

5-2008

The Importance of Normative Social Influence and Similarity of Media Preferences on Group Meeting Outcomes: A Preliminary Result

Zixiu Guo

The University of New South Wales, z.guo@unsw.edu.au

Felix B. Tan

AUT University, felix.tan@aut.ac.nz

Tim Turner

The University of New South Wales, t.turner@adfa.edu.au

Huizhong Xu

Fudan University, hzxu@fudan.edu.cn

Follow this and additional works at: <http://aisel.aisnet.org/confirm2008>

Recommended Citation

Guo, Zixiu; Tan, Felix B.; Turner, Tim; and Xu, Huizhong, "The Importance of Normative Social Influence and Similarity of Media Preferences on Group Meeting Outcomes: A Preliminary Result" (2008). *CONF-IRM 2008 Proceedings*. 55.
<http://aisel.aisnet.org/confirm2008/55>

This material is brought to you by the International Conference on Information Resources Management (CONF-IRM) at AIS Electronic Library (AISeL). It has been accepted for inclusion in CONF-IRM 2008 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

80F. The Importance of Normative Social Influence and Similarity of Media Preferences on Group Meeting Outcomes: A Preliminary Result

Zixiu Guo
The University of New South Wales
z.guo@unsw.edu.au

Felix B. Tan
AUT University
felix.tan@aut.ac.nz

Tim Turner
ADFA@ The University of New South Wales
tim.turner@adfa.edu.au

Huizhong Xu
Fudan University
hzxu@fudan.edu.cn

Abstract

Motivated by a desire to extend the Social Influence Model of Technology Use, this paper empirically examines the impact of normative social influence on group media preference patterns and group meeting outcomes in a setting where established groups voluntarily used various communication media over a three-month software development project period. The overall results suggest that conformity to group norms is positively associated with increased similarity of group media preferences, which in turn is positively associated with increased group meeting outcomes. The paper concludes with a discussion of the importance and implications of understanding normative social influence on technology use and meeting outcomes.

Keywords:

Normative social influence, group cohesion, similarity of group media preference, group meeting outcomes

1. Introduction

More than a decade ago, Fulk and her colleagues (Fulk, Schmitz, & Steinfield, 1990; Fulk, Steinfield, Schmitz, & Power, 1987) developed “The Social Influence Model of Technology Use” to explain the accumulating body of anomalous findings in media richness theory, especially for the new communication technologies. Drawing on premises from Social Information Processing (SIP) Theory (Salancik & Pfeffer, 1978), Social Learning Theory (Bandura, 1986), and Symbolic Interactionism (Mead, 1934), the social influence model posits that social forces such as work group norms, and co-workers’ and supervisors’ attitudes and behaviors will influence individuals’ perceptions and choices of new media. It focuses on the role of social information in order to explain media usage patterns. Social influence, such as management’s and co-workers’ attitudes and behavior, can positively or negatively influence individuals’ media attitudes and choice. Even media richness, which is considered to be an objective variable in media richness theory, is viewed as a perception that can vary and be influenced by social factors. The net effect is to produce “a similar pattern of media attitude and use behavior within groups, even across

tasks with different communication requirements,” and “different patterns of media usage across groups” (Fulk et al., 1987, p542-543).

While the social influence model of technology use has found empirical support, with perceptions and use of email being influenced by variables such as co-workers’ perceptions of and use of the medium (Fulk, 1993; Fulk & Boyd, 1991; Schmitz & Fulk, 1991; Soe & Markus, 1993; Webster & Trevino, 1995), there are some issues arising from this model. Four types of characteristics of social influence on both media perceptions and media uses have been considered in this model: (1) direct statements by co-workers in the workplace; (2) vicarious learning; (3) norms for how media should be evaluated and used; and (4) social definitions of rationality. Their reasoning implies that the social environment has two general effects: first, the context may make certain information or aspects of the situation salient, thereby influencing perception and interpretation (Taylor & Fiske, 1978); second, there may be a direct construction of meaning through exposure to the expressed attitudes of others (Festinger, 1954). Both of these contextual effects are likely to occur when informational cues act to make particular features of the task salient and when there is consistency among the cues received (O’Reilly III & Caldwell, 1985). Under these circumstances, that are saliency and consistency of cues, there are actually two different mechanisms, informational social influence and normative social influence, accounting for effects of context or the environment on individual behavior (Moscovici, 1976; Pfeffer, 1982). However, previous investigations of the social influence on media choice have concentrated almost exclusively on informational social influence and ignored the impacts of normative social influence. Although Fulk (1993) and Yoo et al. (2001) argue that members’ attraction to the group, called group cohesion, influences work group technology attitudes, social presence, task participation, and group consensus, overall this premise, as articulated in relation to normative social influence, has not been discussed explicitly. This creates a void in the literature. There is, therefore, a need to examine the impacts of normative social influence on media perception and choice.

In addition, our research intends to address two criticisms of extant small group research. First, it has been argued that the use of ad hoc groups created specifically for laboratory experiments—common in much group research—can bias research findings with respect to the relationship of system use and outcomes. This suggests that the use of established groups faced with familiar tasks would be critical in obtaining results that may generalize to typical work settings. Second, most research on the effects of CMC use has been performed in controlled settings, and many use the method of comparing results when groups meet with and without the technology. This feature has deviated from actual work conditions, where information technology is used as a supplement to, rather than a substitute for, other modes of interaction. Straus (1997) found that interacting by CMC alone is inappropriate for both the instrumental and expressive functions of small groups, particularly when performing tasks that require consensus.

This study examines how similar group media preference behavior is formulated and how such similarity of group media preference impacts group meeting outcomes. This study will go beyond prior research by incorporating two methodological concerns mentioned above into its research design - using established groups facing meaningful tasks, communicating via all media available within groups, and collecting data at the end of a three-month software development group project. This results reported in this paper is derived from our pilot study. The next section illustrates our research framework. Then we discuss relevant theoretical perspectives and lay out our research hypotheses. This is followed by a brief description of the research methods. Next, the data analysis results are

reported. Finally, the paper concludes with a discussion that focuses on interpreting the results and on examining the theoretical and practical implications of the study.

2. Research Framework

Figure 1 depicts our research model. It suggests that, as group members interact with each other, they will develop perceptions about the medium with which they are working. Such interaction will also influence the way group members communicate with each other. Ultimately, such interaction processes will have an impact on group meeting outcomes.

There are two theoretical perspectives relevant to the above framework. The first one focuses on the social influence process on individuals' attitudes and behaviors. The second one extends the social impact of group norms on individual behavior to group meeting outcomes. The discussion below develops these perspectives further.



Figure 1: Research Model

3. Theoretical Foundation and Hypotheses Development

3.1 Normative Social Influence and Similarity of Group Media Preferences

According to Deutsch and Gerard (1955), normative social influence is defined as “an influence to conform with the positive expectations of another” (p.303). Normative social influence is formed based on the pressure or sanctions applied by group members to produce conformity in terms of attitude and behaviour. An individual complies with group norms, and in turn, he or she achieves membership and the social support that such membership affords, as well as goal attainment that can occur only through group actions or group membership. It can be strengthened by cohesion which serves to attract group members. The evidence for the impact of normative social influence on individual attitudes and behavior is substantial, ranging from the early study of Festinger et al. (1952) and Kaplan and Miller (1987) to more recent empirical tests in CMC systems (Lee & Nass, 2002; Postmes, Spears, & Lea, 2000).

Because normative social influence will affect individual beliefs about the nature of jobs and work, about what attitudes are appropriate, and indeed, about how people ought to behave (Pfeffer, 1982), we would expect that media choice behavior would be constrained by each individual's existing socially-constructed “how to's” for interaction with other individuals in the group. Within workgroups, there may emerge a consensus about what are the important features of the work environment regarding media choice; in this manner, group members may act to make salient certain aspects of media choice and downplay others (O'Reilly III & Caldwell, 1985). This may lead to media being preferred similarly

within groups and differently across groups. In other words, conformity to group norms may lead to similar media preferences within groups and different across groups.

One index of this conformity pressure may be group cohesion (O'Reilly III & Caldwell, 1985). Group cohesion is defined as "members' attraction to the group" (Hogg, 1992, p.30). In Social Information Processing terms (Salancik & Pfeffer, 1978), this pressure for conformity may reduce the variance in members' views and result in greater consistency of attitudes and behaviors. Hence, this study uses group cohesion as the surrogate measure of normative social influence.

Researchers have frequently considered group cohesion to be an important component of group process and performance (Gully, Devine, & Whitney, 1995). Festinger et al (1952) found that highly cohesive groups exerted more pressure on members towards compliance with group norms than did less cohesive groups. Yoo et al. (2001) found that group cohesion has a significantly greater influence on social presence and task participation than media condition. We argue that the desirability to maintain their membership in the group calls attention to the potential willingness of the individual to respond to group communication norms, which would lead to similar media preferences within groups. Such similarity can be strengthened by cohesion that serves to attract group members. Accordingly,

Hypothesis 1: A higher level of group cohesion will be positively associated with increased similarity of group media preferences.

3.2 Similarity of Group Media Preferences and Group Meeting Outcomes

Fulk et al. (1991) argue that the study of the consequence of media choice could have an additional benefit of helping to answer the question of why study media choice. This paper goes beyond prior studies and examines the impact of the similarity of group media preferences on group meeting outcomes.

Groups exert pressure on individuals to conform to central attitudes and behaviors with norms acting as a mechanism to produce a homogeneity of values (Santee & Jackson, 1977). The higher the pressure for conformity, the greater the consistency of attitudes and behaviors, and the higher the satisfaction with job outcomes (O'Reilly III & Caldwell, 1985). Postmes and Lea (2000) demonstrated that the pressure to conform found in groups is a mechanism that, in most situations, regulates group interactions productively and which facilitates group performance. Based on Festinger's social comparison theory (Festinger, 1954), Paulus and Dzindolet (1993) found that group members tend to compare with others to reduce uncertainty about their abilities and opinions. They were motivated to match their performance with that of others and such matching process stimulated groups to reach fairly high levels of performance.

Consensus forms the basis of normative regulation of behavior and thereby sets the standard of, and expectations for, group members' behavior (Postmes & Lea, 2000). Thus, it seems reasonable to expect that groups that emerge with highly similar preferred media for communication will be more productive than groups with less similar preferred media for communication. Accordingly,

H2: A higher level of similarity of group media preference will be positively associated with a higher level of group meeting outcomes.

4. Research Method

In order to address the design issues discussed earlier, our research involved 33 established groups working on a meaningful software development project with all available communication media over a three-month period.

4.1 Samples and Data Collection

The subjects for the study were 165 first year postgraduate students taking classes in Information System courses at the time of this study. Each student was administratively assigned to a team of five that remained fixed for the one-semester (three-month) duration of this study. The project involved the first three phases of a computerised hotel information system development: requirement specification, feasibility analysis, and logical design. Since students performed the same project, the potential influence of the complexity of the project was removed. A questionnaire was administered in paper format at the end of the semester. The students were instructed to respond to all survey items with respect to their fixed team for the semester. Among the 165 participants, 69% were male, and over 65% of them aged 21-29. The average team working experience was 3.7 years.

The latent constructs used in this study were all measured using the individual member perceptions of the respective group activities. Data were then averaged across group members before testing group-level hypotheses.

4.2 Measures

We used items that had been validated in prior research. The constructs “group cohesion” and “group meeting outcomes” were measured with reflective items while the construct “similarity of group media preference” was measured with formative items. For reflective items, all items were viewed as parallel measures capturing the same construct of interest (Chin, 1998). In the case of formative measures, all item measures can be independent of one another since they are viewed as items that create the “emerging factor” (Chin, 1998).

Measures of group cohesion were borrowed from Evans and Jarvis' (1986) Group Attitude Scale (GAS). Group meeting outcomes are a composite construct that include group decision quality (Gouran, Brown, & Henry, 1978), decision process satisfaction, and decision satisfaction (Green & Taber, 1980). All these measures were phrased as questions on a seven-point Likert scales, from 1 = strongly disagree to 7 = strongly agree.

Similarity of group media preferences was measured formatively using the following available media options: face-to-face, telephone, email, Short Messaging Service (SMS), and Instant Messaging (IM). In order to measure similarity of preferences for each of these media at group level, we firstly asked all respondents to specify their rankings of preferred media when they communicate with their group members and instructors to accomplish each of the eight communication activities that were used to communicate with their group members and their instructors. These communication activities were originally developed by D'Ambra and Rice (1994) to capture daily organizational communication activities and have been used in previous media studies (e.g., Guo, 2002; Rice, D'Ambra, & More, 1998) and have been rephrased to fit the university context. For each communication task, media preference was generated by asking participants to choose from the most preferred medium to the least preferred medium on a 5-point equal interval scale ranging from 1=least preferred medium to 5= most preferred medium (Straub & Karahanna, 1998; Straub, 1994). Thus the higher the number, the more likely the medium was to be chosen. Next, following the procedures of Wagner et al. (1984), for each medium, we used the Euclidean

distance measure to measure an individual's similarity of medium preference from the others in the group.

$$\left[\sum_{j=1}^n \frac{(S_i - S_j)^2}{n} \right]^{1/2}$$

Where S_i is the mean medium preference for individual i , and S_j represents the mean medium preference of the j th member in a group of size n . This measure is a network analogue for representing social similarity (Wagner et al., 1984), which directly reflects the absolute distance of each individual person from every other individual in a group. Based on this individual level measure of media preference similarity, similarity of group media preference was obtained by using the coefficient of variation based on individual distance measures (standard deviation divided by the mean) (Wagner et al., 1984). A higher score indicates that group has a lower similarity in medium preference. We calculated this group-level measure for each of the five available media.

4.3 Data Analysis

The analysis of the data was done in a holistic manner using partial least squares (PLS). Among the many benefits of structural equation modelling tools, compared with traditional statistical techniques, PLS has its capacity to estimate simultaneously both the structural component and the measurement component (Gefen, Straub, & Boudreau, 2000). Compared with other structural equation models, PLS does not require a large sample size. Furthermore, PLS is more suitable when the objective is causal predictive testing, rather than testing an entire theory (Chin, 1998). Another distinctive feature of PLS is that it allows links between the measurement model and the latent constructs to be considered as either reflective or formative (Chin & Gopal, 1995). Given that the model presented in this study has not been tested before and considering the difficulty of recruiting the large sample size, as well as the formative nature of some of the measures used in this model, we used PLS-graph version 3.0 to analyse our model.

5. Results

In order to ensure our conclusion on structural relationship is drawn from a set of measurement instruments with desirable psychometric properties, we followed a two-step procedure to analyse our model. First the measurement model was assessed and then the structural model was tested.

5.1 Measurement Model

In evaluating the reflective measurement models, we examined the individual item reliability by looking at the construct loadings, internal consistency which was measured using composite reliability, and the average variance extracted (AVE). Table 1 shows the result. For all constructs with multiple measures, all loadings are significant at the .01 level and above the recommended .7 parameter value (Chin, 1998). Table 1 shows that all reliabilities are greater than .70 and average variance extracted to be above .50 recommended level (Chin, 1998). Based on the criteria mentioned above, the reflective measures of the constructs in this study had adequate convergent validity.

The discriminant validity of the measurement model was assured by looking at the cross-loadings. They are obtained by correlating the component scores of each latent variable with both their respective block of indicators and all other items that are included in the model (Chin, 1998). In this study, the loadings of indicators for that particular construct

were all higher than the other indicators used to measure the other constructs (Chin, 1998). Taking together, this implies that this study exhibited discriminant validity and acceptable psychometric properties.

For the formative measures, they are weighted according to their relative importance in forming the construct. The weights allow us to determine the extent to which each indicator contributed to the development of the construct (Sambamurthy & Chin, 1994). Table 1 shows the weights for all formative indicators of similarity of group media preference construct. Among the formative indicators of similarity of group media preference, data in Table 1 confirm that similarity of face-to-face preference, similarity of telephone preference, similarity of email preference, and similarity of IM preference were all influential factors in forming similarity of group media preference. However, the similarity of preferring SMS contributed little to the similarity of group media preference.

Factor	Variable	Weight	Loading	t-value
Group Cohesion Internal Consistency: 0.922 AVE: 0.747	COHE1		0.838	14.433
	COHE2		0.898	41.185
	COHE3		0.840	16.287
	COHE4		0.878	16.478
Decision Quality Internal Consistency: 0.959 AVE: 0.854	DQ1		0.926	28.068
	DQ2		0.919	28.431
	DQ3		0.920	47.586
	DQ4		0.931	35.614
Decision Process Satisfaction Internal Consistency: 0.965 AVE: 0.901	DPS1		0.951	45.722
	DPS2		0.949	33.294
	DPS3		0.948	51.256
Decision Satisfaction Internal Consistency: 0.965 AVE: 0.824	DS1		0.965	56.423
	DS2		0.931	44.590
	DS3		0.919	22.040
	DS4		0.923	28.587
Similarity of Group Media Preferences	Similarity of Face-to-face Preference	0.317		1.892
	Similarity of Telephone Preference	0.426		2.621
	Similarity of Email Preference	0.455		3.344
	Similarity of SMS Preference	0.029		0.213 (n.s.)
	Similarity of IM Preference	0.347		2.457

Table 1: Construct Weights and Loadings, Internal Consistency, and Average Variance Extracted

5.2 Structural Model

Having confirmed the psychometric properties of the scales in our model, the next step was to assess the explanatory power of the entire model on similarity of group media preference and meeting outcomes as well as the predictive power of the independent variable and mediating variable. Paths in this model are interpreted as standardized regression weights and the loadings on each construct as loadings in principal component analyses. A

bootstrapping procedure with replacement using 500 subsamples was used to estimate the statistical significance of the parameter estimates. A summary of these results is presented in Figure 2.

The analysis shows that group cohesion accounts for 61.3 percent of the variance in similarity of group media preferences. The relationship between group cohesion and similarity of media preferences is statistically significant at the .01 level ($\beta=-.783$, $t=13.022$), indicating that the higher the level of group cohesion, the more similar group media preferences are, supporting hypothesis 1.

The R^2 of .738 for group meeting outcomes indicates that the two external factors (group cohesion and similarity of group media preferences) accounted for 73.8% of the variance of the construct, group meeting outcomes. The R^2 indicates the predictive power of this model, and suggests that there is a significant combined effect of all independent variables on the dependent variable in this operational model. The relationship between similarity of group media preferences and group meeting outcomes is statistically significant at the .01 level ($\beta=-.348$, $t=2.321$). This denotes that the more similar group media preferences are, the higher the group meeting outcomes, supporting hypothesis 2.

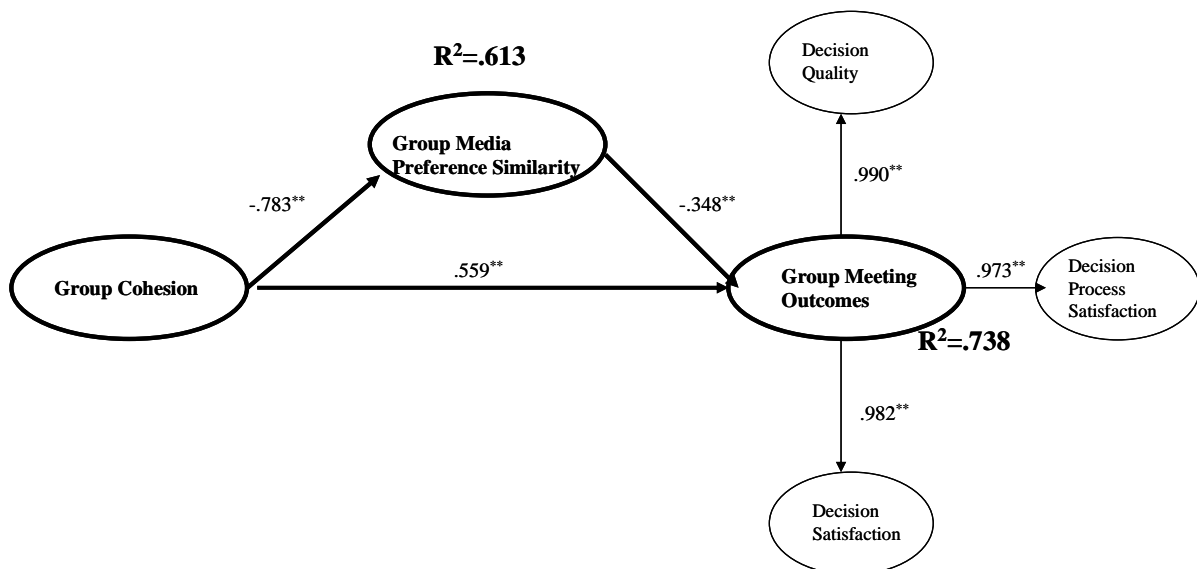


Figure 2: Structural Model

The hypothesized model presented in Figure 1 represents our best theoretical predictions of the relationships between the variables of interest to this study. Of most interest in this study are the relationships between similarity of group media preferences and the other variables in the model. In order to evaluate the relative impact of similarity of group media preferences on the relationship between group cohesion and group meeting outcomes, we compared the change in their R^2 values when similarity of group media preferences is removed from the model, as recommended by Chin (1998). This difference in R^2 values allows us to examine the substantive impact of adding similarity of group media preferences to the model. This is a good indicator of its substantive impact since it provides an explicit comparison of R^2 values generated from models with and without the mediating variable in question (Mathieson, Peacock, & Chin, 2001). More specifically, the effect size can be calculated as

$$f^2 = (R^2_{\text{full}} - R^2_{\text{excluded}}) / (1 - R^2_{\text{full}})$$

Cohen (1988) suggests 0.02, 0.15, and 0.35 as operational definitions of small, medium, and large effect sizes respectively. Based on the formula, similarity of group media preferences with an effect size of 0.18 has a substantial influence on group meeting outcomes.

6. Discussion and Conclusion

This study demonstrates that normative social influence plays an important role in group interactions and meeting outcomes. The empirical results suggest that we can extend the social influence model of technology use by including normative social influence, group members' media preferences and their impact on group meeting outcomes, in an effort to better understand why some groups succeed to a greater extent than others.

By studying established groups operating in their natural setting, rather than ad hoc groups formed solely for experimental purposes, we were able to examine the relationship of groups themselves, such as group cohesion, with their media preferences and group meeting outcomes. The group cohesion measure would have little value or meaning for a temporary group, and our setting has permitted us not only to validate the measure, but also to empirically confirm its potential importance in the study of groups. Furthermore, the present study findings indicate that by applying group norms about media preference, work groups may alter a priori differences between groups and individuals into consistent behavior, which in turn may affect group members' perceptions of the technology used and group meeting outcomes.

A limitation of this study is the use of student sample and its implications for the generalizability of the results. Students may have less experience in working with group members. However, because the students in this study were engaged in naturally occurring projects and using all available media that support their day-to-day collaboration on projects assigned by the lecturers, we believe the generalization is less of an issue. When people are engaged in a task that is meaningful to them, an accurate description of participants' judgements is more likely (Fredrickson & Mitchell, 1984).

Integrating the theory of normative social influence with similarity of group media preferences is a first step toward a better understanding of how groups can work more effectively. Future study should continue to explore the dynamic nature of group work in order to increase the variance explained in the model. The use of teams is an increasingly prevalent phenomenon in organizations and information technologies designed to support team work is one way organizations attempt to improve the group effectiveness.

References

- Bandura, A. *Social Foundations of Thought and Action: A social cognitive theory* Prentice-Hall, Englewood Cliffs, NJ, 1986.
- Chin, W.W. "The partial least squares approach for structural equation modeling," in: *Modern Methods for Business Research*, G.A. Marcoulides (ed.), Lawrence Erlbaum Associates, Hillsdale NJ, 1998, pp. 295-336.
- Chin, W.W., and Gopal, A. "Adoption intention in GSS: Importance of beliefs," *Database Advances* (26:2&3) 1995, pp 42-64.
- Cohen, J. *Statistical Power Analysis for the Behavioral Sciences* Erlbaum, Hillsdale, NJ, 1988.

- D'Ambra, J., and Rice, R.E. "Multimethod approaches for the study of computer-mediated communication equivocality, and media selection," *IEEE Transactions on Professional Communication* (37:4) 1994, pp 231-239.
- Deutsch, M., and Gerard, H.B. "A Study of normative and informative social influence upon individual judgment," *Journal of Abnormal and Social Psychology* (51) 1955, pp 629-636.
- Evans, N.J., and Jarvis, P.A. "The group attitude scale: A measure of attraction to group," *Small Group Behavior* (17:2) 1986, pp 203-216.
- Festinger, L. "A theory of social comparison processes," *Human Relations* (7) 1954, pp 117-140.
- Festinger, L., Gerard, H., and Hymonitch, B. "The Influence processes in the presence of extreme deviants," *Human Relations* (5) 1952, pp 327-346.
- Fredrickson, J.W., and Mitchell, T.R. "Strategic decision processes: Comprehensiveness and performance in an industry with an unstable environment," *Academy of Management Journal* (27:2) 1984, pp 399-423.
- Fulk, J. "Social construction of communication technology," *Academy of Management Journal* (36:5) 1993, pp 921-950.
- Fulk, J., and Boyd, B. "Emerging theories of communication in organizations," *Journal of Management* (17:2) 1991, pp 407-446.
- Fulk, J., Schmitz, J., and Steinfield, C.W. "A Social influence model of technology use," in: *Organizational and Communication Technology*, J. Fulk and C. Steinfield (eds.), Sage Publications, Newbury Park, CA, 1990, pp. 117-142.
- Fulk, J., Steinfield, C.W., Schmitz, J., and Power, J.G. "A Social information processing model of media use in organizations," *Communication Research* (14:5) 1987, pp 529-552.
- Gefen, D., Straub, D.W., and Boudreau, M. "Structural equation modeling and regression: Guidelines for research practice," *Communication of the Association for Information Systems* (4:7) 2000, pp 2-79.
- Gouran, D.S., Brown, C., and Henry, D.R. "Behavioral correlates of perceptions of quality in decision-making discussions," *Communication Monographs* (45:1) 1978, pp 51-63.
- Green, S.G., and Taber, T.D. "The effects of three social decision schemes on decision group processes," *Organizational Behavior and Human Performance* (25:1) 1980, pp 97-106.
- Gully, S.M., Devine, D.J., and Whitney, D.J. "A meta-analysis of cohesion and performance: Effects of level of analysis and task interdependence," *Small Group Behavior* (26:4) 1995, pp 497-520.
- Guo, Z. "Cultural Influence on Communication Media Choice Behavior: A Cross-Cultural Study within Multinational Organizational Settings," in: *Information Systems*, University of New South Wales, Sydney, 2002.
- Hogg, M.A. *The Social Psychology of Group Cohesiveness: From Attraction to Social Identity* New York University Press, New York, 1992.
- Kaplan, M.F., and Miller, C.E. "Group decision making and normative versus informational influence: Effects of types of issue and assigned decision rule," *Journal of Personality and Social Psychology* (53:2) 1987, pp 306-313.
- Lee, E.-J., and Nass, C. "Experimental tests of normative group influence and representation effects in computer-mediated communication: When interacting via computers differs from interacting with computers," *Human Communication Research* (28:3) 2002, pp 349-381.

- Mathieson, K., Peacock, E., and Chin, W.W. "Extending the technology acceptance model: The influence of perceived user resources," *The DATA BASE for Advances in Information Systems* (32:3) 2001, pp 86-112.
- Mead, G.H. *Mind, Self and Society* University of Chicago Press, CHicago, 1934.
- Moscovici, S. *Social Influence and Social Change* Academy Press, London; New York, 1976.
- O'Reilly III, C.A., and Caldwell, D.F. "The Impact of normative social influence and cohesiveness on task perceptions and attitudes: A social information processing approach," *Journal of Occupational Psychology* (58) 1985, pp 193-206.
- Paulus, P.B., and Dzindolet, M.T. "Social influence process in group brainstorming," *Journal of Personality and Social Psychology* (64:4) 1993, pp 575-586.
- Pfeffer, J. *Organizations and Organization Theory* Pitman, Marshfield, MA, 1982.
- Postmes, T., and Lea, M. "Social process and group decision making: Anonymity in group decision support systems," *Ergonomics* (43:8) 2000a, pp 1252-1274.
- Postmes, T., Spears, R., and Lea, M. "The formation of group norms in computer-mediated communication," *Human Communication Research* (26:3) 2000b, pp 341-371.
- Rice, R.E., D'Ambra, J., and More, E. "Cross-cultural comparison of organizational media evaluation and choice," *Journal of Communication* (48:3) 1998, pp 3-26.
- Salancik, G.R., and Pfeffer, J. "A Social information processing approach to job attitudes and task design," *Administrative Science Quarterly* (23) 1978, pp 224-253.
- Sambamurthy, V., and Chin, W.W. "The effects of group attitudes toward alternative GDSS designs on the decision-making performance of computer-supported groups," *Decision Sciences* (25:2) 1994, pp 215-241.
- Santee, R.T., and Jackson, J. "Cultural values as a source of normative sanctions," *Pacific Sociological Review* (20) 1977, pp 439-454.
- Schmitz, J., and Fulk, J. "Organizational colleagues, media richness and electronic mail: A test of the social influence model of technology use," *Communication Research* (18:4) 1991, pp 487-523.
- Soe, L., and Markus, M.L. "Technological or social utility? Unraveling explanations of email, vmail, and Fax use," *The Information Society* (9) 1993, pp 213-236.
- Straub, D., and Karahanna, E. "Knowledge worker communications and recipient availability: Toward a task closure explanation of media choice," *Organization Science* (9:2) 1998, pp 160-175.
- Straub, W. "The effects of culture on IT diffusion: E-mail and Fax in Japan and the USA," *Information Systems Research* (5:1) 1994, pp 23-47.
- Straus, S.G. "Technology, group, process, and group outcomes: Testing the connections in computer-mediated and face-to-face groups," *Human-Computer Interaction* (12:3) 1997, pp 227-266.
- Taylor, S., and Fiske, S. "Salience, attention and attribution: Top of the head phenomena," in: *Advances in Experimental Social Psychology*, L.Berkowitz (ed.), Academy Press., New York, 1978.
- Wagner, W.G., Pfeffer, J., and O'Reilly III, C.A. "Organizational demography and turnover in top-management groups," *Administrative Science Quarterly* (29) 1984, pp 74-92.
- Webster, J., and Trevino, L.K. "Rational and social theories as complementary explanations of communication media choices: Two policy-capturing studies," *Academy of Management Journal* (38:6) 1995, pp 1544-1572.
- Yoo, Y., and Alavi, M. "Media and group cohesion: Relative influences on social presence, task participation, and group consensus," *MIS Quarterly* (25:3) 2001, pp 371-390.