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Follow Me: Strategies Used by Emergent Leaders in Virtual Organizations

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In this multi-method study, we investigated the strategies used by members who emerged as leaders in organizations communicating primarily via e-mail communication. We hypothesized and found that members who emerged as leaders tended to rely on soft influence tactics, were consistent in their usage of a certain influence tactic, and participated in e-mail exchanges more than other members. Additionally, we found that e-mail style moderated the relationship between soft tactic usage and emergent leadership, such that members who used weak e-mail style when using soft tactics were more likely to emerge as leaders. The use of weak e-mail style, such as typos or unclear wording, may have increased the degree to which soft tactics were perceived to be sincere, and therefore increased their effectiveness.

As social and technological forces change the face of management in the 21st century, insight is needed into how managers can capture the value provided by new and improved communication technology. This is especially relevant for managers called to work in virtual teams. As virtual teams become more prominent, research is needed into how computer-mediated communication will affect traditional leadership processes (c.f. Barry & Fulmer, 2004). For example, virtual organizations, such as large online interest groups, that are created without an existing hierarchy in place have created a need for studies of leadership in such unstructured organizations in which emergent leaders (members who gain their position from the support of followers; Hollander, 1958, 1974), rather than hierarchical leaders, may play a central role. Therefore, this multi-method study aims to better understand the leadership processes in such environments by investigating the strategies members can take to emerge as leaders in virtual organizations.

Computer-mediated communication entails forms of indirect interaction mediated by a machine, such as e-mail or instant-messaging (Postmes, Spears, & Lea, 1998). The particular form of computer-mediated communication used by the organizations examined in this study is electronic mail, which has become a fundamental communication tool for millions of people

worldwide (Friedman & Currall, 2003). Electronic mail, or e-mail, is a type of interpersonal message service that allows the transmission of written messages from one point to another electronically, rather than by physical delivery (Loperfido, 1993). E-mail is asynchronous, rapid, and text-based (Friedman & Currall, 2003). These characteristics make this form of communication very useful for leaders but also make it different from traditional forms of communication. This may have large consequences for how leaders communicate within their organizations, as they have to adapt to an environment which may constrain their ability to express non-verbal behaviors (Daft & Lengel, 1984, 1986).

Leadership at its most basic level is the ability to influence others (Kochan, Schmidt, & De Cotiis, 1975). Influence tactics can thus be viewed as a vital tool of leaders. Past research on influence tactics has examined the spectrum of influence tactics (e.g., Kipnis, Schmidt, & Wilksinson, 1980), the consequences of tactic usage (e.g., Kipnis & Schmidt, 1988), and the situational determinants of tactical choice (e.g., Schilit & Locke, 1982). However, research has yet to investigate the relationship between influence tactic usage and leader emergence in an organization, and in the setting of virtual organizations in particular. Rather, past leadership and influence tactic research has focused mostly on existing leaders in hierarchical settings (c.f. Buzzanell et al., 1997). However, the rise of virtual teams and other such groups which communicate primarily over virtual mediums and are created without an existing hierarchy in place has created a need for studies of emergent leadership in virtual, unstructured organizations. Hollander (1958, 1974) was one of the first to differentiate between two different categories of leadership: hierarchical and emergent. The first category of leadership that Hollander proposed consisted of members who achieve their role using their formal positions within the organizational hierarchy. The second category consisted of emergent leaders who gain their position from the support of followers. As of yet, research has yet to specifically address the strategies members aspiring to be emergent leaders can take to ensure themselves a position of high status in their virtual organization.

Additionally, scant research has examined the usage of influence tactics in the online environment (c.f. Barry & Fulmer, 2004). For virtual teams who communicate primarily over computer-mediated communication, the nature of interaction may greatly differ from traditional face-to-face interaction (Driskell, Radtke, & Salas, 2003). Traditional organizational process, such as the communication of influence tactics, could be very different when occurring over e-mail, which could greatly affect how aspiring leaders should communicate with other organizational members. Media richness theory provides a framework for comparing computer-mediated communication to face-to-face communication (Daft & Lengel, 1984, 1986). Media richness theory posits that media differ in their ability to translate non-verbal cues. Face-to-face mediums, which are able to fully capture non-verbal cues, are classified as "rich" while textual mediums, which are less able to capture non-verbal cues, are classified as "lean." Because of the textual nature of e-mail, it has been described as a lean medium (Daft & Lengel, 1984, 1986).

The leanness of e-mail could have important implications for aspiring leaders. First of all, in rich face-to-face communication, non-verbal cues can be used to exert influence. However, in lean mediums, such as written text and computer-mediated communication, traditional non-verbal communication may not be as easily, immediately communicable (Daft & Lengel, 1984; Driskell et al., 2003; Friedman & Currall, 2003; Tanis & Postmes, 2003). This could have two effects on influence tactic usage in computer-mediated communication. The first is that influence strategies that work in face-to-face channels may not work the same in e-mail. The second effect of lean mediums is on how influence tactics are articulated. Because

nonverbal cues are eliminated, the presentation of the verbal cues, or the e-mail style, is very important. E-mail style is similar to the concept of verbal style in oral communication. Verbal style has been defined as "the 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 interaction" (Baker, 1990, p. 13). Similarly, we define e-mail style as the choice and presentation of words in an e-mail which impacts how others assign meaning to the e-mail. While communication style has always been a key tool of leaders (Bass, 1985; Pfeffer, 1981), the confines of groups bond to e-mail communication may make it even more essential. Our research thus addresses the implications for aspiring leaders of using different influence tactics in e-mail communication.

Our study draws on e-mail and interview data collected over a period of three years from unstructured political-organizing organizations in the United States. Political-organizing organizations offer an excellent opportunity to study leadership strategies via e-mail as members tend to be high users of e-mail, given the suitability of e-mail for the complex organizational activities of such organizations and the rapid communication required for their collective actions (Garton & Wellman, 1995). Our study will thus investigate how a member's usage of various influence tactics may affect the likelihood of the member becoming an emergent leader in the organization and how the e-mail style with which the influence tactics are communicated may affect their usefulness in helping the member to become an emergent leader in the organization. Our study will provide aspiring leaders with advice on how best to gain power when communicating over virtual mediums.

Theoretical Background

Leadership and influence have been studied from a number of perspectives including social psychology, interpersonal communication, and management. In this paper, we utilize the three category grouping of leadership influence behaviors of hard, soft, and rational influence tactics (Kipnis & Schmidt, 1985), a commonly used framework in past empirical studies of influence tactics. Hard tactics are comprised of direct asserted requests for compliance (Miller, 1983). Hard tactics typically involve aggressive behaviors (Barry & Shapiro, 1992; Farmer, Maslyn, Fedor, & Goodman, 1997; Kipnis & Schmidt, 1985), such as the use of demands, threats, or persistent reminders (Somech & Drach-Zahavy, 2002; Yukl & Tracey, 1992). Soft tactics are generally thought to consist of friendliness or ingratiation (Barry & Shapiro, 1992; Farmer, Maslyn, Fedor, & Goodman,1997; Kipnis & Schmidt, 1985). Ingratiation in the context of influence tactics is used to convince a target to think favorably of the agent before the agent asks the target to do something (Tedeschi & Melburg, 1984). Rational tactics involve information sharing and the application of logic (Kipnis et al., 1980; Kipnis & Schmidt, 1985; Somech & Drach-Zahavy, 2002; Yukl & Tracey, 1992).

Past research on influence tactics has found that soft and rational tactics are the most commonly used tactics by all types of members within an organization (e.g., Schwarzwald, Koslowsky, & Ochana-Levin, 2004). However, findings for the relative effectiveness of each tactic are mixed, as seen in Higgins, Judge, and Ferris's (2003) meta-analysis of influence tactics and work outcomes. Higgins and his co-authors found that soft and rational tactics tended to correlate the most strongly with performance assessments, but hard tactics tended to correlate more strongly with extrinsic success, such as salary or promotions. This could be explained by the fact that soft and rational tactics incite less of a negative reaction in the influence target than

hard tactics whose verbal aggressiveness may invoke feelings of anger and resentment (c.f. Schwarzwald et al., 2004). Our study will examine if these findings on the effects of influence tactics on performance outcomes can also be translated into increases in informal status within organizations that communicate primarily online.

Soft Influence Tactic Usage in E-mail

Soft tactics, or ingratiation as they are often simply called, involve the use of friendliness or flattery to gain compliance with a request. Ingratiation is a process whereby a person tries to improve his or her attractiveness in the eyes of others (Jones, 1964; Wortman & Linsenmeier, 1977). Research has found that the use of ingratiation increases influence (Barry & Shapiro, 1992; Gordon, 1996; McFarland, Ryan, & Kriska, 2002; Watt, 1993; Yukl & Tracey, 1992). Kelman's (1961) theory of identification provides an explanation for this: through reinforcement of the target's role relationship with the agent (Miller, 1983), the agent is able to develop influence over the target. The leanness of e-mail could prove useful for soft tactics, as ulterior motives are less apparent (c.f. Barry & Fulmer, 2004). For example, a compliment given before a request may not seem as suspicious in e-mail because the 'wink' given in such a situation is not seen in the e-mail (i.e. "Oh you look nice today! Will you do X for me?"). Past research on ingratiation has supported this prediction, finding ingratiation more successful in lean mediums such as computer-mediated communication and audio than it was in rich mediums such as face-to-face communication (Gordon, 1996). Our first hypothesis, therefore, is as follows:

H_{1:} Soft tactic usage in e-mail is positively related to leadership emergence.

Rational Influence Tactic Usage in E-mail

Rational tactics involve the use of logical reasoning to convince influence targets why they should comply. Although past research on the relative effectiveness of rational tactics has revealed contradictory findings (e.g., Yukl & Tracey, 1992), rational tactics are accepted as the most commonly used influence tactic (e.g., Somech & Drach-Zahavy, 2002) because they are unlikely to incite negative emotional reactions in others. Rational tactics are also likely to be effective in e-mail. E-mail is very amenable to the transmission and aggregation of factual information. E-mail's text-based nature, speed, ability to send messages to multiple users, and ability to store and retrieve information make it very useful in information sharing (Romm & Pliskin, 1997). As rational tactics often involve the use of information to support a request, rational tactics should be well-suited to usage in e-mail. Therefore, our second hypothesis is as follows:

H_{2:} Rational tactic usage in e-mail is positively related to leadership emergence

Hard Influence Tactic Usage in E-mail

Using hard tactics in e-mail, which are often viewed as being unfriendly (van Knippenberg & Steensma, 2003), may in contrast inhibit a member from emerging as a leader. For example, a very directive statement such as "you must do this now" from someone who is not yet a clear leader might not be accepted and could be seen as being too presumptive. The repercussions of

this could be that other members would not like this person enough for the person to emerge as a leader in this team. Along this line, hard tactics could also be perceived as conveying close control and lack of freedom of choice (Schwarzwald et al., 2004), which again, when coming from someone who is not yet a leader, might be poorly taken by other members. We therefore propose hypothesis three:

H_{3:} Hard tactic usage in e-mail is negatively related to leadership emergence.

Leadership and Influence Tactic Consistency

Past leadership research has found that leaders tend to be consistent in their behavior (e.g., Albright & Forziati, 1995; Richardsen & Piper, 1986). This is perhaps because consistency is effective. Richardsen and Piper (1986) found that consistent leader behavior was associated with greater learning by group members in their study. They defined consistency as uniformity in the predominant style of the leader. In this study, we propose that uniformity in style specifically, consistency in influence tactic usage—is associated with a member's emergence as a leader within an organization. Using influence tactics in a consistent manner can also be important to leaders from the standpoint of procedural fairness. Consistency, as a procedural rule, implies that members in higher positions use procedures consistently across both people and time (Leventhal, 1980). Past research has found that this procedural rule is very important within organizations (e.g., Van den Bos, Vermunt & Wilke, 1996). De Cramer (2003) found that leadership inconsistency was regarded as unfair, decreasing the self-esteem of members who were low in social self-esteem and increasing their willingness to replace the leader. This implies that members who are not consistent run the risk of losing, rather than gaining, power in the organization. Consistency is also important in e-mail communications. Because members in virtual teams communicate primarily by e-mail, members have to base their impressions of other members on limited information (e.g., Lea & Spears, 1992). It is therefore essential that the limited information available be consistent. Without consistent information, members would be unable to form accurate perceptions of each other, and leaders would not be recognized as such. Additionally, without consistency in behavior, other members may misinterpret member communications, further inhibiting the likelihood of the member to emerge as a leader in the organization. We therefore propose hypothesis four:

H_{4:} Consistency in influence tactic usage in e-mail is positively related to leadership emergence.

Leadership and E-mail Participation

Members who are more engaged in the group (i.e. participate more) may also be more likely to become leaders. Early theories and research suggested that participation is a critical behavior of emergent leaders (e.g., Bass, 1949; Geier, 1967; Morris & Hackman, 1969). Indeed, a meta-analysis by Mullen, Salas, and Driskell (1989) found that members with high levels of verbal participation were the most likely to be chosen as leaders. Relatedly, past research has found that leaders are extroverts (Bales, 1950; Lashbrook, 1975; Lord, DeVader, & Alliger, 1986; Riggio, 2003) and tend to interact more with the group than others in order to achieve their desired results (Riggio, 2003). The relation of participation and emergent leadership may be

explained by several factors. First of all, a member who puts forth more effort to participate may be seen as more motivated to work for the group than other members, and therefore, may be seen as a good potential leader (Sorrentino & Boutillier, 1975; Sorrentino & Field, 1986). Secondly, participation may also signal that the member possesses certain characteristics, such as task expertise, which may also imply to other members that the member should be a good leader in the situation (e.g., Stein & Heller, 1979). In groups characterized by their usage of lean mediums, frequent communication is predicted to be even more important as members aspiring to be leaders try to exert their presence over a medium that does not allow for easy identification of the social cues usually associated with leaders (Zigurs, 2002). This prediction has been supported by past research on the relative participation of hierarchical leaders in e-mail communication, which has found that high-status members communicated more than low-status members (e.g., Weisband, Schneider, & Connolly, 1995). We therefore propose hypothesis five:

H_{5:} E-mail participation will be positively related to leadership emergence.

The Moderating Effect of E-mail Style

In computer-mediated communication, the style in which the e-mail is written may be especially important for members aspiring to be leaders. E-mail style is wording used in an email that affects the way readers assign meaning to the message. This is similar to the concept of verbal style, as introduced by Baker (1990). Strong e-mail style includes correct grammar, the absence of misspellings, and the use of clear language. In e-mail, strong e-mail style may be especially important as past research has found that impressions formed via computer-mediated communication are stronger than those formed from face-to-face interactions (Hancock & Durham, 2001; Lea & Spears, 1992; Walther, 1996). This has been explained by the fact that in lean mediums, users often engage in an "overattribution" process. Users build impressions of others over e-mail without qualifying the strength of the impressions by the scant information they are built upon—for example, spelling errors or e-mail "signatures." This overreliance on minimal cues means that weak e-mail style or strong style will have a greater effect on group perceptions of the member in computer-mediated communication than in other mediums, such as face-to-face communication. Therefore, e-mail style has the potential to greatly moderate the effectiveness of e-mail influence attempts by members aspiring to be leaders (c.f. Higgins et al., 2003). We propose that e-mail style moderates the effectiveness of influence, such that rational tactics will be enhanced by strong e-mail style and the effectiveness of rational tactics will be diminished by poor e-mail style. We therefore propose hypothesis six:

H_{6:} E-mail style moderates influence tactic usage in e-mail for emergent leaders; specifically, influence tactic usage will be more strongly related to leader emergence when strong e-mail style is used in the e-mail than when weak e-mail style is used in the e-mail.

Methods

Data and Sample

We conducted a three-year multi-method field study on political-organizing organizations located in the United States that used e-mail extensively for their communications. These organizations included, for instance, an international women's organization, a university peace organization, an environmental organization, and a community improvement organization. We collected e-mail data from these organizations over a period of 36 months by becoming a member of the general list serves for the organizations, conducting interviews with members, taking field notes at meetings, and collecting hard copies of handouts from organizational meetings and other ideological materials, similar to the methods employed by Philips and Eisenberg (1993). Given the complexity of influence attempts, qualitative research methods in conjunction with traditional quantitative methods is an especially useful way to study the complex topic of influence (Barry & Fulmer, 2004; c.f. Lee, 1999). Our total e-mail sample consisted of 7,617 e-mails, sent from a total of 631 members representing 10 different organizations. The average organization had 63 members and had exchanged a total of 646 e-mails over the period of the study. Fifty-four percent of the members were female, and the average member age was 33.

Measures

To measure influence tactic usage and e-mail tactics in e-mail, we utilized both quantitative and qualitative data. The quantitative data included text analyses and coder ratings. The qualitative data included interviews and ethnographic observation. In the following sections, we will describe the exact measures used to assess each construct.

Because it was not feasible to code 7,617 e-mails, we reduced the sample size for coding based on the procedure used by Finholt, Sproull, and Kiesler (2002). Members who sent more than 1% of a group's e-mails were first chosen, presuming that members who sent less than 1% of the e-mails were not active participants of the group. For the text analyses, we ran all emails sent by these 'active' members (165 members) through a text analysis engine; specifically, 4592 emails were text-analyzed. Next, for the coder ratings, for each 'active' member, one e-mail per month for each month of the study was randomly selected for coding, similar to the selection process of archived reply files done by Finholt et al. (2002). This strategy allowed 13.7% of the e-mails to be sampled (1031 emails) for coder ratings, as is common with this method.

Influence tactic usage and e-mail style. To obtain a quantitative measure of influence tactic usage and e-mail style, we used the results of word counts from a text analysis as well as the results of coder ratings of the emails. For the text analysis, we analyzed all e-mails through a text-analysis engine based on procedures set forth in previous research (Baker, 1990; Jehn & Bezrukova, 2004; Weisband 2002). To measure the usage of each influence tactic, we developed a keyword list for each of the variables based on past research and the language actually used by group members (Glaser & Strauss, 1967). To measure e-mail style, we utilized a keyword list developed by Baker (1990). The complete list of keywords used can be found in the Appendix. We then sorted the data into individual files for each member. These files were subsequently searched for the keywords using the text-analysis engine MonoConc Pro 2.0

(Barlow, 2000). Because the keywords could also occur with a negation term, such as "not," we used a Boolean search in Monoconc to identify the number of times a keyword occurred in conjunction with a negation term. This total was then subtracted from the total times the keyword was used. From this, we were able to obtain the frequencies of keywords for each construct. The keywords used for influence tactics were based on past research (e.g., Kipnis & Schmidt, 1985) and the language actually used by group members (Glaser & Strauss, 1967). To measure e-mail style, we employed the keyword list of Baker (1990).

The second method of measurement was the use of independent raters. For the coding, we utilized two coders who were both blind to the hypotheses. The coders were presented with the exact same packet of e-mails, with each e-mail containing the e-mail heading (including information such as date sent, importance, and subject) and e-mail message. Coders received verbal instructions, including a discussion of the theoretical constructs for which they were to be coding. Following this, the coders then answered as set of questions, based on a Likert scale of 1-7 (with 7 being high), for each of the e-mails. The two raters had an inter-rater agreement of 96%, demonstrating very high reliability.

The exact questions the coders used to rate the influence tactic usage and e-mail style of the sender of the e-mail are shown in the Appendix. The operationalization of these measures was based on existing influence tactic (e.g., Kipnis & Schmidt, 1985) and verbal style literature (Baker, 1990) and an initial pretest of the coder questions. In the pre-tests, we initially utilized items more similar to traditional influence tactic scales which capture more overt influence attempts (e.g., Kipnis, et al., 1980). However, in our pre-test, we found that these questions were too strong for the e-mail context, as the subtleness underlying influence tactic usage is not as visible in e-mail (Barsness & Bhappu, 2004). We therefore adapted our questions for the coders to fit the more subtle e-mail context. The Appendix contains our final items. Because our questions had to be modified to fit the e-mail context, we made a point of discussing in depth the underlying definitions of influence tactics and e-mail styles with the coders so that the coders were aware of the construct they were rating in the e-mail context.

The two methods of measurement—text analyses and independent coders—exhibited high agreement, with Cohen's kappa for rational tactics equaling .77, for soft tactics .80, for hard tactics .81, and for e-mail style .80. The final measure for each influence tactic and e-mail style variable was the standardized average of the scores from the text analysis and coder ratings.

Influence tactic consistency and participation measures. For our measure of the consistency of a member's use of a certain influence tactic, we used the coefficient of variation, and then reverse-coded it. The coefficient of variation has traditionally been used in diversity research to capture the range of diversity on a continuous variable such as age (Bedeian & Mossholder, 2000). The range was from .30 to .99. A score of .99 means a member was highly consistent.

To measure the participation level of members, we used a straight count of the e-mails sent per member.

Emergent leadership measures. For our dependent variable, emergent leadership, measures came from coding of e-mails done by independent raters blind to the hypotheses (see Appendix for questions), and from coding done by an expert rater, blind to the hypotheses, who had ethnographic experience with all the groups in our sample over time. The independent raters

rated the e-mails in the sample as described above. The expert rater rated each of the members in the organizations on the degree to which they became leaders or not, based on the expert rater's personal, first-hand knowledge of each of these groups. These two measures—independent coding of e-mails and ratings from an expert who participated in the groups—were highly related, with an inter-rater agreement (r_{wg}) of .86, and were thus averaged together. Additionally, for five of the groups, we had supplemental qualitative interview data with four members active in one or more of the unstructured groups that gave members' own opinions on who the leaders were in their group. As Buzzanell et al. (1997) noted, "Members' leadership frequently is legitimated through meetings" (p. 291). These interviews served as qualitative confirmations to our quantitative assessments of who the leaders were within the groups.

Control variables. We initially controlled for the gender and race of members. In preliminary analyses, we found that neither gender nor age significantly affected our model, so demographics were left out of ensuing analyses.

Analysis. To test our hypotheses, we used hierarchical regression analysis. To create the interaction terms, we centered our independent variable in line with the procedure of Aiken and West (1991). Because our dependent variable is the degree to which a member emerges as a leader, we analyzed our data at the individual level of analysis. Specifically, we aggregated the email level-ratings to a mean member level score (e.g., for soft tactics, a member's score would represent the average level of soft tactics used by the member across emails the member sent to the organization).

Additionally, we also investigated whether there was significant variance between the different organizations included in our sample that would call for a multi-level analysis of our data. Inter-class correlations (ICC[1]s) and corresponding F-tests indicated that there was not significant variance between organizations nor significant correlations within the organizations (all F-tests for our independent and dependent variables were non-significant, and ICC[1]s ranged from .01-.05) (Klein & Kozlowski, 2000). However, to provide a conservative test of our hypotheses, we still do control for any possible differences between organizations through the use of dummy variables representing the different organizations.

Lastly, to analyze our data, which we had collected over a period of three years, we split our data in half, looking at the effects of our independent variables during the first 1.5 years of the study on our dependent variable, leadership emergence, as coded during the last 1.5 years of the study. Emails sent during the first 1.5 years were text analyzed and coded separately from emails sent during the last 1.5 years of the study.

Results

Means, standard deviations, and correlations among the variables are shown in Table 1. The results of our hypothesis testing are presented in Table 2. In step 1, we entered the independent variables of our model. In step 2, we entered the interactions of e-mail style with the different types of influence tactics.

Variable	M	SD	1	2	3	4	5	6	
1. Hard tactics	5.00	1.53							
2. Soft tactics	4.90	1.64	.58**						
3. Rational tactics	4.91	1.43		09					
4. Tactic consistency	0.80	0.13	.28**	.43**	.24**				
5. Participation	28.00	48.39			.43**	.18			
6. E-mail style	4.91	1.35	.59**		.53**	.37**	.26**		
7. Emergent leadership	4.93	1.96	.30*	.33**	.44**	.32**	.12	.22*	

Table 1: Means, Standard Deviations, and Correlations (N = 168)

In general, influence tactic usage and participation explained between 15% and 32% of the variance in emergent leadership. Our first hypothesis proposed that soft tactic usage would be positively related to leadership emergence. As seen in Table 2, this was supported, as there was a relation between soft tactic usage and leadership emergence ($\beta = .34$, p < .05). Our second hypothesis stated that rational tactic usage would be positively related to leadership emergence. We did not find significant support for this hypothesis. Our third hypothesis predicted that hard tactic usage would be negatively related to leadership emergence. This was not supported, as there was not a significant difference between rational and hard tactic usage. We further hypothesized that members who would emerge as leaders would be consistent in their use of an influence tactic. Hypothesis 4 was marginally supported as there was a positive, marginally significant relationship between tactic consistency and emergent leadership ($\beta = .17, p < .10$). In Hypothesis 5, we proposed that e-mail participation would be positively related to leadership emergence. This was fully supported ($\beta = .21$, p < .05). In our sixth hypothesis, we proposed that e-mail style would improve the effectiveness of the different types of influence tactics. The moderation of influence tactic usage by e-mail style was only significant for soft tactics ($\beta = -$.22, p < .05). As seen in Figure 1, we found the opposite of what we predicted: soft tactics were the most effective for leadership emergence when members had weak e-mail style. For members using soft or hard tactics, there was no moderation by e-mail style.

^{*}p < .05. **p < .01.

Table 2: Summary of Hierarchical Regression Analysis for Participation, Influence Tactics, and E-mail Style Predicting Emergent Leadership Time 3

Variable	В	SEB	β
Step 1 (<i>F</i> = .41)			
Organization Dummy 1	.05	.00	02
Organization Dummy 2	.03	07	07
Organization Dummy 3	.01	07	06
Organization Dummy 4	.01	08	03
Organization Dummy 5	.01	01	02
Organization Dummy 6	.01	00	03
Organization Dummy 7	.01	01	.01
Organization Dummy 8	.00	06	05
Organization Dummy 9	.00	01	03
Step 2 $(F = 1.55^{+})$			
Participation		.21	.22*
Hard Tactics		04	05
Soft Tactics		.34	.32*
Rational Tactics		08	07
E-mail Style		32	31*
Influence Tactic Usage Consistency		.17	.14+
Step 3 ($F = 1.70*$)			
Hard Tactics X E-mail Style			.04
Soft Tactics X E-mail Style	22*		
Rational Tactics X E-mail Style Note $P^2 = 0.3$ for Stop 1: $AP^2 = 1.4$ for Stop 2			03

Note. $R^2 = .03$ for Step 1; $\Delta R^2 = .14$ for Step 2, $\Delta R^2 = .18$ for Step 3. Standardized regression coefficients are shown.

 $^{^{+}}$ p < .10. * p < .05. **p < .01.

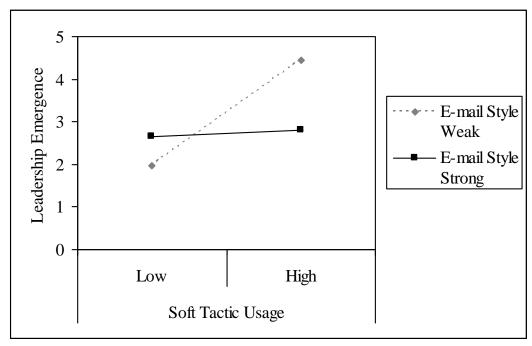


Figure 1. Interactive effect of soft tactics and e-mail style on emergent leadership.

Discussion

Given the growing occurrence of e-mail usage and virtual teams within organizations, managers must learn how to effectively manage and lead when interacting over lean mediums such as e-mail. The unique properties of computer-mediated communication technologies imply that traditional leadership behaviors have to be adapted to fit a new set of conditions, including both lean communication tools as well as unstructured environments that are often common to virtual teams. Our study's main contributions involve clarifying how members who emerge as leaders utilize influence tactics in e-mail communication, as well as examining a new conceptualization of influence tactic usage—consistency—and a moderator of influence tactic usage—e-mail style.

Soft tactics were the most positively related influence tactic to emergent leadership. In line with what we proposed, when members used soft tactics, or ingratiation, in their e-mails, they were able to increase their influence over others and attain leadership positions in their organization. Soft tactics have been shown to also increase influence in face-to-face interactions (e.g., Yukl & Tracey, 1992), but if ulterior motives underlying the tactics are exposed, they could potentially hurt the member's role in the organization. The e-mail environment may provide an ideal location for the use of soft tactics as ulterior motives are easier to conceal in lean environments, such as e-mail (c.f. Barry & Fulmer, 2004; Gordon, 1996). For example, flattery in one e-mail followed by a request in a subsequent e-mail may not be as obviously seen as ingratiation as in real life when the tone of voice someone uses to give a compliment can sometimes give away the fact that the compliment is not sincere and is only a ruse to gain compliance with a request. We do not find either hard tactics or rational tactics to be significantly related to emergent leadership. Because hard tactics are often viewed as unfriendly

(van Knippenberg & Steensma, 2003), it is not surprising the soft tactics were more effective for leadership emergence. However, the lack of an effect of rational tactics on emergent leadership is more surprising. This may have to do with the nature of the e-mail environment. Because of their lean nature, virtual environments may require a strong emphasis on relationships, and therefore, rational tactics are not as effective as soft tactics.

In terms of influence tactic consistency, we did find this to have a marginally significant effect on who became leaders in these organizations. This is in line with theory and research which has suggested that consistency may be especially important in virtual settings, where miscommunication is likely (e.g., Lea & Spears, 1992). Consistency in influence strategies may help reduce the likelihood of such miscommunication. Relatedly, consistent behavior has been shown to increase the perception that a member is fair (e.g., De Cramer, 2003) and likely to be a good leader. Therefore, when choosing an influence strategy, our results show the importance of being consistent in that chosen influence strategy.

Lastly, we examined the effect of the e-mail style of the organizational members on their influence tactic usage. We found that soft tactic usage was the most likely to positively relate to leadership emergence when members used weak e-mail style. It could be that when members write a perfectly crafted e-mail that contains a soft tactic, such as ingratiation, the potentially ulterior motives behind the usage of the soft tactic may seem more apparent. In contrast, when an e-mail does not seem to have been given extensive forethought, compliments (soft tactics) may be more believable to others. For example, a spontaneous postscript at the end of the email with a few typos that tells someone how much their idea was appreciated may feel more heartfelt than a seemingly very deliberately given compliment. This finding extends past research on influence tactics (Barry & Shapiro, 1992; Farmer et al., 1997; Kipnis & Schmidt, 1985) by helping identify a strategy that members employing soft tactics can use to make soft tactics seem more credible.

Limitations and Future Research

While a strength of our study is the specialized political-organizing setting we used to examine leadership in e-mail communication, this can also be considered a limitation. Our research might not hold in other more traditional organizational settings. Future research should examine if these findings can also be generalized to organizations with different organizational goals.

Future research should also find ways to further refine the aspects of 'good' e-mail style and the specific strategies leaders employ to enrich lean mediums to make the use of complex influence tactics, such as soft tactics, possible. While past research has examined aspects of strong verbal style (e.g., Baker, 1990), a clear picture of strong verbal style in lean communication mediums is not yet available. In order to truly understand the processes underlying influence attempts in lean mediums, a thorough understanding of what exactly constitutes strong e-mail style needs to be reached.

Managerial Implications

The results of this study suggest several important implications for organizational members when communicating over e-mail. In sum, our research suggests that to be a successful leader when using e-mail, members should use soft tactics, such as friendly

comments and polite requests, to influence others; they should be consistent in their influence strategy; and members should participate in e-mail exchanges as often as possible. These findings offer important implications for managers. For example, when working in a virtual team, making your presence known through active participation in e-mail exchanges is critical in gaining a leadership role within the team. Relatedly, consistency in behavior is also critical when engaging in these e-mail exchanges, as misunderstandings are common in virtual settings, and consistent behavior may help others more reliably interpret others' words and actions. When members know that a member tends to always give feedback in a, for example, rational manner, they may be better able to interpret the meaning of comments than if the member were not always consistent. By being able to reliably predict a member's style, other members may be less likely to read incorrect meanings into e-mails from the member, and the member is therefore better able to become a leader in the virtual organization.

Additionally, we find that employees should be careful that when they use soft tactics, they do not use strong e-mail style. Perfectly written emails may make compliments seem overly thought out and insincere, whereas more spontaneous soft tactic usage may be taken more to heart by other organizational members. While it may be a step too far to train employees to write e-mails with weak e-mail style, organizational trainings could emphasize the value of heart-felt communication in e-mail that makes clear that employees value the relationships with others. Especially when communicating in virtual environments, making sure employees pay attention to the affective natures of their working relationships is critical.

In the modern age of electronic communication and virtual collaboration, managers must realize that traditional leadership behaviors need to be adapted to the changing conditions. The 21st century is calling for a new sort of manager—a manager that can collaborate with colleagues around the world and make the most out of the lean communication mediums that are necessary for the creation of virtual teams. By understanding the situational effects of communication mediums on influence tactic usage and effectiveness and the effects of working in unstructured teams, managers can use computer-mediated mediums to further enhance their status in their organizations.

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References

- Aiken, L., & West, S. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Albright, L., & Forziati, C. (1995). Cross-situational consistency and perceptual accuracy in leadership. *Personality and Social Psychology Bulletin*, *21*, 1269-1276.
- Baker, D. C. (1990). A qualitative and quantitative analysis of verbal style and the elimination of potential leaders in small groups. *Communication Quarterly*, *38*, 13-26.
- Bales, R. (1950). Interaction process analysis. Reading, MA: Addison-Wesley.
- Barlow, M. (2000). Concordance with MonoConc Pro 2.0. Houston, TX: Athelstan.
- Barry, B., & Fulmer, I. S. (2004). The medium and the message: The adaptive use of communication media in dyadic influence. *Academy of Management Review*, 29, 272-292.
- Barry, B. & Shapiro, D. L. (1992). Influence tactics in combination The interactive effects of soft versus hard tactics and rational exchange. *Journal of Applied Social Psychology*, 22, 1429-1441.
- Barsness, Z. I., & Bhappu, A. D. (2004). At the crossroads of technology and culture: Social influence, information sharing, and sense-making processes during negotiations. M. Gelfand, & J. Brett (Eds.), *Negotiation: Theoretical advances and cross-cultural perspectives* (pp. 350-373). Palo Alto, CA: Stanford University Press.
- Bass, B. M. (1949). An analysis of the leaderless group discussion. *Journal of Applied Psychology*, *33*, 527-533.
- Bass, B. M. (1985). Leadership and performance beyond expectations. New York: Free Press.
- Bedeian, A. G., & Mossholder, K. W. (2000). On the use of coefficient of variation as a measure of diversity. *Organizational Research Methods*, *3*, 285-297.
- Buzzanell, P., Ellingson, L., Silvio, C., Pasch, V., Dale, B., Mauro, G., Smith, E., Weir, N., & Martin, C. (1997). Leadership processes in alternative organizations: Invitational and dramaturgical leadership. *Communication Studies*, 48, 285-310.
- Daft, R. L., & Lengel, R. H. (1984). Information richness: A new approach to managerial information processing and organizational design. In B. Staw & L. L. Cummings (Eds.), *Research in organizational behavior*, vol. 6, (pp. 191-233). Greenwich, CT: JAI Press.
- Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science*, 32, 544-571.
- De Cramer, D. (2003). Why inconsistent leadership is regarded as procedurally unfair: the importance of social self-esteem concerns. *European Journal of Social Psychology*, *33*, 535-550.
- Driskell, J. E., Radtke, P. H., & Salas, E. (2003). Virtual teams: Effects of technological mediation on team performance. *Group Dynamics: Theory, Research, and Practice*, 7, 297-323.
- Farmer, S. M., Maslyn, J. M., Fedor, D. B., & Goodman, J. S. (1997). Putting upward influence strategies in context. *Journal of Organizational Behavior*, 18, 17-42.
- Finholt, T. A., Sproull, L., & Kiesler, S. (2002). Outsides on the Inside: Sharing Know-How Across Space and Time. In P. Hinds & S. Kiesler (Eds.), *Distributed Work* (pp. 357-380). Cambridge, MA: MIT Press.
- Friedman, R. A. & Currall, S. C. (2003). Conflict escalation: Dispute exacerbating elements of e-mail communication. *Human Relations*, *56*, 1325-47.

- Garton, L., & Wellman, B. (1995). Social impacts of electronic mail in organizations: A review of research literature. *Communication Yearbook*, *18*, 434-453.
- Geier, J.G. (1967). A trait approach to the study of leadership in small groups. *Journal of Communication*, 17(4), 316-323.
- Glaser, B., & Strauss, A. L. (1967). *The discovery of grounded theory*. Chicago: Aldine Publishing Co.
- Gordon, R. A. (1996). Impact of ingratiation on judgments and evaluations: A meta-analytic investigation. *Journal of Personality and Social Psychology*, 71, 54-70.
- Hancock, J. T., & Dunham, P. J. (2001). Impression formation in computer-mediated communication revisited: An analysis of the breadth and intensity of impressions. *Communication Research*, 28, 325-347.
- Higgins, C. A., Judge, T. A., & Ferris, G. R. (2003). Influence tactics and work outcomes: A meta-analysis. *Journal of Organizational Behavior*, 24, 89-106.
- Hollander, E. P. (1958). Conformity, status, and idiosyncrasy credit. *Psychological Review*, 65, 117-127.
- Hollander, E. P. (1974). Processes of leadership emergence. *Journal of Contemporary Business*, *Autumn*, 19-33.
- Jehn, K. A., & Bezrukova, K. (2004). A field study of group diversity, workgroup context, and performance. *Journal of Organizational Behavior*, 25, 1-27.
- Jones, E.E. (1964). *Ingratiation: A social psychological analysis*. New York: Appleton-Century-Crofts.
- Kelman, H. C. (1961). Processes of opinion change. Public Opinion Quarterly, 25, 57-78.
- Kipnis, D., & Schmidt, S. M. (1985, April). The language of persuasion. *Psychology Today*, 40-46.
- Kipnis, D., & Schmidt, S. M. (1988). Upward influence styles: Relationship with performance evaluations, salary, and stress. *Administrative Science Quarterly*, *33*, 528-542.
- Kipnis, D., Schmidt, S. M., & Wilkinson, I. (1980). Intraorganizational influence tactics: Explorations in getting one's way. *Journal of Applied Psychology*, 65, 440-452.
- Klein, K. J., & Kozlowski, S. W. J. (2000). *Multilevel theory research and methods in organizations*. San Francisco: Jossey-Bass, Inc.
- Kochan, T. A., Schmidt, S. S., & De Cotiis, T. A. (1975). Superior-subordinate relations: Leadership and headship. *Human Relations*, 28, 279-294.
- Lashbrook, V. J. (1975). Leadership emergence and source valence: Concepts in support of interaction theory and measurement. *Human Communication Research*, 1(4), 308-315.
- Lea, M., & Spears, R. (1992). Paralanguage and social perception in computer-mediated communication. *Journal of Organizational Computing*, 2, 321-341.
- Lee, T. W. (1999). *Using qualitative methods in organizational research*. Thousand Oaks, CA: Sage.
- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the fairness in social relationships. In K. Gergen, M. Greenberg, & R. Willis (Eds.), *Social exchange theory*, (pp. 27-55). New York: Plenum.
- Loperfido, A. M. (1993). Electronic mail as a media choice for managers. *The Electronic Journal of Communication* [Online], 3.
- Lord, R. G., DeVader, C. L., & Alliger, G. M. (1986). A meta-analysis of the relation between personality traits and leader perceptions: An application of validity generalization procedure. *Journal of Applied Psychology*, 71, 402-410.

- McFarland, L. A., Ryan, A. M., & Kriska, S. D. (2002). Field study investigation of applicant use of influence tactics in a selection interview. *The Journal of Psychology*, *136*, 383-398.
- Miller, G. R. (1983). On various ways of skinning symbolic cats: recent research on persuasive message strategies. *Journal of Language and Social Psychology*, 2, 123-140.
- Morris, C. G., & Hackman, J. R. (1969). Behavioral correlates of perceived leadership. *Journal of Personality and Social Psychology*, 13, 350-361.
- Mullen, B., Salas, E., & Driskell, J. E. (1989). Salience, motivation and artifact as contributions to the relation between participation rate and leadership. *Journal of Experimental Social Psychology*, 25, 545-559.
- Pfeffer, J. (1981). Management as symbolic action: The creation and maintenance of organizational paradigms. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior*, vol. 3 (pp. 1-52). Greenwich, CT: JAI Press.
- Phillips, S. R., & Eisenberg, E. M. (1993). Strategic uses of electronic mail in organizations. *The Electronic Journal of Communication*, 3(2).
- Postmes, T., Spears, R., & Lea, M. (1998). Breaching or building boundaries? SIDE-effects of computer-mediated communication. *Communication Research*, 25, 689-715.
- Richardsen, A. M., & Piper, W. E. (1986). Leader style, leader consistency, and participant personality effects on learning in small groups. *Human Relations*, *39*, 817-836.
- Riggio, R. E. (2003). The role of social and emotional communication skills in leadership emergence and effectiveness. *Group Dynamics: Theory, Research, and Practice*, 7, 83-103.
- Romm, C. T., & Pliskin, N. (1997). Toward a virtual politicking model. *Communications of the ACM*, 40(11), 95-100.
- Schilit, W. K., & Locke, E. A. (1982). A study of upward influence in organizations. *Administrative Science Quarterly*, 27, 304-316.
- Schwarzwald, J., Koslowsky, M., & Ochana-Levin, T. (2004). Usage of and compliance with power tactics in routine versus nonroutine work settings. *Journal of Business and Psychology*, 18, 385-402.
- Somech, A., & Drach-Zahavy, A. (2002). Relative power and influence strategy: The effects of agent/target organizational power on superiors' choices of influence strategies. *Journal of Organizational Behavior*, 23, 167-179.
- Sorrentino, R. M., & Boutillier, R. G. (1975). The effect of quantity and quality of verbal interaction on ratings of leadership ability. *Journal of Experimental Social Psychology*, 11, 403-411.
- Sorrentino, R. M., & Field, N. (1986). Emergent leadership over time: The functional value of positive motivation. *Journal of Personality and Social Psychology*, *50*, 1091-1099.
- Stein, R. T., & Heller, T. (1979). An empirical analysis of the correlations between leadership status and participation rates reported in the literature. *Journal of Personality and Social Psychology*, *37*, 1993-2002.
- Tanis, M. & Postmes, T. (2003, December). Social cues and impression formation. *Journal of Communication*, 53(4), 676-693.
- Tedeschi, J. T., & Melburg, V. (1984). Impression management and influence in organizations. In S. B. Bacharach & E. J. Lawler (Eds.), *Research in the sociology of organizations*, vol. 3, (pp. 31-58). Greenwich, NJ: JAI Press.

- Van den Bos, K., Vermunt, R., & Wilke, H. A. M. (1996). The consistency rule and the voice effect: The influence of expectations on procedural fairness judgments and performance. *European Journal of Social Psychology*, 74, 1493-1503.
- Van Knippengerg, B., & Steensma, H. (2003). Future interaction expectation and the use of soft and hard influence tactics. *Applied Psychology: An International Review*, 52, 55-67.
- Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. *Communication Research*, 23, 3-43.
- Watt, J. D. (1993). The impact of the frequency of ingratiation on the performance of bank personnel. *The Journal of Psychology*, *127*, 171-177.
- Weisband, S. (2002). Maintaining awareness in distributed team collaboration: Implications for leadership and performance. In P. Hinds & S. Kiesler (Eds.), *Distributed work*, (pp. 311-333). Cambridge, MA: MIT Press.
- Weisband, S. P., Schneider, S. K. & Connolly, T. (1995). Computer-mediated communication and social information Status salience and status differences. *Academy of Management Journal*, *38*, 1124-1151.
- Wortman, C. B., & Linsenmeier, J. A. W. (1977). Interpersonal attraction and techniques of ingratiation in organizational settings. In B. Staw & G. Salancik (Eds.), *New directions in organizational behavior*, 133-178. Malabar, FL: Robert E. Krieger.
- Yukl, G. & Tracey, J. B. (1992). Consequences of influence tactics used with subordinates, peers, and the boss. *Journal of Applied Psychology*, 77, 525-535.
- Zigurs, I. (2002). Leadership in virtual teams: Oxymoron or opportunity? *Organizational Dynamics*, *31*(4), 339-351.

Appendix

Scale Summary

Rational Tactics ($\alpha = .77$)

Coder Questions:

- 1. Does this e-mail seem to be **sharing information** with the group?
- 2. Does this e-mail seem to be providing **important information** for the group?
- 3. Does this e-mail seem to be **providing knowledge** for the group?

Interrater reliability = .95

Keywords: event, action, call, forward, www

Hard Tactics ($\alpha = .74$)

Coder Questions:

- 1. Does this person seem to be **giving a direction**/instruction/order?
- 2. Is this person telling others what to do?

Interrater reliability = .93

Keywords: now, must, have to, cc

Soft Tactics ($\alpha = .79$)

Coder Questions:

- 1. Does this person sound like he/she is **trying to please** someone?
- 2. Does this person sound like he/she wants the sender(s) to like him/her?

Interrater reliability = .90

Keywords: please, just, you, thank (you)

E-mail Style ($\alpha = .88$)

Coder Questions:

- 1. Does this person try to make himself/herself **understood** by others?
- 2. This e-mail is very **clear**.
- 3. Does this person have **good language skills**?

Interrater reliability = .95

Keywords: well, like, mean, you know, maybe, perhaps, would, could, might, something, somewhere, interesting (Baker, 1990)

Leadership ($\alpha = .87$)

Coder Questions:

- 1. Do you think this person is a **leader** in this group?
- 2. Does this person seem to have a **lot of influence** in this group?

Interrater reliability = .98

Ethnographic rating: Based on expert rater's personal experience with group members