment about herself. This code also includes issues or situations that the speaker's close personal others find easy or difficult. For example, if a speaker said, "My first year wasn't hard for me, but it was hard for my best friend." This would be coded as two separate 15s (one evaluating the self and another for evaluating her best friend.).[2]

[2] Note that if the speaker said, "My first year wasn't hard for me, but it's hard for most students," this would be coded as a 15 first and then a 10 because the latter part referred to students in general rather than people close to the speaker.

Though this category is closely related to the task-oriented opinion category, there are some clear features that distinguish the two. Namely, a task-oriented opinion describes an attitude object OTHER than the self or close personal other, and a self-oriented opinion describes an attitude object that IS the self or close personal other. For example, the phrase "I hate the food at MSU" does reference the self (and, really, all opinions do reveal something about the self), however, the object of the attitude is the food at MSU. This statement could be rephrased as, "The food at MSU is bad." This rephrasing retains the statement's original meaning and clearly highlights that the speaker is evaluating the food at MSU, not the self. On the other hand, in the phrase "I'm not very good at waking up for my 8:00 class" refers to the ability of the self to make it to an early class.

One way to distinguish between these two types of opinions is to ask who or what is the attitude object in the opinion statement. If your answer to this question is 'the speaker or someone close to the speaker' then you should code that utterance as a self-oriented opinion. If your answer to this question is someone or something other than the speaker and her close network, you should code that utterance as a task-oriented opinion.

Some examples of self-oriented opinions are:

"I don't think I could ever live with a stranger."

"I'm not very good at making new friends."

"The hardest challenge for me was living with three other girls."

"I have a problem with money management."

"In my experience, it's hard to fit new college friends and old high school friends into your life."

Make a Suggestion

Participants may make suggestions about how to proceed as a group. This type of communication behavior, in which a person offers a plan for future behavior, should be classified as suggestion-making behavior. In order to further differentiate between specific types of suggestions, you should code two distinct types: Task-Oriented Suggestions and Relation-Oriented Suggestions.

Task-Oriented Suggestions– Code 20

A task-oriented suggestion helps to move the group along in completing the top ten list. This type of suggestion includes: offering an idea to write down (without evaluation), how the group should word an idea on the top-ten list, how the group should go about generating the top-10 list, how to combine previously generated ideas, and how to rank new or previously generated ideas.

Task-oriented suggestions come in two forms. First, a speaker may offer the suggestion about how to proceed with the task in the form of a statement. For example, a participant may say, "Maybe you could combine our ideas about partying and money management because they go together." Second, a group

member might offer a suggestion in the form of a question. For example, a group member might suggest the ranking of a particular idea by stating that suggestion in the form of a question: "Should we rank money management first?" Any time an individual makes a suggestion about how to complete the top-10 list, regardless of whether it is worded as a statement or question, it should be coded as a task-oriented suggestion.

If group members begin working by first brainstorming individually and then sharing their written ideas, these ideas are coded as task-oriented suggestions. Even though a speaker may provide factual information by reporting an item that they wrote on their individual list, sharing it with the group makes it a suggestion for the group's top ten list. For example, "I put adjusting to people from different cultures" would be coded as a 20.

Ideas offered for the top ten list are coded here unless they have an evaluative nature. Idea suggestions for the top ten list are coded here when they state the topic/issue without describing it with adjectives. A speaker who merely says, "Weight loss," would receive a code of 20. Adding a general evaluation (e.g., "A lot of students put on weight in their first year.") would make the statement a 10, whereas adding a personal evaluation (e.g., "I had trouble managing my weight in my first year.") would make the statement a 15. In sum, an idea offered for the top ten list could be coded as a 20, 10, or 15 depending on if there is no evaluation, a general evaluation, or a personal evaluation.

Some examples of task-oriented suggestions are:

"Let's come up with ideas first then rank them."

"We should combine the idea about drinking and meeting friends."

"You should write that as, 'students have a hard time with time management.'"

"How about safety issues?"

"Should we go on to rank these suggestions?"

Relation-Oriented Suggestions– Code 25

Participants may make suggestions about how to become a more cohesive group, get to know one another better, or support one another. These types of relation-oriented suggestions should be coded in this separate category. One example would be if a participant said, "Let's say one thing about ourselves to get to know one another a little better."

Much like the Task-oriented suggestions, this category includes suggestions that may be couched in the form of a question. For example, "Should we talk about our roommates?" would be an example of a suggestion about how to proceed in the process of becoming more cohesive.

Some examples of relation-oriented suggestions are:

"Let's spend a few minutes getting to know one another."

"I think we should ask each other one question about our lives."

"Should we tell each other one thing about our personal lives?"

Questions

Questions are utterances that participants make that seek clarification or information from others. Speakers may wish another to clarify ideas about opinions, or suggestions. Also, questions may be used to find out personal or task-related information from others. Unless you think a question is a mitigated form of a suggestion, any question should be coded in the one of the two question categories: Task oriented questions or personal questions.

Task-Oriented Questions – Code 30

Task-oriented questions seek further information about issues or procedures in completing the top ten list. A speaker may ask another to elaborate on an idea or task-oriented opinion, to specify how the group should treat an idea (e.g., how to word or rank it), or to clarify a particular task-related procedure. For example, if one member is unsure about the task requirement, she may ask, "So, do these ideas have to be in order or do we just list the top 10 in any order?" This would be an example of a Task-oriented Question.

Some examples of task-oriented questions are:

"How do you think we should go about ordering these ideas?"

"What do you mean when you say that money management is a problem?"

"What idea should we write next?"

"Do you think most students have a problem with partying?"

"Do the buses run after midnight?"

Personal Questions – Code 35

Personal questions are questions that seek personal information about another group member. That is, a personal question solicits a self-disclosure from another member or members (i.e., prompts group members to share information or opinions about themselves and their lives that other people are unlikely to know or discover from other sources). A personal question differs from a task-oriented question in that the former solicits information about another member's self or close personal network (i.e., friends, family members, intimate partner), whereas the latter solicits information about the task, an issue, or another member's task-oriented opinion. For example, a member may ask another to clarify the story she just told about her parents moving away from her childhood home: "So, where did your parents move to?" This would be an example of a personal question.

Some examples of personal questions are:

"Where are you from?"

"What hall do you live in?"

"What is your major?"

"Did you come in with a roommate or did you go 'pot-luck'?"

"Did you have trouble adapting to the party scene?"

"Who is your roommate?"

Provide Information

Information-providing utterances need not follow questions, but they often do. These utterances are potentially verifiable as true or false and, thus, are not opinions. This coding system differentiates two types of information that an individual may provide: Task-oriented Information and Personal Information.

Task-Oriented Information – Code 40

Task-oriented information is an utterance that quite often will follow a task-oriented question (code 30). These utterances provide some potentially verifiable information about or related to the group's task. Potentially verifiable information is information that can definitively be shown to be either true or false, that is, the veracity (truth) of the claim can be demonstrated. The information need not necessarily be ACCURATE per se, it must simply be verifiable. Task-oriented information may include procedural information, such as what the group has accomplished thus far, or the task instructions offered by the experimenter. Task-oriented information may also include facts about issues related to the ideas generated for the top ten list (e.g., facts about the MSU campus).

For example, after an individual asks whether or not the list must be generated as the top 10 in order or whether they could just list 10 ideas in any order, the participant may make the utterance, "We just need to list the ideas, they don't need to be in order." This is an incorrect recollection of the experimental instructions provided to groups. It is easy to verify the exact instructions that the experimenter read to groups and know that this statement is inconsistent with those instructions.

Some examples of task-oriented information are:

"I don't think we need to discuss for the entire 25 minutes."

"I wrote, 'difficulty living with a stranger.'"

"We've got 11 ideas written down."

"I didn't have that idea on my list."

"Back in the day, IM used to be free."

"The buses don't run after 2 a.m."

Personal Information – Code 45

To receive this code, a member provides personal information about the self or close related other (e.g., family member, friend, intimate partner). This information comes in the form of a potentially verifiable fact. For example, if a participant asked another participant where her parents were moving, the other participant may respond, "My parents are moving to Houston, Texas." This would be an example of personal information.

Some personal informational utterances quite commonly occur when a participant is telling a personal story in support of an issue that was raised as a top challenge for incoming students. It is important to distinguish, here, between fact and opinion as they've been defined by this coding scheme. For example, if a participant stated, "I know moving away from home was really hard for me" it would NOT be classified as personal information, but rather as a self-oriented opinion (because any belief or evaluation about the self is classified as such—code 15.) However, the following statement would be coded as personal information (code 45) because it is potentially verifiable: "I know when I moved to MSU I was on the phone to my Mom every day during the first week."

Some examples of personal information are:

"I have three brothers and one sister."

"I am a Junior."

"I'm hoping to get into the business school."

"I went to a community college my first two years."

"My friends gained weight their freshman year."

"My roommate and I fought a lot this past semester."

"I'm signed up for another study on Wednesday."

"I usually go out 2 nights a week."

Appendix H

Quick Reference Coding Summary Sheet

Table 1

	TASK	RELATIONAL
Provide Opinion (statement of belief, judgment or evaluation)	**Code 10 – Task-oriented opinions** Personal opinion about an issue, situation, thing, the experimental task or people. e.g., "It's weird to live with a stranger."	**Code 15 – Self-oriented opinions** Personal evaluation or judgment about the self or close personal other. e.g., "I'd have trouble living with a stranger."
Make Suggestion (Offer of plan for future behavior)	**Code 20 – Task-oriented suggestions** Idea to write on the list, how to rank the idea, suggested wording for an idea, how to combine an idea with other ideas, how to go about completing task. e.g., "Let's write down our ideas first and then share them."	**Code 25 – Relation-oriented suggestions** How to go about feeling like a cohesive group, how to support one another. e.g., "Let's say one thing about ourselves to get to know one another."
Questions (Seeking clarification about or requests for an idea, opinion, fact, or suggestion)	**Code 30 – Task-oriented questions** Question about idea, treatment of idea, task procedure. e.g., "How should we order these ideas?"	**Code 35 – Personal questions** Question seeking personal information from another group member. e.g., "Where do you live?"
Provide Information (Potentially verifiable from observation, fact-based utterances)	**Code 40 – Task-oriented information** Information about the requirements of the task, what the group has accomplished, or other information related to the task. e.g., "I wrote 'difficulty living with a stranger' on our list."	**Code 45 – Personal information** Facts or story about the self or close related other. e.g., "I was paired with a stranger for a roommate."

Quick Reference Coding Summary Sheet

Appendix I

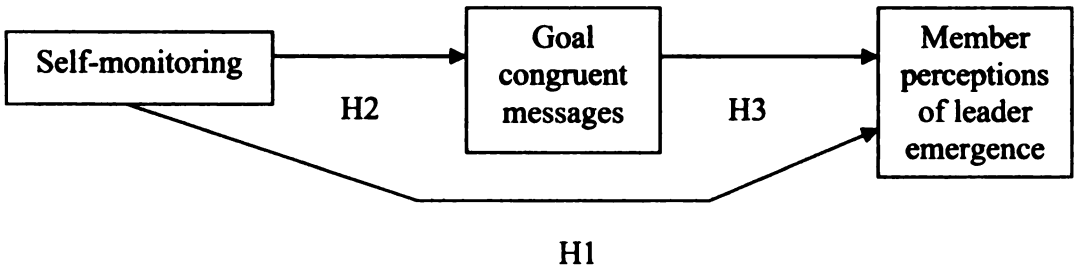
Coder Response Sheet

Coding Sheet

Group Number: _______ **Discussion Time:** ________ **Coder Initials:** _______

Speaker	Action	Speaker	Action	Speaker	Action

Figure 1



The Conceptual Model

REFERENCES

REFERENCES

Anderson, L.R., & McLenigan, M. (1987). Sex differences in the relationship between self-monitoring and leader behavior. *Small Group Behavior, 18*, 147-167.

Bales, R.F. (1950). *Interaction process analysis.* Cambridge, MA: Addison-Wesley.

Bales, R.F. (1970). *Personality and interpersonal behavior.* New York: Holt, Rinehart, & Winston.

Bass, B.M. (1949). An analysis of the leaderless group discussion. *Journal of Applied Psychology, 33*, 527-533

Bass, B.M. (1990). *Bass & Stodgill's handbook of leadership.* New York, NY: Free Press.

Briggs, S.R., Cheek, J.M., & Buss, A.H. (1980). An analysis of the self-monitoring scale. *Journal of Personality and Social Psychology, 38,* 679-686.

Cronshaw, S.F., & Ellis, R.J. (1991). A process investigation of self-monitoring and leader emergence. *Small Group Research, 22*, 403-420.

Cronshaw, S.F., & Lord, R.G. (1987). Effects of categorization, attribution, and encoding processes on leadership perceptions. *Journal of Applied Psychology, 72,* 97-106.

Dillard, J.P., & Hunter, J.E. (1989). On the use and interpretation of the emotional empathy scale, the self-consciousness scales, and the self-monitoring scale. *Communication Research, 16,* 104-129.

Dobbins, G.H., Long, W.S., Dedrick, E.J., Cheer Clemons, T. (1990). The role of self-monitoring and gender on leader emergence: A laboratory and field study. *Journal of Management, 16*, 609-618.

Eagly, A.H., & Karau, S.J. (1991). Gender and the emergence of leaders: A meta-analysis. *Journal of Personality and Social Psychology, 60,* 685-710.

Eagly, A.H. (1987). *Sex differences in social behavior: A social-role interpretation.* Hillsdale, NJ: Erlbaum.

Eby, L.T., Cader, J., & Noble, C.L. (2003). Why do high self-monitors emerge as leaders in small groups? A comparative analysis of the behaviors of high versus low self-monitors. *Journal of Applied Social Psychology, 33*, 1457-

1479.

Ellis, R.J., & Cronshaw, S.F. (1992). Self-monitoring and leader emergence: A test of moderator effects. *Small Group Research, 23*, 113-129.

Ellis, R.J., Adamson, R.S., Deszca, G., & Cawsey, T.F. (1988). Self-monitoring and leadership emergence. *Small Group Behavior, 19*, 312-324.

Ellis, R.J. (1988). Self-monitoring and leader emergence in groups. *Personality and Social Psychology Bulletin, 14*, 681-693.

Fleishman, E.A., Mumford, M.D., Zaccaro, S.J., Levin, K.Y., Korotkin, A.L., & Hein, M.B. (1991). Taxonomic efforts in the description of leader behavior: A synthesis and functional interpretation. *Leadership Quarterly, 2*, 245-287.

Forsyth, D.R. (2006). *Group Dynamics* (4th ed.). Belmont, CA: Thomson/Wadsworth Publishing Co.

Gabrenya, W.K., Jr., & Arkin, R.M. (1980). Factor structure and factor correlates of the self-monitoring scale. *Personality and Social Psychology Bulletin, 6,* 13-22.

Gangestad, S., & Snyder, M. (1985). "To carve nature at its joints": On the existence of discrete classes in personality. *Psychological Review, 92,* 317-349.

Gangestad, S., & Snyder, M. (2000). Self-monitoring: Appraisal and Reappraisal. *Psychological Bulletin, 126,* 530-555.

Garland, H., & Beard, J.F. (1979). Relationship between self-monitoring and leader emergence across two task situations. *Journal of Applied Psychology, 64,* 77-81.

Hall, R.J., Workman, J.W., & Marchioro, C.A. (1998). Sex, task, and behavioral flexibility. *Organizational Behavior And Human Decision Processes, 74*, 1-32.

Hollander, E.P. (1964). *Leaders, groups, and influence.* New York: Oxford University Press.

Hosch, H.M., Leippe, M.R., Marchioni, P.M., & Cooper, D.S. (1984). Victimization, self-monitoring, and eyewitness identification. *Journal of Applied Psychology, 69,* 280-288.

Kashy, D.A., & Kenny, D.A. (2000). The analysis of data from dyads and groups. In H.T. Reis and C.M. Judd (Eds.), *Handbook of Research Methods in Social and*

Personality Psychology (pp. 451 – 477). Cambridge, UK: Cambridge University Press.

Kenny, D.A., & Zaccaro, S. (1983). An estimate of variance due to traits in leadership. *Journal of Applied Psychology, 68*, 678-685.

Lennox, R.D., & Wolfe, R.N. (1984). Revision of the self-monitoring scale. *Journal of Personality and Social Psychology, 46,* 1349-1364.

Lord, R.G., de Vader, C.L., & Alliger, G.M. (1986). A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures. *Journal of Applied Psychology, 71*, 402-410.

Lord, R.G., Foti, R.J., & de Vader, C.L. (1984). A test of leadership categorization theory: Internal structure, information processing, and leadership perceptions. *Organizational Behavior and Human Performance, 34,* 343-378.

Mill, J. (1984). High and low self-monitoring individuals: Their decoding skills and empathic expression. *Journal of Personality, 52*, 372-388.

Mumford, M.D., Zaccaro, S.J., Harding, F.D, Owen Jacobs, T., & Fleishman, E.A. (2000). Leadership skills for a changing world: Solving complex social problems. *Leadership Quarterly, 11*, 11-35.

Riggio, R.E., Riggio, H.R., Salinas, C., &Cole, E.J. (2003). The role of social and emotional communication skills in leader emergence and effectiveness. *Group Dynamics, 7*, 83-103.

Schein, V.E. (1975). Relationship between sex-role stereotypes and requisite management characteristics among female managers. *Journal of Applied Psychology, 60,* 340-344.

Schein, V.E. (1973). The relationship between sex-role stereotypes and requisite management characteristics. *Journal of Applied Psychology, 57,* 95-100.

Sherif, M. (1948). *An outline of social psychology.* New York: Harper & Brothers.

Smith, J.A., & Foti, R.J. (1998). A pattern approach to the study of leader emergence. *Leadership Quarterly, 9*, 147-160.

Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology, 30,* 526-537.

Snyder, M. (1979). Self-monitoring processes. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology.* New York: Academic Press.

Snyder, M. (1987). *Public appearances/public realities: The psychology of self-monitoring.* New York: Freeman.

Snyder, M., & Gangestad, S. (1986). On the nature of self-monitoring: Matters of assessment, matters of validity. *Journal of Personality and Social Psychology, 51,* 125-139.

Stogdill, R.M. (1974). *Handbook of leadership: A survey of theory and research.* New York: Free Press.

Zaccaro, S.J., Foti, R.J., & Kenny, D.A. (1991). Self-monitoring and trait-based variance in leadership: An investigation of leader flexibility across multiple group situations. *Journal of Applied Psychology, 76,* 308-315.