

**THE IMPACT OF COGNITIVE COMPLEXITY
AND SELF-MONITORING
ON LEADERSHIP EMERGENCE**

by

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ABSTRACT

Understanding the individual difference variables that influence why some individuals emerge over others to perform traditional leadership functions provides insight into leadership emergence. Cognitive complexity and self-monitoring are two such variables. Both deal with tailoring communication to be situation-specific. Thus, this study examined the role that cognitive complexity and self-monitoring play in leadership. Participants in student groups completed questionnaires that measured leadership perceptions, cognitive complexity, self-monitoring, and predisposition to verbal behavior. While the results did not indicate a significant relationship among the variables, the findings do lead to an increased understanding of emergent leadership.

Chapter 1

LITERATURE REVIEW

Leadership has long been an area of great interest for researchers and practitioners alike. Organizations devote time and money to leadership training and development (Zorn & Leichthy, 1991). In addition, “a large portion of leadership perspectives concur that individuals will be more successful in emerging as leaders and influencing group members when they perform particular types of behaviors” (Barge, 1989, p. 237). Therefore, it becomes imperative to understand leadership theories and the factors that influence leadership. Investigating the influence of cognitive complexity, “an individual-difference variable associated with a broad range of communication skills and related abilities” (Burlison & Caplan, 1998, p. 233), as well as self-monitoring, an “ability to modify self-presentation” (Ifert & Roloff, 1997, p. 56), on leadership may provide insight into predicting and distinguishing effective leadership skills.

This thesis examines the extent to which a group member’s level of cognitive complexity and self-monitoring skill is associated with the perceptions of fellow group members. More specifically, perceptions regarding the extent to which group members are seen as having emerged as leader will be examined. This chapter will review relevant literature pertaining to leadership emergence, cognitive complexity, and self-

monitoring. The subsequent chapters will outline a study of the associations among these variables and discuss both the results and implications of the findings.

Leadership Emergence

Understanding the role of leadership within the small group dynamic remains a vital area of communication research. According to Kolb (1998), emphasis on teamwork in organizations has led to an increase in the amount of small group and leadership research, along with the enormous impact that effective leadership has on organizational success. In fact, many organizations dedicate significant time and money towards leadership training for the employees (Zorn & Leichty, 1991). In addition, leadership style, amongst other factors, has been linked to the communication between subordinates and superiors (Richmond, Wagner, & McCroskey, 1983). According to Zorn (1991), “an integration of communication and leadership theory should provide a clearer understanding of leadership communication and the communication-related abilities that leaders rely upon to influence others” (p. 178). Therefore, this section will examine the most dominant approaches to leadership, make a case for the study of leadership emergence, and outline some variables, specifically cognitive complexity and self-monitoring, that influence emergent leadership.

Leadership Approaches

As long as there have been great leaders throughout the world, there have been questions surrounding leadership. What makes someone a great leader? What qualities

does a leader possess? Are there different types of leaders? How can one become a better leader? What are the differences between an effective and ineffective leader? In attempts to better understand leadership, a number of leadership approaches have been proposed and examined. Leadership can be defined as a process of influence between a leader and group members towards goal achievement (Bryman, 1996). Although the focus of this study is on the communication-centered approach of emergent leadership, it is still necessary to understand other major leadership approaches, as they tend to influence and relate to one another. Approaches where communication has not been granted a key role, classified here as non-communication approaches, will be discussed, in addition to communication leadership approaches, as these non-communication approaches have still been used in communication studies (i.e., Zorn & Leichty, 1991).

Non-communication Approaches. According to Pavitt (1998, 1999), communication is not given a central role in many of the traditional approaches to leadership such as the trait approach, style approach, situational approach, and contingency approach. The idea that leaders possess certain traits that set them apart from non-leaders encompasses the *trait approach* to leadership (Bryman, 1996; Pavitt, 1998). In other words, leadership skills cannot be developed because one either has them or not (Shockley-Zalabak, 2002). The majority of the traits fall into the three categories of physical traits, abilities, and personality characteristics (Bryman, 1996). However, the trait theory has failed to distinguish a stable set of characteristics that consistently predict

effective leadership across differing situations (Shockley-Zalabak, 2002) and the trend in leadership studies shifted to the style approach.

The *style approach* encompasses the idea that an individual's behavior, as opposed to their traits, indicates their leadership ability (Bryman, 1996). One basic distinction is made among democratic, authoritarian, and laissez-faire leadership styles (Pavitt, 1999). Democratic leaders tend to involve others in the decision-making process (Shockley-Zalabak, 2002) and help the group reach its own goals, while authoritarian leaders force the group to reach the leader's goals and make most of the group's decisions with little input from others (Pavitt, 1998). Finally, laissez-faire leaders are sometimes characterized as nonleaders, as they expect and allow individuals and groups to make their own decisions (Shockley-Zalabak, 2002). In addition to these three classic styles of leadership, a second distinction is made between two other leadership styles, termed consideration and initiating structure (Bryman, 1996). According to Bryman (1996), a leader displaying an initiating structure style "defines closely and clearly what subordinates are supposed to do and how, and actively schedules work for them," while leaders displaying a consideration style are "concerned about their subordinates as people, are trusted by subordinates, are responsive to them, and promote camaraderie" (p. 278). Similar to the trait approach, the style approach fails to account for why this theory of leadership works in some situations and not in others (Shockley-Zalabak, 2002).

Building off of the style approach, the *situational approach* recognizes the importance of situational factors on effective leadership. Although the style approach emphasized the importance of balancing task and relational, Hersey and Blanchard

(1969) claimed that there is not a perfect style of leadership and that different situations require different leadership styles. Instead of just focusing on certain behaviors, such as initiating structure and consideration, the effectiveness of the leader also needs to be examined by looking at a combination of their style and the environment (Hersey & Blanchard, 1969). For example, the level of maturity or other characteristics of the followers should impact a leader's behavior. While accounting for uniqueness of situations and taking the style approach one step further, the situational approach offered a different perspective on leadership.

Finally, the *contingency approach* to leadership attempts to overcome shortcomings of the trait, style, and situational approaches by incorporating elements of each (Pavitt, 1998). Several variables are investigated in terms of their impact on leadership (Pavitt, 1999) and the emphasis swings away from a "universalistic" theory of leadership where specific styles or traits account for leadership toward a "particularistic" approach where leadership is understood through an "it all depends" style of thinking (Bryman, 1996, p. 279). An example of the contingency approach in action is Fiedler's use of the least preferred coworker (LPC) scale, which is intended to measure the leadership orientation of an individual and indicates if a respondent is more relationship or task oriented as a leader. In addition, situational favorableness, defined by leader-member relations, task structure, and position power, interacts with leader LPC to determine leadership effectiveness (Bryman, 1996).

Communication Approaches. Although the trait, style, situational, and contingency approach contribute much to leadership study, the central role of communication in the leadership process is rarely, if at all, indicated in these leadership theories. However, other central approaches to leadership have recognized the fundamental impact of communication in the explanation and prediction of leadership. The functional, perceptual, charismatic, communication competency, and emergent approaches put the focus on communication and will be outlined in the following section.

The *functional approach* to leadership focuses on the behaviors that aid a group in performing their task, maintaining group cohesiveness, and interacting with the environment (Pavitt, 1998). In other words, leadership involves fulfilling certain functions, duties, and/or responsibilities in order to achieve the goals of the group (Barge & Hirokawa, 1989). All group members can perform these functions and all group members can take a role in providing leadership. However, usually only a few individuals take on the duties and responsibilities associated with leadership and necessary to maintain and achieve the group's objectives (Bales, 1953). Communication is integral to this approach in that the majority (if not all) of the behaviors used in achieving the group's goals are communicative in nature (Pavitt, 1999).

While most approaches are concerned with leadership as an objectively real phenomenon, the *perceptual approach* claims that leadership exists solely in individuals' minds and that the only way to study leadership is to study how people believe leaders behave and what traits they should possess (Calder, 1977). The basic idea is that each person has characteristics in their mind that differentiate an effective leader from an

ineffective leader and that the process of impression formation leads them to attribute good or bad leader traits to an individual. Implicit leadership theories capitalize on the basic idea that individuals have cognitive structures that they use to interpret the actions of others, directly influencing the process (Peterson & Sorenson, 1991). In other words, the perceptual approach can be defined as individuals attributing leadership to group members who display some key traits, behaviors, or characteristics that they believe an effective leader should possess.

Certain traits are more salient, or attention-grabbing, than others and work to create a prototype or picture of the “ideal” leader (Pavitt, Whitchurch, McClurg, & Petersen, 1995). Impressions are formed when an individual displays a salient trait and then others attribute other characteristics to them (Pavitt, 1998). Based on certain traits, individuals might perceive another person as displaying other behaviors indicative of effective or ineffective leadership. Some characteristics or behaviors that have been associated with an “ideal” leader are managing conflict, forcefulness, and playing devil’s advocate (Pavitt et al., 1995).

Going by a number of different names such as *transformational*, *visionary*, or *charismatic* leadership, the basic premise to the “new leadership approach” is that a leader defines organizational reality and helps to create a vision for his or her followers (Bryman, 1996, p. 280). According to Gardner (2003), charismatic leadership emphasizes a process in which followers model a charismatic leader’s exemplary behavior. Charismatic, transformational, and visionary leaders possess certain traits such as self-confidence, need for power, willingness to take risks, and a strong conviction in

their own beliefs, while also having the relevant experience and a strong vision (Pavitt, 1998). In addition, exemplary leaders are often characterized as unusually trustworthy and ethical and inspire others to strive to be more like them (Gardner, 2003).

Inspirational leaders transform or change situations and circumstances through personal example (Shockley-Zalabak, 2002) and motivate others by convincing them that the way to attain personal goals is through achieving the organizational or group vision (Zorn, 1991).

The basic assumptions of the *mediational or communication competency* approach are that leadership is a process of mediation, occurs through communication, and relies on communication competencies (Barge & Hirokawa, 1989; Fisher, 1986). Leadership serves as a medium in helping groups to achieve goals and removing obstacles from their attempts towards goal achievement (Barge & Hirokawa, 1989). For a leader to do this, there must be communication occurring within the group and the leader must exhibit task communication competencies, such as establishing operating procedures and analyzing problems, and relational communication competencies, such as interaction management and expressiveness (Barge & Hirokawa, 1989). The goals of the group determine which leader competencies are more critical at a given time. According to Fisher (1986), “the goal is not to match the situation with an appropriate leader but to have leadership that is a good medium (that is, possesses and exhibits high complexity) in order to be able to handle such variations” (p. 214). In other words, the communication competency approach calls for a leader to possess task and relational competencies so that they can help facilitate the group towards defining the situation through the task

structure, role relationships, group climate, and achievement of task and relational goals (Barge & Hirokawa, 1989). While the functional approach looks precisely at leader behaviors, the mediational approach focuses on which leader competencies are the most important in the given situation.

The final communication approach that will be discussed is the *emergent approach*. The emergent approach to leadership is relevant to groups without a traditionally appointed leader (Pavitt, 1999). During this process, “unofficial leaders emerge and perform many of the same functions as traditional leaders” (Kolb, 1998, p. 265). Therefore, emergent leadership can be defined as the group member who exerts significant influence over other group members towards goal achievement despite having no formal designation of authority. The role of communication is imperative in the emergent approach as it is generally communicative behaviors that allow others to perceive an individual as assuming the leadership role. Thus, it is the role of perception that differentiates assigned leadership from emergent leadership. “In emergent leadership, contrasted to officially designated leadership, the perception of leadership is key. Individuals only serve as leaders for as long as others see them in that role” (Kolb, 1998, p. 265). Finally, leadership emergence is not necessarily pinpointed on one individual, as multiple individuals can take on a leadership role. Leadership can even be shared amongst all members, varying on the situational context and perceptions of group members.

Why Study Leadership Emergence?

Leadership has real world implications. According to Richmond et al. (1983, p. 27), "Two of the major concerns of most organizations in contemporary society are productivity and employee satisfaction." Leadership is an important factor in determining the success of an organization and helps to strike a balance between these two concerns. While there have been many approaches to leadership, most have of them have only focused on assigned and/or elected leadership. However, many groups do not have assigned or elected leadership, and, instead, rely on leaders emerging. Thus, the emergent approach to leadership is the most directly relevant to this circumstance. While the numerous other approaches to leadership that have contributed much to leadership research, this study will only focus on leaders who emerge in groups. Therefore, emergent leadership, which has been found to be a factor in improved group performance (Souza & Klein, 1995) will be examined in depth in this thesis.

It is important to recognize the overlap and lack of conceptual clarity of all leadership approaches. Each approach shares certain qualities with other approaches. Although, as described earlier, the emergent approach can be distinguished from other approaches due to its specific relevance to groups without assigned or elected leadership, it does encompass characteristics of several other approaches. Emergent leadership emphasizes the importance of the situation, as does the situational approach to leadership. The situation that a group is facing will help determine the person that emerges as leader (Pavitt, 1998).

This concept is also consistent with the mediational approach to leadership where the leader serves as a medium, helping the group to handle the complexity of a given situation (Fisher, 1986). Mediational leaders possess a repertoire of communicative abilities, avoid oversimplifying information, and are able to adapt effectively to the varying needs of the group through using the appropriate competencies, task or relational, to assist the group in achieving its goals (Barge & Hirokawa, 1989; Fisher, 1986). Therefore, the proposition that those members of originally leaderless groups who mediate successfully will emerge as leaders makes sense.

The perceptual approach is also related to leadership emergence due to the emphasis on perception (Calder, 1977). A group leader is only the leader when others perceive them to be. Charismatic leadership relies on the communication of a vision and inspiring others (Bryman, 1996), which is comparable to the burden of an emergent leader who must maintain their role by having others still perceive them to be leader. Furthermore, the functional approach allows for all group members to take on a leadership role, but research has found that only a few people tend to take on leadership responsibilities in a group (Bales, 1953). Furthermore, those who perform leadership functions may be more likely to emerge as leader. Therefore, understanding leadership emergence will help us to understand which individuals will take on these leadership responsibilities.

In terms of “real world” implications, some other motivations for using the emergent leadership approach stem from the method for assuming leadership in a group and the role of deviance and leader acceptance. Leadership emergence can occur in most

(if not all) small groups with varying goals, purposes, and contexts. Pavitt (1998) explains that it does not matter if a leader is assigned or elected or emerges from the group as long as the leader is competent and accepted by the group. Therefore, studying emergent leaders is just as important as the study of traditional, appointed leaders. In fact, studying only appointed leaders can limit the plethora of leadership processes in occurring in groups. Finally, although leaders often carry the burden of proposing creative ideas and/or solutions, creativity threatens group norms and can affect leader acceptance. Hollander (1958) discusses the idea that any leader can get away with deviance from the group norms if they are already integrated into the group and have proven their commitment to the group norms. In other words, the members who are perceived positively as leaders can get away with deviance and communication may aid those individuals in being perceived positively. Furthermore, the type of group impacts how individuals are perceived as groups with a competitive or performance focus may breed more aggression and dominance as one individual can “overpower the group process” (Yamaguchi, 2001, p. 693).

Influences on Emergent Leadership

Research surrounding leadership emergence strives to predict which group members are likely to emerge as leader in groups without an appointed leader and explain why some group members emerge over other members (Pavitt, 1998). Research has shown the most important factor is the content and amount of verbal communication. Morris and Hackman (1969) found that rates of participation influenced who was

perceived to assume the leadership role in experimental groups. However, they also found that high participation was not sufficient for being seen as leader because a third of the participants characterized as high participators were not perceived to be leader. Morris and Hackman indicated that this was due to communication that deemphasized facilitative activities and emphasized detrimental activities. While participation appeared to play the biggest role in perceived leadership in their study, the importance of content can not be ignored. In fact, Baker (1990) found that emergent leaders were characterized by communication content that was high in procedure, moderate to low in ideas, and low in opinions. This suggests that the type of communication impacts leadership emergence, not just the sheer amount of communication.

Although there may be some link between talk time and leadership, content is vitally important. A major flaw in the literature is that experiments are often done with experimental groups whose members are not personally invested in the group's goals (Pavitt, Whitchurch, Siple, & Petersen, 1997). Therefore, whoever talks the most, regardless of what they are saying, tends to assume leadership. However, in groups that have been together over a period of time and are invested in the outcomes, such as students who have been working together through a semester and motivated to get a good grade, the quality of communication has been found to be just as important as the quantity (Pavitt et al., 1997).

The performance of certain communicative functions has been found to influence leadership emergence. For example, Schultz (1978, 1986) found that it is possible to predict leadership emergence based on group member's ratings of communicative

functions. In her 1978 study, Schultz found that an individual who was perceived by group members as formulating goals and summarizing the group's process emerged as leader, while her 1986 study found that being perceived as goal directed, giving directions, and, again, summarizing the group's actions were integral to predicting leadership emergence. However, it is important to note that Schultz never studied actual behaviors, only members' perceptions of behaviors. However, these findings support Souza and Klein's (1995) finding that leaders emerge when they display high ability and goal commitment, as well as Ketrow's (1991) finding that people performing procedurally oriented behaviors were most often perceived group leader, followed by people performing social-emotional behavior and, lastly, people performing for some other objective such as task-oriented or analytical behaviors.

Communication also plays a role in eliminating group members from assuming the leadership role. In the emergence of a leader, Geier (1967) found that there were two stages, the first being a "rapid and relatively painless elimination process" where potential leaders are eliminated based on negative characteristics such as being uninformed and not participating (p. 320). The second stage is a competition that furthers the elimination process as remaining candidates for leadership attempt to garner support from previously eliminated group members. Potential leaders who make it to this second stage are often eliminated for reasons such as authoritativeness and offensive verbalization when the other group members do not like the way the leadership candidate expresses his or herself (Geier, 1967).

In addition, Baker (1990) investigated the role of verbal style in elimination of potential leaders in small groups. “If other group members get the impression that a member of the group does not contribute any ideas for the group task or does not contribute toward organizing the group, then the individual will be eliminated as a potential leader of the group” (Baker, 1990, p. 25). This impression is created through not communicating, communicating in a vague and tentative manner, and seeking guidance from other group members (Baker, 1990). However, verbal style is not the only communicative behavior influencing the elimination and competition phases of leadership emergence. Johnson and Bechler (1998) found that individuals perceived as good listeners were less likely to be eliminated and more likely to emerge as group leader. Thus, due to verbal and listening ability, it would follow that using communication effectively would allow a person to emerge as leader in a group.

Although the role of communication has been discussed in terms of content versus loquacity and verbal style in the elimination process, there are still several variables consistently evolving through leadership emergence research. For example, seating position has been found to impact who is perceived to be leader. When individuals sit at the end of a rectangular table, they tend to be more talkative (Hare & Bales, 1963) and are seen as being the leader (Pellegrini, 1971). In addition, Howells and Becker (1962) found that seating position influences the flow of communication that determines emergent leader. When two individuals sat on one side of a table facing three other individuals, the “leader” generally emerged from the two-person side. Since conversation tends to go back and forth, the individuals on the two-person side enjoyed

more talk time, resulting in perceived leadership. In addition, individuals who receive reinforcing messages such as characterized as “recognition” and “support” were more likely to engage in leadership-relevant communication (Mortensen, 1966).

Issues of gender and leadership have sparked many questions of interest and research has struggled to figure out if gender makes a difference in leadership. According to Smith (1997), there are distinctions between masculine and feminine leadership styles where the feminine style is characterized by using consensus decision-making, viewing power in relational terms as something to be shared, encouraging productive approaches to conflict, building a supportive working environment, and promoting diversity. A masculine style is characterized by using more authoritative decision-making, seeing power as something to “have” over others, and viewing conflict as a negative phenomenon. If these gender characteristics are accurate then it is not surprising that Eagly and Karau (1991) found that men were more likely to emerge as leader in general measures of leadership, especially those focusing on task, while women were more likely to emerge as leader in measures of social leadership. In addition, a study by Serafini and Pearson (1984) found that femininity was more closely associated with a consideration style of leadership where the emphasis is on relationships, while masculinity was associated with initiating structure where the emphasis is on defining the tasks of subordinates.

Other factors have come to light in the investigation of the relationship between gender and leadership emergence. There has long been role and organizational conflicts, resulting in a double bind situation (Tracy, 2004). Specifically, there has been a conflict

between femininity and competence (Robson, 2000), as females strive to be perceived as leaders. Andrews (1984) found that performance self-esteem plays a huge role on whether or not a male or female gendered person emerges as leader. Individuals who think highly of themselves and have faith in their skills and talents, regardless of gender, were more likely to be perceived as leader. However, Andrews (1984) points out that “men are expected to “act” like leaders, but women for whom such an expectation does not exist may receive unusually high ratings when they surprise the group with their leadership skills” (p. 10). In addition to performance self-esteem, the composition of a group impacts which gender emerges as leader. Bunyi and Andrews (1985) found that in mixed-gender male-majority groups, the males served more often as the emergent leader. Finally, gender may be a salient factor in managerial evaluations at the entry level of one’s career (Knott & Natalie, 1997). In other words, gender may lead to opinions about one’s skill early on in their job and possibly eliminate them as a future emergent leader.

Furthermore, the self-confidence of an individual allows them to be more influential on other group members (French & Snyder, 1959). Other individual difference variables such as cognitive complexity and self-monitoring also provide insight into the emergent approach to leadership. The idea that more cognitively complex individuals are better able to predict the actions of others and shape their own responses (Burlison & Caplan, 1998), suggests that cognitively complex individuals may be able to communicate more effectively in groups, leading to leadership emergence.

Self-monitoring also impacts the emergence of a leader in small groups. Because high self-monitors are better able to modify their self-presentation through the use of

social cues than low self-monitors (Cronshaw & Ellis, 1991; Ifert & Roloff, 1997), understanding the influence of one's self-monitoring skill in relation to their cognitive complexity may offer greater insight into predicting leadership emergence. The impact of cognitive complexity and self-monitoring on the emergent leadership process is of central concern to this current project. In the next two sections these variables will be explored in depth.

Cognitive Complexity

Research on cognitive complexity has touched upon a number of areas including social perception skill, message production, message reception, and social management skills (Burlison & Caplan, 1998). While cognitive complexity is situation specific, individuals who are cognitively complex in interpersonal domains are generally hypothesized to have stronger social perception skills in areas such as identifying others' states and inferring their dispositions (e.g., Burlison, 1994), organizing impressions of others (O'Keefe, 1984), and taking the perspective of others (e.g., Hale & Delia, 1976). These skills could increase the likelihood of one's ability to emerge as leader in a group because one would be able to form more sophisticated impressions of group members.

Furthermore, individuals who are cognitively complex tend to use relatively more person-centered communication and less position-centered communication, resulting in effectively accomplishing both instrumental and relationship goals (e.g., Burlison & Samter, 1985; O'Keefe & McCornack, 1987). Person-centered communication involves focusing on the individual by developing messages that are responsive to the goals of the

other person and tailored to that individual, while position-centered communication tends to focus not on the uniqueness of the individual, but on the role of the individual (Burleson, 1987).

Finally, cognitively complex individuals have been described as more adept at “managing the introduction, flow, and development of conversational topics” (Burleson & Caplan, 1998, p.261), which allows them to impact the group’s procedure. Because group members tend to perceive individuals who display procedural behaviors as more leadership-oriented, these procedural-focused individuals are more likely to emerge as leaders (Frey, 1989). The combination of person-centered communication and skilled interaction management should lead others to perceive the characteristics of highly cognitive complex people as approximating their implicit theories of ideal leadership. Implicit leadership theories serve as prototypes or beliefs about the attributes that effective leaders should possess (Pavitt, 1998). Thus, all of these elements related to cognitive complexity may impact leadership emergence.

Social Perception

According to Burleson and Caplan (1998), “persons with highly developed systems of interpersonal constructs are better able than those with less developed systems to acquire, store, retrieve, organize, and generate information about other persons and social situations” (p. 240). Constructs refer to a basic template of cognitive structure which arms individuals with the ability to comprehend what is going on around them (Kelly, 1955). Delia, O’Keefe, and O’Keefe (1982) claim that “persons implicitly rely on

interpersonal construct systems in generating strategies for guiding actions” (p. 162). In other words, these constructs affect the way that individuals perceive the world around them, influencing their ability to anticipate and evaluate situations. Interpersonal construct systems allow individuals to better understand the states and dispositions of others through perspective-taking. Cognitive complexity is highly correlated with perspective-taking, suggesting that more cognitively complex individuals are able to use their “system of personal constructs to construe how a situation appears within the construct system of another” (Hale & Delia, 1976, p. 198). Furthermore, cognitive complexity has been linked with the ability to form sophisticated impressions of others. Perceivers with a highly differentiated interpersonal construct system are more able to synthesize new or diverse information when forming coherent and organized impressions of others (O’Keefe & Delia, 1982).

As people use their construct system to differentiate among individuals and make sense out of situations, it would follow that people with developed construct systems would be more likely than those with less developed construct systems to emerge as leaders in a group. For example, business leaders who scored high in interpersonal cognitive differentiation (i.e., possessing developed construct systems) were perceived by employees to be charismatic, personal, and inspirational (Zorn, 1991). Although these business leaders were assigned, not emergent, their developed construct systems allowed them to be perceived as effective leaders. Accordingly, individuals with highly developed construct systems may be more likely to emerge as leaders in groups in which there is no designated leader.

Person-Centered Communication

Person-centered communication is another outcome of cognitive complexity. Woods (1998) views person-centered communication as an “orientation to sociality” (p. 167), and cognitively complex individuals have the ability to produce more sophisticated messages in numerous situations. Person-centered messages should “imply a recognition of the other as a unique person, and a sensitivity to the other’s unique qualities, goals, feelings, and concerns” (Zorn, 1991, p. 183).

In addition, an association exists between cognitively complex individuals and the ability to produce and use person-centered messages (Burleson & Caplan, 1998). For example, person-centered communication has been linked with being able to recognize and develop effective comforting strategies (Burleson, 1982). More complex individuals were more likely to ask questions about a distressed person’s point-of-view, resulting in being able to tailor more sophisticated comforting messages (Samter & Burleson, 1984).

Moreover, individuals with a more differentiated construct system were more focused on the distressed individual and spent less time talking about unrelated issues. In other words, cognitively complex individuals use communication messages that are tailored to the other person. Therefore, cognitively complex individuals, with developed construct systems, are equipped to develop and implement person-centered communicative messages.

Person-centered communication may serve as an indicator for leadership emergence. Person-centered verbal ability has been linked to person-centered verbal

adaptiveness in interaction, as well as nonverbal projection of concern (Woods, 1998). Furthermore, person-centered verbal ability also indicated advanced person-centered verbal strategies and projected greater concern in persuasive conversation (Woods, 1998). Although some of these person-centered communication findings stem from persuasion research, the application to leadership emergence should not be very different as one can look at leadership emergence as members' attempts to persuade other group members of their leadership qualities. In addition, person-centered leadership messages have been found to impact the perceptions of employees in terms of how effective and relationally-oriented a message is perceived (Zorn, 1991). Finally, employees who perceive their bosses to have a more employee-centered leadership style report more organizational satisfaction (Richmond et al., 1983). Therefore, as effective leaders have an intuitive understanding of the needs of their followers and use person-centered communication to appeal to those needs (Zorn, 1991), person-centered communication is viewed as vital to leadership.

Interaction Management

One's interaction management ability, linked to cognitive complexity, may impact their likelihood of emerging as leader in a group. One aspect of interaction management is verbal and nonverbal style. Verbal style is defined as a "specific pattern of word choices exhibited within a particular context that has an impact on how the interactants assign meaning to the content of the situation" (Baker, 1990, p. 13). As stated earlier, Woods (1998) found that person-centered verbal ability had a positive

impact, leading to nonverbal cues of concern and other person-centered perceptions. Analogously, nonverbal style can be seen as a pattern of nonlinguistic behaviors that impact how interactants assign meaning to a situation. Gardner (2003) found that a strong delivery, characterized by eye contact, vocal fluency, use of facial expressions, and dynamic hand gestures, increased perceptions of a leader's charisma relative to a weak delivery, characterized by lack of eye contact, minimized facial expressions, shifts in posture, and speech errors and hesitations. Thus, both of these findings concerning verbal and nonverbal style suggest that one's verbal and nonverbal ability impacts people's perceptions of another's leadership skill.

The link between more cognitively complex verbal and nonverbal ability and leadership is not surprising given its impact on other areas of communication. Burleson and MacGeorge (2002) found that effective supportive communication was characterized by highly person-centered verbal and nonverbal behaviors. These behaviors allowed a target of a supportive message to develop "greater comprehension of the problematic situation" and have an "improved perspective on it" (Burleson & MacGeorge, 2002, p. 402). Therefore, individuals displaying verbal and nonverbal behaviors associated with cognitive complexity were able to respond to targets as individuals and not make them feel as though they were being negatively evaluated. Although this example pertains to supportive communication, it shows that cognitively complex individuals may possess skilled verbal and nonverbal ability, resulting in higher quality communication. The verbal and nonverbal behavior could potentially lead to individuals emerging as leaders because of their sensitivity to fellow group members.

In addition, Baker (1990) found that emergent leaders in groups were characterized by certain verbal styles as compared to individuals who were eliminated as potential leaders. For example, emergent leaders were characterized as verbalizing high procedure statements, low to moderate idea statements, and low opinion statements. High status members who did not emerge as leader but were still perceived as making valuable contributions to the group were characterized by verbalizing moderate to low procedural statements, high idea statements, and moderate to high opinion statements.

Finally, individuals eliminated as potential emergent leader were characterized by a verbal style yielding few procedure and idea statements and a moderate amount of opinions (Baker, 1990). This suggests that emergent leaders are determined by the content of their communication. However, although Rubin and Henzl (1984) did not find an association between cognitive complexity and verbal skill, individuals exhibiting person-centered communication may be seen as potential leaders because they would adapt to the situation and tailor their verbal statements (i.e. procedural, idea, or opinion statements) towards what was needed in the group dynamic.

Although the link between verbal ability and cognitive complexity is not crystal clear, there is an association between nonverbal ability and cognitive complexity (Rubin & Henzl, 1984). An interesting finding is that highly complex individuals scored higher than individuals with low cognitive complexity in terms of nonverbal encoding skills of facial expressions and tone of voice consistent with the message being sent (Rubin & Henzl, 1984). Furthermore, highly complex individuals were more adept at distinguishing the nonverbal behaviors of audience members (Rubin & Henzl, 1984). For

example, Rubin and Henzl (1984) found that cognitively complex individuals were much more adept at nonverbal self-monitoring, allowing them to read accurately the nonverbal communication in a situation and react accordingly. These findings suggest a role for self-monitoring as a mediating force on the impact of cognitive complexity on leadership; this suggestion will be examined in the next section.

Implicit Leadership Theories

According to O'Keefe (1984), "a person's level of construct differentiation should influence the structure and content both of impressions that he or she forms and of impressions formed of that person" (p. 265). As people rely on their construct system to make sense of the world (Delia, O'Keefe, & O'Keefe, 1982), the impression-formation process involves understanding the implicit theories of personality employed by perceivers. Implicit personality theory is based on the idea that there are certain traits or behaviors that produce an impression, which then leads to further inferences being made about the individual in question (Schneider, Hastorf, & Ellsworth, 1979). For example, an individual who appears to be having fun and being comfortable at a party may also be perceived as being extroverted, confident, and outgoing. A perceiver's impression of that person will not just be limited to them having fun and being comfortable, but will incorporate other traits that the perceiver believes to be linked to the initial, stimulus traits (Schneider et al., 1979). Implicit leadership theories are linked to cognitive complexity because they both function as a desire to manage impressions.

Traits and behaviors fall into certain categories and, when an individual exhibits one or more of those traits or behaviors, the perceiver puts them into that category, attributing all the other traits and behaviors to them as well. Linking certain traits and behaviors helps to organize impressions and can be seen as prototypes or stereotypes. Prototypes and stereotypes are a necessity in making sense of the world (Schneider et al., 1979).

Accordingly, the categories and constructs that individuals use to make sense of leadership should be examined. Implicit leadership theories have been described as “cognitive structures used to interpret interactions with authority figures, but might also be viewed as knowledge structures that directly affect the leadership process” (Peterson & Sorenson, 1991, p. 505). In addition, implicit leadership theories may reflect a social reality derived from one’s own experiences as a leader or follower (Weiss & Adler, 1981). Individuals use these theories to attribute multiple leadership traits to others who exhibit a similar, salient leadership trait or attribute non-leadership traits to others who exhibit a similar follower trait (Barge & Schlueter, 1991). In other words, individuals have implicit ideas of how a leader or follower should act, possibly based on their own past experiences, and if they encounter a person, they will be inclined to place them in one of the categories. For example, Pavitt, Whitchurch, McClurg & Petersen (1995) had students list the traits and behaviors they believed an ideal leader would possess, resulting in an idea of a prototypical leader. Their impressions of leadership stem from the leadership constructs that they have developed.

Some concerns with implicit leadership theories are that they may not be as strongly associated with cognitive complexity as initially thought. Weiss and Adler (1981) found implicit theories to be unrelated to cognitive complexity. They indicated that individual perceivers possessed similar implicit ideas about leadership despite possessing varying levels of cognitive complexity. However, a communicator's cognitive complexity is associated with that communicator's communicative skill which should, in turn, be associated with the extent to which other people's impressions of that communicator approximate their implicit leadership theories. Therefore, the impact of a potential emergent leader's cognitive complexity and the implicit leadership theories held by the other members of the group affect the likelihood of that individual emerging as group leader.

In summary, cognitive complexity (an individual's differentiated construct system) is related to the use of person-centered communication and skillful verbal and nonverbal behaviors, which is related in turn to other's impression formation through their implicit leadership theories. A cognitively complex individual can effectively tailor their communication to specific situations and specific individuals, resulting in more effective communication. As individuals interact within a group setting, these factors associated with cognitive complexity will impact the roles people assume, including the natural emergence of leadership for certain individuals over others. Therefore, the following hypothesis is proposed:

H1: Cognitive complexity is directly related to leadership emergence in groups.

Self-Monitoring

It follows that self-monitoring, in addition to cognitive complexity, is variable of interest in the study of leadership emergence. According to Goffman (1959), “when an individual presents himself before others, his performance will tend to incorporate and exemplify the officially accredited values of the society, more so, in fact, than does his behavior as a whole” (p. 35). In other words, Goffman likens human interaction to stage acting where humans are constantly performing in an attempt to present an idealized picture for others. During interactions, Goffman believes that humans utilize face- saving techniques that help them capitalize on their best possible self in a specific situation. Taking this concept one step further, Snyder (1974) recognized that only some individuals act in a “socially appropriate manner,” while others lack in their ability or desire to act according to social cues (p. 527). Thus, acting appropriately in specific social situations apparently stems from an individual difference, which Snyder (1974) referred to as self-monitoring. This section will define self-monitoring and investigate its relationship with cognitive complexity and leadership emergence.

Defining Self-Monitoring

The theory of self-monitoring is based on the premise that people exercise varying amounts of control over expression (Gangestad & Snyder, 1985, 2000; Snyder 1974; Snyder & Cantor, 1980; Snyder & Gangestad, 1986). Self-monitoring involves a concern with the social appropriateness of one’s behavior, an attention to social comparison information as cues for appropriate expression, the ability to control or modify self-

presentation, the use of this ability in particular situations, and the extent to which an individual's expressive behavior is consistent or variable across situations (Snyder, 1974, p. 529). Thus, high self-monitors, or those who exercise greater expressive control, are characterized as being "highly responsive to social and interpersonal cues of situationally appropriate performances," whereas low self-monitors, or those who exercise little or no expressive control, are characterized as having "expressive behavior that personally reflects their own inner attitudes, emotions, and dispositions" (Gangestad & Snyder, 2000).

According to Snyder (1974), individuals may be compelled to use expressive control and monitor their behavior as a tool for effective communication. For example, one may monitor his or herself to portray one's true emotional state accurately or to convey an arbitrary emotional state that is not necessarily in line with one's true feelings (Snyder, 1974). Furthermore, individuals utilize expressive control to conceal an inappropriate emotional state in favor of an appropriate one or in favor of no reaction at all. Finally, expressive control is also used to show an appropriate emotional state when one is not feeling anything at all (Snyder, 1974). High self-monitors rely on social comparisons to guide behavior when they are uncertain how to act or react, while low self-monitors rely on their affective states to guide behavior.

Self-monitoring plays a significant role in communication research and offers greater insight into a variety of areas. Impression management, influence, adaptability, security, and self-esteem are just a few areas linked to self-monitoring. Understanding

the role of self-monitoring in these areas will offer clarity in understanding the relationship between self-monitoring, cognitive complexity, and leadership emergence.

Impression management appears to be a cornerstone of self-monitoring theory. According to Day, Schleicher, Unckless, and Hiller (2002), the goal of impression management is to “positively influence evaluations of oneself and to win approval from others” (p. 390). Individuals are constantly making impressions in day to day life, but one area where impression management has significant impact is in the workplace. Day et al. (2002) found that individuals with high self-monitoring skill used impression management techniques to influence positively their performance ratings. Furthermore, high self-monitors are more likely to utilize a variety of strategies to manipulate their personal impression during negotiations (Jordan & Roloff, 1997). The link between impression management and self-monitoring may stem from the concept that high self-monitors are more likely to put themselves in situations in which there is a clear expectation of what considered proper, while low self-monitors prefer situations where behaviors stemming from their personal opinions is required (Snyder & Gangestad, 1982).

However, even though there is general agreement that high self-monitors tend to be concerned with impression management, the linkage between low self-monitors and impression management is less clear. Meyer (2001) indicated that low self-monitors were not more likely than high self-monitors to pursue a common goal throughout several interactions instead of altering goals in different situations. This similarity between high and low self-monitors with impression management tactics may be better understood

through an explanation of the types of impression management. Assimilative impression management occurs when an individual brings the behaviors of others in line with their own behaviors and emotions, while accommodative impression management occurs when an individual attempts to bring their behaviors in line with that of the other people in a situation (Gangestad & Snyder, 2000). Because low self-monitors tend to act in accordance with their affective states (Snyder, 1974), they may utilize more assimilative techniques and act in a manner to influence others to share their view instead of altering their own behaviors for the sake of others. However, despite a loose link between low self-monitoring and impression management, there is a strong association between high self-monitoring and impression management. Therefore, further understanding of the discrepancies between the levels of self-monitoring skill could be achieved through understanding specific impression management techniques, as well as specific situations.

Another important link to self-monitoring behavior is that of influence and adaptability. Ifert and Roloff (1997) indicate that self-monitoring skill is related to persuasion and facework through their investigation of individual's responses made when their requests to others are met with an unwilling reaction. When a high self-monitor encounters an unwillingness obstacle they use mitigating facework as a persuasive technique of influence, while a low self-monitor is more likely to use facework to "politely signal disengagement" from the request (Ifert & Roloff, 1997, p. 64). In other words, self-monitoring skill potentially offers an individual a greater ability to adapt their message and approach through facework and persuasive tactics, resulting in greater influence over others. Furthermore, before and during negotiation, high self-monitors

actually “plan to adapt their personal persona,” creating an impression that they believe will be most effective at accomplishing their goals (Jordan & Roloff, 1997, p. 53). This ability to influence and adapt may also be why it is more difficult to judge accurately deceptive messages coming from high self-monitors (deTurck & Miller, 1990).

Finally, self-monitoring affects esteem and security issues. Thus far, self-monitoring theory has painted a positive picture in which an individual is able to manage their personal impressions effectively and adapt their messages, resulting in effective communication. However, it would be remiss not to address the fact that high self-monitoring does not automatically suggest confidence and high self-esteem. For example, Briggs, Cheek, and Buss (1980) found that other-directedness, or being concerned with the social appropriateness of one’s behavior, was linked to shyness, low self-esteem, and neuroticism. Gaines, Work, Johnson, Youn, and Lai (2000) developed this notion with their findings that other-directedness was more characteristic of insecure individuals, rather than secure individuals. A possible explanation for this may result from the increased role stress, in terms of role ambiguity and role conflict, facing high self-monitors (Day et al., 2002). Possibly, trying to be too many things to too many people may affect the security and esteem of individuals.

Self-Monitoring and Cognitive Complexity

There exists a link between self-monitoring and cognitive complexity. Because cognitive complexity indicates the level of one’s social perception skill (Burleson & Caplan, 1998), self-monitoring theory, which relies on social cues to determine

appropriate behavior, may indicate a relationship between the two. In fact, Rubin and Henzl (1984) indicated a positive association between individuals who are cognitively complex and their ability in nonverbal self-monitoring. Because self-monitoring involves observing and controlling expression and self-presentation to create a positive image and remain on favorable terms with others (Kolb, 1998), the emphasis on being adept at producing and receiving nonverbal messages is obvious.

Furthermore, Snyder and Cantor (1980) investigated the links between social knowledge and self-monitoring and found that high self-monitors were able to access “richer dispositional constructs organized around a prototypic other,” while low self-monitors were able to access “richer dispositional constructs with regard to the self” (p. 231). Although the social cognitive processes involved in self-monitoring are still relatively unknown, certain individual’s abilities to excel in certain communicative tasks may possibly stem from their ability to read a situation and act in accordance with social cues (Jordan & Roloff, 1997). In other words, their ability to acquire a more complex understanding of what is appropriate in a given situation may stem from their ability to process information cognitively in a more rich and layered manner.

Self-Monitoring and Leadership

Self-monitoring has been found to influence leadership emergence in small groups. Day et al. (2002) claim that high self-monitors are more likely to display leadership behaviors and emerge as leaders in work situations. High self-monitors are more likely to attend to cues regarding the appropriateness of behavior in a given

situation and let those cues guide their own actions, while low self-monitors rely on their own attitudes about appropriate behaviors in a given situation and do not mold their behavior to specific situational demands (Cronshaw & Ellis, 1991). In terms of leadership, high self-monitors use social cues to determine if leadership behaviors are appropriate and, if so, which types of behaviors are appropriate. In contrast, low self-monitors rely on their attitudes towards leadership to guide their actions (Cronshaw & Ellis, 1991).

Research has found that high self-monitoring leads to leadership emergence across situations, while low self-monitoring may lead to leadership emergence if the situational demands are in line with the self-monitor's attitude (Cronshaw & Ellis, 1991; Kolb, 1998). As high self-monitors are more likely to determine the uniqueness of a situation and act accordingly, the focus on maintaining the face of other individual allows emergent leaders to communicate in a multifunctional manner, managing the identities of and relationships with group members (Zorn & Leichty, 1991). Thus, self-monitoring serves as a variable that may either impact leadership emergence or serve as a mediating variable on the relationship between cognitive complexity and emergent leadership.

Therefore, the following hypothesis and research question are proposed:

H2: Self-monitoring skill is directly related to leadership emergence in groups.

RQ1: Do cognitive complexity and self-monitoring interact in some fashion to influence leadership emergence?

In conclusion, this study will investigate the impact of cognitive complexity and self-monitoring skill on leadership emergence. Leadership emergence, with its commanding focus on communication, serves as a realistic way to investigate leadership as many groups operate without elected or assigned leadership. Because cognitive complexity influences the way an individual communicates and the roles that they assume in group settings, the complexity of an individual would seemingly impact their likelihood to emerge as a group leader. Furthermore, because self-monitoring skill is concerned with reading a situation and acting accordingly, emergent leadership may also be influenced by one's self-monitoring skill. Therefore, further understanding of the role that cognitive complexity and self-monitoring plays in emergent leadership will lead to a more detailed assessment of the phenomenon of emergent leadership in groups without assigned or elected leaders.

Chapter 2

METHOD

Members of standing groups doing a course project completed measures of cognitive complexity, self-monitoring, and loquacity. In addition, they rated their implicit ideas about leadership and rank ordered one another's leadership.

Participants

One hundred and thirty-four students enrolled in either a public speaking course or communication fundamentals course at a mid-sized eastern university participated in the study. They were divided into twenty-six 3 to 7-member standing groups. The sample consisted of ninety-two females and forty-two males. Sixty-five of the students studied were communication majors, while the remaining students represented a wide variety of majors. One freshman, twenty-three sophomores, sixty-nine juniors, and forty-one seniors participated in the study.

In the majority of the groups, instructors assigned participants at random to groups for the purpose of completing a graded thirty minute persuasive presentation. However, some instructors let students form their own groups. Students worked together in groups for about a month before presenting their projects and received extra credit for participation. Of the one hundred and thirty-four students, four participants never turned

in their completed measures and six participants turned in partially completed measures. Due to insufficient information, one group was left out of data analysis.

Procedures

At the completion of the group's persuasive presentation, the participants individually filled out a variety of instruments that assessed their perceptions of leadership emergence in the group, their cognitive complexity, and their self-monitoring skill. In addition, they completed instruments assessing loquacity and their implicit ideas about leadership. Cognitive complexity and implicit leadership measures were completed during class time. The other measures were filled out at home. They also answered questions regarding how much time was spent working on the group project. Over fifty percent of groups met three times or more outside of class and over fifty percent of groups spent at least three hours working with other group members on the project.

Leadership Emergence

Participants assessed leadership emergence by rating themselves and fellow group members in terms of 16 leadership-relevant characteristics. These 16 leadership-relevant characteristics were developed by Pavitt through a two-stage process (Pavitt et al., 1995). The characteristics include 8 traits and 8 behaviors of an effective leader and participants used a 7-point semantic differential scale with endpoints labeled "Not at all" and "Very much so" (see Appendix A). The traits include: enthusiastic, forceful, understanding,

supportive, intelligent, creative, friendly, and organized. The behaviors include: stated the group's procedure, encouraged group member participation, encouraged harmony among group members, summarized the group's decision, facilitated group discussion, played devil's advocate, managed conflict, and kept group discussion organized.

Participants judged the extent to which fellow group members, as well as themselves, exhibited these qualities. Cronbach's alpha was computed to test the reliability of these sixteen characteristics and was very high at .87. Then, each individual was assigned a leadership score based on the perceptions of their peers. This leadership score was computed arithmetically. Each group member's judgments across all 16 characteristics were totaled for an individual. Then these totals were averaged, resulting in that individual's leadership score.

Leadership emergence was assessed in two additional ways. As a way of measuring implicit theories of leadership, participants completed a 7-point semantic differential scale for each of the 16 leadership characteristics they believe to be indicative of an "ideal" leader. Reliability, using Cronbach's Alpha, was slightly lower at .76, but this was due to very little variance amongst participants in terms of their perceptions of an "ideal" leader. Each participant's ratings of an "ideal" leader were then compared to their ratings of each group member and the difference calculated. The absolute differences for all 16 characteristics were summed between the ideal and the judgment of each group member. Thus, ratings of group members that closely lined up with a participant's implicit theory were seen as emerging as a leader.

Finally, each participant rank-ordered group members, including themselves, in terms of providing leadership to the group. The rank-ordering simply served as another tool for assessing perceptions of leadership emergence within the group.

Cognitive Complexity

The cognitive complexity of each participant was assessed through the Role Category Questionnaire (see Appendix B). The Role Category Questionnaire (RCQ) estimates cognitive complexity by having participants provide free-response descriptions of several individuals known to them, after which the responses are coded for the number of interpersonal constructs reflected (Burleson & Caplan, 1998).

According to Burleson and Caplan (1998), the benefit of the RCQ lies in its flexibility. Although the RCQ makes allowances in the number and type of persons described, research has shown that having participants describe peers for two to five minutes allows for reliable and valid cognitive complexity estimates (Burleson & Caplan, 1998). Therefore, this study had participants take a maximum of five minutes to describe a well-known peer who is liked and an additional five minutes to describe a well-known peer who is disliked.

Interpersonal constructs used to describe each liked and disliked peer are counted in terms of that person's personality and behavior, as opposed to their physical characteristics. The descriptions fall into five categories: (1) physical descriptions, (2) role constructs, including name, age, and sex, (3) descriptions of the other's general behaviors or specific actions in the interaction, (4) reports of specific or general beliefs

and attitudes expressed by the other person, and (5) abstract dispositional and personality constructs (Delia, Clark, & Switzer, 1974). Generally, qualities falling into the physical descriptions and role constructs categories are not counted as part of the total RCQ score (Burlison & Waltman, 1988). Two coders were trained in coding RCQs and worked independently to code sixty participants' RCQs. Intercoder reliability was extremely high with an intraclass correlation coefficient of .92.

While the RCQ only provides a sample of one's cognitive complexity, as opposed to an exhaustive measure, the reliability and validity of the RCQ has made it the most widely used measure of cognitive complexity in the communication field (Burlison & Caplan, 1998). The RCQ enjoys strong test-retest reliability and construct validity in terms of its correlations with many communicative and socio-cognitive functions.

In samples of adults, the RCQ enjoys strong test-retest reliability, with estimates of .95, .86, and .84 in different tests (Crockett, 1965; O'Keefe, Shepherd, & Streeter, 1981), as well as strong construct validity in terms of relative stability amongst adults (O'Keefe & Sypher, 1981). However, some criticisms of the RCQ are that it may be affected by the wordiness of participants' responses and that the way the RCQ is administered can affect complexity scores. In response to these challenges, Burlison and Caplan (1998) synthesized the literature and found little relation between the RCQ and measures of loquacity. They also indicated that the altered results from changing the administration of the measure is comparable to changing the administration of any measure and should not be a large concern. Therefore, despite some criticisms, the RCQ appears to be a valid and reliable measure of cognitive complexity.

Self-Monitoring Skill

This study administered the Revised Self-Monitoring Scale (Lennox & Wolfe, 1984), consisting of 13 Likert-type items, to participants (see Appendix C). This scale measures two dimensions, ability to modify self-presentation with seven items and sensitivity to expressive behavior of others with six items. The Revised Self-Monitoring Scale, as a whole, does not show a significant positive correlation with social anxiety, public self-consciousness, and individuation. Lennox and Wolfe (1984) found the internal consistency of the entire scale to be .75, the seven items measuring ability to modify self-presentation to be .77, and the six items measuring sensitivity to expressive behavior of others to be .70 (Lennox & Wolfe, 1984). Furthermore, in a meta-analysis of self-monitoring and work environments, Day, Schleicher, Unckless, and Hiller (2002) found the entire Revised Self-Monitoring Scale to have a high reliability ($\alpha = .81$).

In this present study a factor analysis of the Revised Self-Monitoring Scale (see Table 2.1) found a three factor solution, as opposed to the two factors reported by Lennox and Wolfe (1984). The first factor accounted for 25% of the variance, the second factor 14.8%, and the third factor only 4.7%. Item 12 only loaded on the third factor at .415 and was left out of analysis. Otherwise, all other items loaded as indicated by Lennox and Wolfe (1984) at .4 or higher. This study found the reliability of the Revised Self-Monitoring Scale to be consistent with Lennox and Wolfe's and Day et. al's findings. Using Cronbach's alpha, the scale has an internal consistency of .78 for twelve of the thirteen items, .81 for six of the seven items measuring ability to modify self-

presentation, and .75 for six items measuring sensitivity to the expressive behavior of others.

Table 2.1

Rotated Factor Matrix for Items Measuring Ability to Modify Self-Presentation and Sensitivity to Expressive Behavior

Factor/Item	Factors		
	1	2	3
Ability to Modify Self-Presentation			
13. Once I know what the situation calls for, it's easy for me to regulate my actions accordingly.	.49 (.77**)	.26 (-.03**)	.13
10. I have found that I can adjust my behavior to meet the requirements of any situation I find myself in.	.73 (.74**)	.04 (-.06**)	.16
9. I have trouble changing my behavior to suit different people and different situations.*	.40 (.65**)	-.02 (-.01**)	.84
1. In social situations, I have the ability to alter my behavior if I feel that something else is called for.	.54 (.53**)	-.02 (-.12**)	.28
3. I have the ability to control the way I come across to people, depending on the impression I wish to give them.	.65 (.50**)	.24 (.11**)	.22
7. When I feel that the image I am portraying isn't working, I can readily change to something that does.	.76 (.48**)	.08 (.10**)	.06
12. <i>Even when it might be to my advantage, I have difficulty putting up a good front.*</i>	.26 (.32**)	.03 (.05**)	.42
Sensitivity to Expressive Behavior of Others			
8. I can usually tell when I've said something inappropriate by reading it in the listener's eyes.	.13 (.06)	.44 (.66**)	-.19
5. My powers of intuition are quite good when it comes to understanding others' emotions and motives.	.06 (-.04**)	.75 (.89**)	.05
11. If someone is lying to me, I usually know it at once from that person's manner of expression.	.06 (-.03**)	.52 (.49**)	-.11
4. In conversations, I am sensitive to even the slightest change in facial expression of the person I'm conversing with.	.12 (-.06**)	.50 (.49**)	.09
2. I am often able to read people's true emotions correctly through their eyes.	.00 (.13**)	.83 (.49**)	.19
6. I can usually tell when others consider a joke to be in bad taste, even though they may laugh convincingly.	.07 (.06**)	.48 (.40**)	.03
*Reverse scoring used for these items.			
**Items in parentheses indicate Lennox and Wolfe's 1984 findings.			

Loquacity

In addition to measures of leadership emergence, cognitive complexity, and self-monitoring, participants completed a measure of loquacity, or inclination towards wordiness in verbalizations. This measure administered to participants because loquacity may have a significant moderator-type impact on the hypothesized relations. Past research has been very inconsistent concerning whether sheer amount of talk is a strong predictor of leadership emergence independently of the content of that talk. There is some reason to believe that this possibility is most relevant to zero-history groups where group members do not have a stake in the outcome. In contrast, it appears the content of communication, over and above the sheer amount of talk time, impacts real, standing groups (Pavitt, 1999; Pavitt, Whitchurch, Siple, & Petersen, 1997). Since this study is using real groups with a shared goal that members care about (the grade of the project), it is possible that only content, and not sheer amount of communication matters. However, given inconsistencies in past research, the measure was administered to investigate the impact of communication content and amount. Furthermore, while some researchers have indicated that RCQ scores are correlated with loquacity (e.g. Beatty & Payne, 1984; Powers, Jordan, & Street, 1979), several other researchers have found little relation between talk time and cognitive complexity (e.g. Burlison, Applegate, & Neuwirth, 1981; Burlison, Waltman, & Samter, 1987).

Mortensen, Arnston, and Lustig's (1977) predispositions towards verbal behavior scale (see Appendix D) was used as a check to ensure that loquacity is not affecting the other variables being investigated in the study. Mortensen et al. (1977) reported an

internal consistency of .89 and a test-retest reliability of .91. This study reports an internal consistency of .94 using Cronbach's alpha for all twenty-five items.

Chapter 3

RESULTS

This chapter will have descriptive data and test the two hypotheses and research question.

Descriptives and Correlations

The minimums, maximums, means, and standard deviations are depicted in Table 3.1. RCQ scores ranged from 2 to 39, with a mean of 18.82 and a standard deviation of 6.63. Self-monitoring was broken down into two dimensions, with the ability to modify self-presentation (Modify) scores ranging from 9 to 30 and sensitivity to the expressive behavior of others (Sensitive) scores ranged from 7 to 30. The mean for Modify was 20.69 and the standard deviation was 4.07, while the mean for Sensitive was 20.85 and the standard deviation score was 3.64. Finally, pre-disposition to verbal behavior (PVB) scores ranged from 43 to 153, with a mean of 107.41 and a standard deviation of 21.95.

The dependent variable, leadership, was measured in three ways. Leader scores, based on the total of peer ratings on the 16 leadership relevant characteristics, ranged from 56.75 to 104, with a mean score of 80.67 and a standard deviation of 8.43. Ideal Leader scores, based on how close rankings on the 16 leadership relevant characteristics were to a peer's "ideal" leader, ranged from 12 to 43.70, with a mean of 22.19 and a

standard deviation of 6.68. Ranked Leader scores ranged from 1 to 6.4, with a mean of 3.30 and a standard deviation of 1.38.

Table 3.1
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
RCQ	130	2	39	18.82	6.626
PVB	120	43.00	153.00	107.4083	21.95009
Modify	122	9.00	30.00	20.6885	4.07387
Sensitive	123	7.00	30.00	20.8537	3.64103
Leader	133	56.75	104.00	80.6673	8.42535
Ideal Leader	133	12.00	43.70	22.1902	6.67636
Ranked Leader	133	1.00	6.40	3.3041	1.38105
Valid N (listwise)	119				

The correlations between all of the variables are depicted in Table 3.2. Both dimensions of self-monitoring, ability to modify self-presentation and sensitivity to the expressive behavior other others, were correlated at .207 and significant at the .05 level. In addition, ability of modify self-presentation and sensitivity to the expressive behavior of others were both significantly correlated with predisposition to verbal behavior at .383 and .218, respectively. Finally, sensitivity to the expressive behavior of others was also correlated to RCQ at .235, significant at the .01 level.

Not surprisingly, all three leadership variables were significantly correlated at the .01 level. Leader and Ideal Leader were correlated at -.773, Leader and Ranked Leader were correlated at -.673, and Ideal Leader and Ranked Leader were correlated at .507. Finally, it is important to point out that predisposition to verbal behavior was not significantly correlated with any of the leadership emergence variables or RCQ scores.

The predisposition to verbal behavior scale was used as a check to make sure that loquacity, or talkativeness, was not affecting cognitive complexity or leadership emergence. Furthermore, in type 3 tests of fixed effects, PVB did not significantly impact Leader ($F[66, 33]=.94, p=.591$) or Ideal Leader ($F[66, 33]=.79, p=.794$). Thus, this study asserts that loquacity does not appear to be impacting the measures used for assessing cognitive complexity and perceptions of leadership.

Table 3.2
Correlations

		RCQ	PVB	Modify	Sensitive	Leader	Ideal Leader	Ranked Leader
RCQ	<i>r</i>	1	-.040	.101	.235(**)	.114	-.040	-.149
	Sig.		.665	.267	.009	.198	.653	.091
	N	130	120	122	123	130	130	130
PVB	<i>r</i>	-.040	1	.383(**)	.218(*)	.029	-.075	-.085
	Sig.	.665		.000	.017	.751	.415	.359
	N	120	120	119	120	120	120	120
Modify	<i>r</i>	.101	.383(**)	1	.207(*)	.083	-.045	-.084
	Sig.	.267	.000		.022	.365	.625	.355
	N	122	119	122	122	122	122	122
Sensitive	<i>r</i>	.235(**)	.218(*)	.207(*)	1	.135	-.062	-.098
	Sig.	.009	.017	.022		.138	.497	.281
	N	123	120	122	123	123	123	123
Leader	<i>r</i>	.114	.029	.083	.135	1	-.773(**)	-.673(**)
	Sig.	.198	.751	.365	.138		.000	.000
	N	130	120	122	123	133	133	133
Ideal Leader	<i>r</i>	-.040	-.075	-.045	-.062	-.773(**)	1	.507(**)
	Sig.	.653	.415	.625	.497	.000		.000
	N	130	120	122	123	133	133	133
Ranked Leader	<i>r</i>	-.149	-.085	-.084	-.098	-.673(**)	.507(**)	1
	Sig.	.091	.359	.355	.281	.000	.000	
	N	130	120	122	123	133	133	133

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Group Effect

Statistical analysis procedures used to test the hypotheses would vary based on whether there is a significant group effect for the leadership variables. Through univariate analysis of variance, the group effect for each of the leadership variables was tested. There was a significant group effect for Leader ($F[24, 103]=2.07, p=.006$) and Ideal Leader ($F[24, 103]=1.902, p=.014$). However, there was not a significant group effect for Ranked Leader ($F[24, 103]=.495, p=.975$).

Leader

Due to significant group effect, hierarchical linear modeling was used in analysis and data were converted into z-scores (with 0 replacing missing data). Type 1 tests of fixed effects were used and Table 3.3 depicts the findings. Hypothesis 1 stated that cognitive complexity is directly related to leadership emergence. However, RCQ scores did not have a significant impact on Leader ($F[29, 61]=1.17, p=.286$). Thus, Hypothesis 1 was not supported.

Hypothesis 2 predicted that self-monitoring would directly influence leadership emergence. Ability to modify self-presentation did not significantly impact Leader ($F[19, 66]=1.58, p=.082$). Sensitivity to the expressive behavior of others did not impact Leader ($F[18,66]=.85, p=..638$). Thus, Hypothesis 2 was not supported.

Finally, cognitive complexity and self-monitored were tested for a significant interaction impacting leadership. RCQ and Modify interacted in such a way that they began to approach significance in terms of their influence on Leader ($F[80, 19]=1.39,$

$p=.150$). RCQ and Sensitive interacted in such way that they began to approach significance in terms of their impact on Leader ($F[82, 17]=1.44, p=.112$). However, there seems to be no all encompassing interaction between cognitive complexity and self-monitoring that results in a significant impact on leadership emergence.

Table 3.3

Leader

Independent Variables	DF	F	Sig.
RCQ	29, 61	1.17	.286
Modify	19, 66	1.58	.082
Sensitive	18, 66	.85	.638
RCQ and Modify	80, 19	1.39	.150
RCQ and Sensitive	82, 17	1.44	.112

Ideal Leader

Hierarchical linear modeling was used in analysis and type 1 tests of fixed effects were used. Results are displayed in Table 3.4. Hypothesis 1 stated that cognitive complexity directly impacted leadership emergence. However, RCQ scores did not significantly effect Ideal Leader ($F[29, 61]=1.13, p=.332$). Thus, Hypothesis 1 was not supported.

Hypothesis 2 predicted that self-monitoring would directly influence leadership emergence. Ability to modify self-presentation did not impact Ideal Leader ($F[19, 66]=1.04, p=.430$). Sensitivity to the expressive behavior of others did not impact Ideal Leader ($F[18,66]=1.03, p=.437$). Thus, Hypothesis 2 was not supported.

Finally, cognitive complexity and self-monitoring were further explored for a combined effect on Ideal Leader. RCQ and Modify did interact to significantly impact

Ideal Leader ($F[80, 19]=1.74, p=.049$). RCQ and Sensitive did not significantly interact to influence Ideal Leader ($F[82, 17]=.98, p=.542$). Thus, it appears that RCQ and Modify interact in such a fashion to impact ideal leadership, but RCQ and Sensitive do not.

Table 3.4
Ideal Leader

Independent Variables	DF	F	Sig.
RCQ	29, 61	1.13	.332
Modify	19, 66	1.04	.430
Sensitive	18, 66	1.03	.437
RCQ and Modify	80, 19	1.74	.049
RCQ and Sensitive	82, 17	.98	.542

Ranked Leader

Because there was no significant group effect, linear regression was used to test both hypotheses and address the research question. Results are listed in Table 3.5. Hypothesis 1 states that cognitive complexity is directly related to leadership emergence. RCQ did not have a significant impact on Ranked Leader ($F[1, 126]=1.578, p=.211$). Thus, Hypothesis 1 was not supported.

Hypothesis 2 states that self-monitoring is directly related to leadership emergence. Sensitivity to the expressive behavior of others did not have a significant impact on Ranked Leader ($F[1, 126]=1.158, p=.284$). Ability to modify self-presentation also did not have a significant impact on Ranked Leader ($F[1, 126]=.801, p=.372$). Thus, Hypothesis 2 not supported.

Next, relationships between the variables were tested for a mediating effect on ranked leadership. RCQ did not have an effect on Modify ($F[1, 226]=1.229, p=.270$). In

addition, RCQ and Modify together did not have a significant impact on Ranked Leader ($F[2, 125]=1.088, p=.340$). Therefore, Modify does not mediate the RCQ-leadership relationship. However, RCQ did have a significant effect on Sensitive ($F[1, 126]=7.265, p=.008$), but RCQ and Sensitive together did not have a significant impact on Ranked Leader ($F[2, 125]=1.112, p=.458$). Therefore, Sensitive does not mediate the RCQ-leadership relationship. Finally, RCQ, Modify, and Sensitive together were found to have no combined impact on Ranked Leader ($F[3, 124]=.872, p=.458$).

Finally, relationships between the variables were tested for a moderating effect on ranked leadership. Adding the product of Modify and RCQ to Modify and RCQ did not have an effect on Ranked Leader ($F[3, 124]= 1.464, p= .228$). Adding the product of Sensitive and RCQ to Sensitive and RCQ did not have an impact on Ranked Leader ($F[3, 124]= .810, p= .490$). Thus, there was no moderating effect between self-monitoring and cognitive complexity on ranked leadership.

Table 3.5
Ranked Leader

Independent Variables	Dep.	DF	F	Sig.
RCQ	Ranked Leader	1, 126	1.578	.211
Sensitive	Ranked Leader	1, 126	1.158	.284
Modify	Ranked Leader	1, 126	.801	.372
RCQ	Modify	1, 126	1.229	.270
RCQ	Sensitive	1, 126	7.265	.008
RCQ and Modify	Ranked Leader	2, 125	1.088	.340
RCQ and Sensitive	Ranked Leader	2, 125	1.112	.332
RCQ and Modify and Sensitive	Ranked Leader	3, 124	.872	.458
RCQ and Modify and RCQ*Modify	Ranked Leader	3, 124	1.464	.228
RCQ and Sensitive and RCQ*Sensitive	Ranked Leader	3, 124	.810	.490

Chapter 4

DISCUSSION

Leadership emergence refers to an individual's ability to exercise significant influence over group members and, thus, be perceived as group leader despite having no designated authority. Cognitive complexity and self-monitoring are psychological individual-difference characteristics that influence communicative behaviors, which, in turn, influence leadership perceptions. For example, cognitive complexity impacts an individual's ability to form sophisticated impressions of others (O'Keefe, 1984), engage in person-centered communication (Burleson, 1987), and skillfully interact with others in a social setting (Burleson & Caplan, 1998). Self-monitoring impacts an individual's ability to exercise expressive control and monitor their behavior in specific situations (Snyder, 1974). It would follow that these two variables, either independently or interdependently, are impacting communicative behaviors that influence emergent leadership. If an individual is adept at managing their communication to such an extent that they can skillfully interact with others on a more personalized level and/or tailor their own behavior to be appropriate in a specific situation, they may increase other's perceptions of their leadership skill.

This study provides a test of these proposed relationships using questionnaire data from student groups. Several measures were completed by participants that assessed

cognitive complexity, two dimensions of self-monitoring (ability to modify self-presentation and sensitivity to the expressive behavior of others), and predisposition to verbal behavior. Predisposition to verbal behavior serves as a covariate to partial out the impact of sheer talk on leadership perceptions. In addition, perceived leadership was measured using three different methods. However, an analysis of the data presents very little support for the proposed linkages among these variables. Therefore, this chapter will discuss the findings, propose some possible explanations for the lack of significant results, and address the strengths and weaknesses of the study.

Findings

Two hypotheses were tested. Hypothesis 1 stated that cognitive complexity was directly related to leadership emergence, while Hypothesis 2 stated that self-monitoring was directly related to leadership emergence. Neither of the hypotheses was supported. RCQ scores, a measure of cognitive complexity, were not found to be related to the three measures of leadership emergence. Additionally, each dimension of self-monitoring, ability to modify self-presentation and sensitivity to the expressive behavior of others, did not influence any of the ways in which leadership emergence was assessed. However, it should be noted that the ability to modify self-presentation approached significance in terms of its impact the measure of leadership in which group members rated each other on leadership-relevant characteristics.

A research question was posed concerning whether or not cognitive complexity and self-monitoring interact to influence emergent leadership. However, there was very

little evidence of any such interaction. Ability to modify self-presentation indicated a potential mediating role in the relationship between cognitive complexity and leadership emergence. Ability to modify self-presentation and cognitive complexity had a significant impact on the measure of leadership that looked at how closely one's perceptions of each group member's leadership skill was in line with their own perceptions of ideal leadership. In addition, these two variables approached significance in terms of their impact on the measure of leadership based on ratings of group member ratings of leadership-relevant characteristics. However, there was not a significant relationship between these two variables on ranked leadership. While an interaction between sensitivity to the expressive behavior of others and cognitive complexity approached significance in the measure of leadership in which group members rated each other on leadership-relevant characteristics, this dimension of self-monitoring did not fully mediate the cognitive complexity and leadership relationship. Despite the significant relationship between cognitive complexity and one dimension of self-monitoring on just one of three measures of emergent leadership, combining both dimensions of self-monitoring does not indicate a full mediation between cognitive complexity and emergent leadership. Finally, there does not appear to be a moderating relationship on emergent leadership between cognitive complexity and each dimension of self-monitoring. Thus, it would appear that cognitive complexity and self-monitoring are not fully interacting in such a fashion that leadership emergence is influenced.

Although not relevant to leadership emergence, the only significant finding was that cognitive complexity has an impact on one of the dimensions of self-monitoring,

sensitivity to the expressive behavior of others. This finding makes logical sense. Individuals characterized as cognitively complex engage in more person-centered communication and are able to accurately assess the needs, qualities, and feelings of others (Zorn, 1991). Thus, it would follow that these individuals would also be adept at reading and responding to social cues, as well as able to effectively gauge what is appropriate in a given situation (Gangestad & Snyder, 2000). It seems likely that an individual's ability to richly process information may lead to higher levels of sensitivity regarding their behavior and communication towards others.

Additionally, the PVB scale was utilized in this study to ascertain that loquacity was not influencing any of the relevant variables. Some interesting findings, although not relevant to the hypotheses or research question, were brought to light. First, loquacity was unrelated to cognitive complexity, supporting findings by several constructivist researchers (e.g. Burlison, Applegate, & Neuwirth, 1981; Burlison, Waltman, & Samter, 1987). Second, loquacity was not correlated to each of the leadership measures, indicating that predisposition to verbal behavior did not enhance one's likelihood of emerging as leader. Finally, although not a relationship touched upon in past literature, predisposition to verbal behavior was significantly correlated with both dimensions of self-monitoring. This finding suggests that research may need to take a second look at self-monitoring.

Proposed Explanations

Despite a failure to support the hypotheses, other studies have reported findings consistent with the proposed hypotheses. It is important to note that the discrepancy between this study and earlier research is not due to measurement problems. All of the measures used in the study were highly reliable. Past research has strongly supported the validity of cognitive complexity (Burlinson & Caplan, 1998) and self-monitoring (Day et al., 2002)). This study reported extremely high intercoder reliability for the RCQ. In addition, the Revised Self-Monitoring Scale had a high internal consistency overall and each dimension, ability to modify self-presentation and sensitivity to the expressive behavior of others, was internally consistent. The 16 leadership-relevant characteristics were found to be reliable as a way of assessing behavior of group members, as well as measuring implicit leadership theory. Furthermore, the three leadership measures were highly inter-correlated, providing evidence of convergent validity. Thus, the instruments used in measuring the three main variables functioned in the expected manner.

Given that there were no issues with the measurements used, it is necessary to look to differences between this and the previous studies for possible explanations for the differing findings. The proposed link between cognitive complexity and leadership emergence has been supported in past research. Zorn (1991) reported a moderate relationship between transformational leadership and RCQ scores. Transformational leadership was assessed through a questionnaire which identified four transformational factors: charisma, individualized consideration, intellectual stimulation, and inspiration. Zorn (1991) found that the person-centered level of employees was significantly, but

weakly correlated to charisma and intellectual stimulation. Furthermore, business owners who scored high on the RCQ were perceived by their employees to be charismatic, as well as using inspirational leadership and individualized consideration (Zorn, 1991).

Differences between the current study and Zorn's (1991) study may account for why this study did not find a similar relationship between cognitive complexity and leadership. First, and most important, Zorn (1991) focused on transformational leadership. Although there are some commonalities between transformational and emergent leadership, especially in regards to perception, it would seem that they may manifest differently in terms of their relationship with cognitive complexity. Second, leadership was assessed using different measures. Leadership behavior was measured with Bass' (1985) Multifactor Leadership Questionnaire. Furthermore, leadership messages, as recalled by each business owner and employee, were coded for person-centeredness (Zorn, 1991). In addition, the leadership role in Zorn's (1991) study was already fulfilled, as opposed to this study's emphasis on an emergent leader. Third, Zorn (1991) used dyads consisting of a business owner and employee, as opposed to the group focus of the current study. The emphasis on an interpersonal, versus a group, dynamic may have been a significant influence on the relationship between cognitive complexity and leadership. Finally, the present study used three measures of leadership, two of which stemmed from an investigation of implicit leadership theory (see Pavitt et al., 1995). According to Weiss and Adler (1981), implicit theories of leadership are unrelated to cognitive complexity differences. In other words, while cognitive

complexity may influence one's perceptions of leadership (Zorn, 1991), it does not influence their beliefs regarding "ideal" leadership.

Despite not being fully supported in the current study, there has also been research supporting a relationship between self-monitoring and leadership emergence. Zaccaro et al. (1991), Cronshaw and Ellis (1991) and Ellis et al. (1988) indicated that self-monitoring has a direct relationship with leadership. Similar to the present study, the past studies both used groups of students and administered a self-monitoring scale. However, Zaccaro et al. (1991) and Cronshaw and Ellis (1991) used zero-history groups completing experimental tasks, while Ellis et al. (1988) relied on standing student groups completing a series of assignments, presentations, and tasks for course credit. Using a ranked leadership measure similar to the one used in this study, Zaccaro et al. (1991) and Cronshaw and Ellis (1991) found that self-monitoring impacted leadership rankings. In contrast, Ellis et al. (1988) linked participants' ratings of each other in terms of exhibited leadership to self-monitoring skill. Thus, each study either used different types of groups than the present study or measured leadership differently.

The greatest difference between these three studies and the present study was the use of the Self-Monitoring Scale (Snyder, 1974), instead of the Revised Self-Monitoring Scale (Lennox & Wolfe, 1984). However, Kolb (1998) used the Revised Self-Monitoring Scale and found a significant relationship between self-monitoring and leadership. Although, similar to this study, Kolb's (1998) sample consisted of student groups working together on a graded course project and used forced ranking as one measure of leadership, she also used several different measures of leadership.

Importantly, Kolb (1998) found that self-monitoring was only significantly correlated to group-reported leadership for female participants. For males, the correlation was not significant. Alternately, when emergent leadership was reported by groups using the forced rankings of each group member, a smaller sample of just the highest ranked or most preferred male leaders was found to significantly correlate with self-monitoring. For highest ranked female leaders, self-monitoring was not significantly correlated with leadership. These sex differences may indicate that the present study needed to also address gender questions in the relationship between self-monitoring and leadership emergence.

Strengths and Limitations

Although this study lacked significant findings in regards to the relationships among self-monitoring, cognitive complexity, and leadership emergence, this study boasts several strong points. First, data collection went well with a high response rate and no apparent hitches along the way. Second, the rich and layered manner in which leadership was measured, along with the high inter-correlations among the three measurement methods, provides confidence in the validity of this study's leadership measurement. Third, there was high reliability for all of the measures used in the study.

Some limitations might have served as a catalyst for the lack of significant findings. First, although leadership was measured in several ways, the validity of these methods can be questioned. Despite the reliability of the 16 characteristics, they had never been used as a leadership emergence scale. Furthermore, even though leadership

was measured in three different ways, two of the ways were based on the 16 leadership-relevant characteristics. If these characteristics were not measuring leadership emergence in the expected way, then that would hurt two of the three leadership measures.

However, all three measures of leadership (including rankings which were not connected to the 16 characteristics) were inter-correlated, so it remains unclear as to whether or not the 16 characteristics served as an accurate measure of emergent leadership.

Furthermore, other limitations arise out of the groups used. The sample size of twenty-six groups was lower than desirable. Additionally, groups may not have been working together long enough. With a larger sample size and longer-term groups, finer differences may have been flushed out of the data and indicated a relationship between self-monitoring, cognitive complexity, and emergent leadership. Relationships approaching significance may have become stronger, suggesting more support for the hypotheses. While the groups worked together on a graded assignment for about a month, there may have been significant differences with groups who had multiple graded assignments over the course several months. In addition, there were some fine differences in group size, group formation, and nature of the group assignments that may have impacted the results.

Finally, although student groups were used, this does not qualify as a weakness or limitation. While there are some areas, as discussed, where the group sample could have been strengthened, these student groups qualified as real, full-fledged groups. According to Bales and Strodtbeck (1951), full-fledged groups possess certain characteristics. Full-fledged, real groups, as opposed to experimental groups, should consist of normal,

regular adult (or near adult) members of our own culture. In addition, group members should be working towards a decision that matters to them and go through all the phases of group decision-making. In other words, groups must see the decision-making process through from start to end, engaging in orientation, evaluation, and control (Bales & Strodtbeck, 1951). Thus, the groups used in this study classify as real, full-fledged groups. They were regular adults working together on a graded group project. It can be assumed that they each had a stake in the outcome. In addition, these groups spent several weeks working together on the project, having to come up with a topic, discuss how to present the material, and, finally, present their project to their class and instructor. These student groups fulfilled the full cycle of decision-making.

While cognitive complexity and self-monitoring were fully related with leadership emergence in this study, there were still some potential relationships approaching significance that suggest valuable areas for further research. Long-term standing groups should be studied and, in addition to other measures of leadership, straight rankings of group members' leadership should be taken as a valid measure of emergent leadership. Furthermore, the impact of sex or gender on cognitive complexity, self-monitoring, and leadership may shed additional light. Finally, it may help to first develop a comprehensive understanding of the link between self-monitoring and cognitive complexity before moving on to their relationship with emergent leadership in groups. Understanding the impact of each dimension of self-monitoring on cognitive complexity may help to shed light on the variables relationship with leadership.

Appendix A

LEADERSHIP MEASURE

For each group member, including you, please indicate how much they displayed the characteristics by marking an “X” in the appropriate blank.

NAME (group member): _____

Enthusiastic	Not at all _____ Very much so
Forceful	Not at all _____ Very much so
Understanding	Not at all _____ Very much so
Supportive	Not at all _____ Very much so
Intelligent	Not at all _____ Very much so
Creative	Not at all _____ Very much so
Friendly	Not at all _____ Very much so
Organized	Not at all _____ Very much so
Stated the group’s procedure	Not at all _____ Very much so
Encouraged group member participation	Not at all _____ Very much so
Encouraged harmony among members	Not at all _____ Very much so
Summarized the group’s decision	Not at all _____ Very much so
Facilitated group discussion	Not at all _____ Very much so
Played devil’s advocate	Not at all _____ Very much so
Managed conflict	Not at all _____ Very much so
Kept group discussion organized	Not at all _____ Very much so

Please rank order the group members, including you, in terms of who exhibited the most leadership skill.

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

In your opinion, what does a good leader do? Put an “X” in the appropriate blank.

Enthusiastic	Not at all _____ Very much so
Forceful	Not at all _____ Very much so
Understanding	Not at all _____ Very much so
Supportive	Not at all _____ Very much so
Intelligent	Not at all _____ Very much so
Creative	Not at all _____ Very much so
Friendly	Not at all _____ Very much so
Organized	Not at all _____ Very much so
Stated the group’s procedure	Not at all _____ Very much so
Encouraged group member participation	Not at all _____ Very much so
Encouraged harmony among members	Not at all _____ Very much so
Summarized the group’s decision	Not at all _____ Very much so
Facilitated group discussion	Not at all _____ Very much so
Played devil’s advocate	Not at all _____ Very much so
Managed conflict	Not at all _____ Very much so
Kept group discussion organized	Not at all _____ Very much so

How many times did your group meet outside of class? Please circle one.

- a. 0 times
- b. 1 time
- c. 2 times
- d. 3+ times

How much time was spent working on this project as a group?

- a. less than 1 hour
- b. 1 hour
- c. 2 hours
- d. 3+ hours

What is your sex?

- a. Male
- b. Female

What was the topic of your group presentation?

Appendix B

ROLE CATEGORY QUESTIONNAIRE

Please describe a peer whom you like. You will have five minutes to write your detailed impression of this person. Describe this person as fully as possible and pay particular attention to this person's habits, beliefs, ways of treating others, mannerisms, and similar attributes.

Please describe a peer whom you dislike. You will have five minutes to write your detailed impression of this person. Describe this person as fully as possible and pay particular attention to this person's habits, beliefs, ways of treating others, mannerisms, and similar attributes.

Appendix C

REVISED SELF-MONITORING SCALE

Please circle the answer that best corresponds to your behavior, where 5= certainly, always true; 4= generally true; 3= somewhat true, but with exception; 2= somewhat false, but with exception; 1= generally false; 0= certainly, always false.

1. In social situations, I have the ability to alter my behavior if I feel that something else is called for.	0 1 2 3 4 5
2. I am often able to read people's true emotions correctly through their eyes.	0 1 2 3 4 5
3. I have the ability to control the way I come across to people, depending on the impressions I wish to give them.	0 1 2 3 4 5
4. In conversations, I am sensitive to even the slightest change in the facial expression of the person I am conversing with.	0 1 2 3 4 5
5. My powers of intuition are quite good when it comes to understanding others' emotions and motives.	0 1 2 3 4 5
6. I can usually tell when others consider a joke to be in bad taste, even though they may laugh convincingly.	0 1 2 3 4 5
7. When I feel that the image I am portraying isn't working, I can readily change it to something that does.	0 1 2 3 4 5
8. I can usually tell when I've said something inappropriate by reading it in the listener's eyes.	0 1 2 3 4 5
9. I have trouble changing my behavior to suit different people and different situations.	0 1 2 3 4 5

10. I have found that I can adjust my behavior to meet the requirements of any situation I find myself in.	0 1 2 3 4 5
11. If someone is lying to me, I usually know it at once from that person's manner of expression.	0 1 2 3 4 5
12. Even when it might be to my advantage, I have difficulty putting up a good front.	0 1 2 3 4 5
13. Once I know what the situation calls for, it's easy for me to regulate my actions accordingly.	0 1 2 3 4 5

Appendix D

PREDISPOSITION TO VERBAL BEHAVIOR SCALE

In the following items, please describe how you express yourself orally to others. Think about how your verbal behavior would be in general situations. Circle the appropriate response where YES!=very strong agreement with the statement; YES=strong agreement with the statement; yes=mild agreement with the statement; ?=don't know or neutral feelings about the statement; no=mild disagreement with the statement; NO=strong disagreement with the statement; and NO!=very strong disagreement with the statement.

1.	I am inclined to let other people start conversations.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
2.	I have a tendency to dominate informal conversations with other people.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
3.	When I am with other people I generally talk often.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
4.	In most social situations I tend to direct the course of conversation.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
5.	When I am with others it generally takes me quite a while to warm up enough to say very much.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
6.	I generally rely on others to keep conversations going.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
7.	In most social situations I generally speak quite frequently.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
8.	I tend to hesitate when I speak.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
9.	I generally prefer to listen rather than to speak.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
10.	In most social situations I tend to come on strong.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
11.	I find myself pausing often when I speak.	<u>YES!</u> YES yes ? no NO <u>NO!</u>

12.	I am inclined to jump into informal conversations.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
13.	I tend to feel inhibited when I talk to others.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
14.	I generally find that I express myself quite freely.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
15.	I try to take charge of things when I am with people.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
16.	I often don't express my views in normal conversations with others.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
17.	I would describe myself as dominant in social situations.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
18.	When I am with others I am inclined to talk forcefully.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
19.	I have a tendency to let other people determine the course of conversation.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
20.	In one-to-one conversations I tend to talk more than half the time.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
21.	In most social situations I tend to speak for long periods of time.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
22.	I am inclined to let other people talk for long periods of time.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
23.	I prefer to keep my comments brief.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
24.	I probably speak for shorter periods of time than the average person.	<u>YES!</u> YES yes ? no NO <u>NO!</u>
25.	In most social situations I am inclined to let other people get in the last word.	<u>YES!</u> YES yes ? no NO <u>NO!</u>

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