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ABSTRACT

Online communication media are being used increasingly for attempts to persuade message receivers. This paper presents a theoretical model that predicts outcomes of online persuasion based on the structure of primary and secondary goals message receivers hold toward the communication.

Keywords

Computer-mediated communication; influence goals; uses and gratifications theory; interpersonal influence

INTRODUCTION

Persuasion is defined as shaping, reinforcing, or changing the responses of message receivers (Miller, 1980). As asynchronous online communication technologies proliferate across organizations, these are increasingly being used in attempts to persuade.

From the message receiver's viewpoint, online communication blurs the traditional distinction between mass communication, such as magazines and television, where the communication is broadcast to multiple receivers, and interpersonal communication, such as a phone call, where one is directly communicating with another human. In online communication, messages that are broadcast to multiple receivers can be customized to simulate the appearance and interactivity of interpersonal communication. Where receivers perceive these messages to be interpersonal in nature, we anticipate the literature of interpersonal communication will be more relevant than mass communication in predicting persuasiveness, regardless of whether a human sender actually is involved in the manner represented by the messages.

GOALS AND PERSUASION

Goals are cognitive representations of desired results, ranging from biological set points, such as body temperature, to complex, long-term outcomes, such as career success (Austin and Vancouver, 1996). In this paper, we center our focus on two lines of goal research that are particularly relevant to persuasion in an online context: Influence goals and uses and gratifications theory.

The study of influence goals derives from a theoretical observation by Clark and Delia (1979) that three goal types typically are present in interpersonal influence attempts. *Instrumental goals* are directly related to the sender's task. For example, in the case of a message requesting some action on the part of the receiver, the instrumental goal is to gain the receiver's compliance. *Interpersonal goals* are directed toward establishing or maintaining a relationship between the message sender and receiver. *Identity goals* relate to the sender's self-concept, including moral standards, principles, and other internal standards.

Empirical research has supported the conceptual structure of these three influence goals and shown that they significantly predict senders' actions in producing messages (Cody, Canary, and Smith, 1990; Hample and Dallinger, 1987). Dillard (1990) subsequently expanded and refined the goals into a bi-level structure called the Goals-Planning-Action (GPA) model. In the GPA model, primary goals serve to define and drive communication (Schrader and Dillard, 1998), thereby instantiating the instrumental goal type proposed by Clark and Delia (1979). Other goals, referred to as secondary goals, "derive directly from more general motivations that are recurrent in a person's life" (Dillard, Segrin, and Harden, 1989). Secondary goals serve to shape and constrain aspects of the communication. In an empirical test of the relationship between senders' influence goals and production of persuasive messages, Dillard et al. (1989) validated the presence of influence goals and the following secondary goals. *Identity goals* are as originally specified by Clark and Delia (1979). *Interaction goals* concern social appropriateness, including the desire to manage others' impressions of oneself, to avoid threatening or embarrassing others, and to appear relevant and coherent. *Relational resource goals* encompass the personal rewards, emotional support, and other gratifications resulting from participation in the communication and incorporate the interpersonal goals proposed by Clark and Delia (1979). *Arousal management goals* arise from the sender's desire to maintain his or her state of arousal and apprehension about the interaction within tolerable limits and avoid conditions of very high arousal, such as panic or rage.

The initial GPA model validation study by Dillard et al. (1989) finds clear distinctions between the function of primary and secondary goals as well as important unique predictions of several aspects of message production. Influence goals proved to be key predictors of planning

and cognitive effort by subjects in creating persuasive messages. Other aspects of message production predicted by the goals were directness, positivity, and logic of messages.

A subsequent study (Wilson and Zigurs, 2001) suggests that influence goals in the GPA model also provide distinctive predictions of how message senders apply various features of online communication technology to create persuasive messages. Subjects participated in a group planning exercise in which they used a custom online communication system to persuade undecided group members to adopt a negotiating position. Subjects who had the strongest influence goals used fewer special features, i.e., visuals and text formatting functions, suggesting that message content was the critical dimension they considered important to achieving their objective. Subjects with strong identity goals added emphasis to text more frequently than others, using bold, italics, and font controls to highlight and organize their work, suggesting that accurately representing their position, i.e., self-identity, was critical to these subjects. Subjects who had high arousal management goals produced terse, error-ridden messages.

The GPA model has proven useful in understanding and predicting how people approach message creation and what features they decide to use in producing online communication. However, the GPA model does not address message receivers nor does it apply to the context of mass communication.

Applications of goals in modeling persuasion of message receivers are addressed by a second literature stream known as uses and gratifications (U&G) theory (Katz, Blumler, and Gurevitch, 1974). U&G theory addresses the psychological needs and motives of an audience viewing mass-media communication, such as television ads. U&G research takes the approach that message receivers assume an active, goal-oriented role rather than a simple, stimulus-response role in evaluating media. The needs served by communication are considered to be part of the wider ranges of human needs that derive from social and psychological origins. Goals generated by such needs govern expectations of the media, which, in turn, lead people to select specific patterns of media exposure in order to gratify their needs

A substantial literature supports the basic tenets of U&G regarding goal-directed behavior of message receivers, most recently in the context of web surfing (e.g., Eighmey and McCord, 1998; Lin, 1999; Korgaonkar and Wolin, 1999). Numerous U&G typologies have been proposed to categorize receivers' needs and goals. Although these are necessarily biased toward the mass-media contexts in which U&G research is conducted, most of the typologies include categories relating to costs and benefits, and some include categories that substantially overlap goals of message senders described by the GPA model. For example, McQuail, Blumler, and Brown (1972) propose a four-dimension typology that includes categories of

diversion (including emotional pleasure and escape from one's regular routine and personal burdens); personal relationships (including substitute companionship as well as social utility); personal identity (including personal reference, reality exploration, and value reinforcement); and surveillance. Categories of personal identity and personal relationships in this typology correspond closely with secondary goals of identity and relational resource presented by Dillard (1990) in the GPA model.

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Both U&G theory and the GPA model point to goals as important predictors of persuasion. U&G theory suggests that goals are important to message recipients in determining which messages to view and how to interpret messages. The GPA model proposes that both primary and secondary goals will be present in the context of interpersonal communication. Primary goals motivate both the receiver's decision for viewing (or avoiding) the message and the cognitive effort that the receiver will expend in interpreting and understanding it. U&G research (e.g., McQuail et al., 1972) suggests that message receivers are motivated, generally, by goals of obtaining benefits and avoiding costs related to the message (for brevity, these goals are referenced hereafter as *benefit goals* and *cost goals*).

It also is likely that receivers will share at least some secondary goals from the GPA model where they perceive messages to be interpersonal in nature. Schrader and Dillard write, "Although the GPA model was developed for the purpose of illuminating influence attempts, it can be applied to virtually any sort of interaction" (1998, p. 279). U&G research has shown that goals closely related to the identity and relational resource secondary goals in the GPA model are important to message receivers in mass-media contexts (McQuail et al., 1972). Identity goals are considered to be "explicitly or implicitly present for overt or tacit negotiation in every communicative transaction" (Clark and Delia, 1979, p. 200). Thus, it seems likely that identity will assume an important role in online contexts as well. However, goals involving development of relationships are more problematic in online contexts. Walther and Burgoon (1992) found that relationships are slow to develop in online communication, and Wilson and Zigurs (2001) failed to find any significant effects relating to relational resource goals in their study of online message senders. This suggests that relational resource goals may not be important in situations where there is not an existing relationship and where online messaging utilizes only static presentation (i.e., text and static visuals, vs. audio and video). It is logical that two other secondary goals in the GPA model also may be important to message receivers, although we did not find empirical evidence directly supporting this proposition. The goal of interaction relates to socially appropriate behavior. It is likely that message receivers will have specific interaction goals relating to message content (e.g., regarding

controversial issues), and that these goals will be associated with such factors as perceived message credibility. Similarly, the goal of arousal management also may be anticipated to exist in message receivers (e.g., when requested to do something uncomfortable).

We propose the research model shown in Figure 1. In this model, messages act upon the receiver through a set of cognitive processes in which the receiver's primary and secondary goals toward the communication jointly predict persuasion outcomes. We anticipate that primary goals related to obtaining benefits from the message and avoiding costs of the message will be instrumental determinants of persuasiveness (i.e., persuasion outcomes), and secondary goals of identity, interaction, and arousal management will provide additional distinctive predictions.
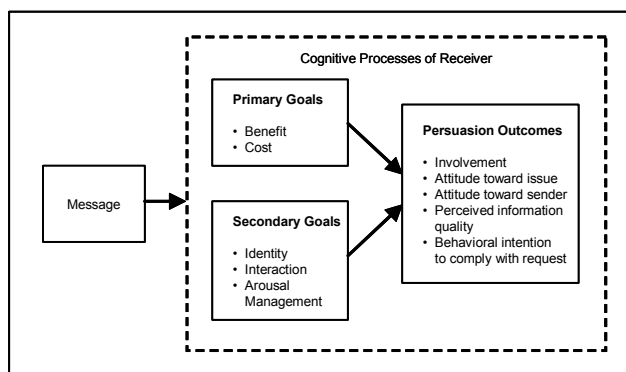

Figure 1. Communication goals research model.

Our first hypothesis tests the construct validity of the goal structure presented in the research model. We propose that message receivers have discrete communication goals regarding incoming messages similar to what has been previously reported in studies of influence goals and message production (e.g., Dillard et al., 1989; Schrader and Dillard, 1998; Wilson and Zigurs, 2001). Construct validation requires the goal measurements to exhibit both discriminant validity, in which measurements of different constructs discriminate among the constructs as predicted by the model, and convergent validity, in which measurements of similar constructs show substantial common association.

H1: Message receivers' benefit, cost, identity, interaction, and arousal management goals will form distinct dimensions.

Our second set of hypotheses relate to primary goals of benefit and cost. The GPA model (Dillard, 1990) proposes that primary goals will be instrumental in determining behavior toward the request. However, the criteria for instrumentality in prior research have been conceptual and qualitative rather than quantitative (e.g., Dillard et al., 1989; Schrader and Dillard, 1998; Wilson and Zigurs, 2001). We propose to test instrumentality using two quantitative criteria. First, we expect primary goals to be *universal* within their domain, (i.e., they will have significant effects on all measures within the area to

which they pertain). It is logical that the relationships to persuasion outcomes will be positive for benefit goals and negative for cost goals, leading to two hypotheses:

H2a: Higher levels of benefit goals will increase persuasiveness of the message on all measures.

H2b: Higher levels of cost goals will decrease persuasiveness of the message on all measures.

Second, we expect primary goals to be *prominent*, (i.e., predicting more variance than any secondary goal across measures in their domain). This property is assessed by two additional hypotheses:

H2c: Benefit goals will account for more variance than any secondary goal on all measures.

H2d: Cost goals will account for more variance than any secondary goal on all measures.

Our final hypothesis addresses the role of secondary goals in predicting persuasion outcomes. Secondary goals act to shape and constrain interaction in communication, in effect providing specific, unique predictions of persuasion outcomes beyond predictions provided by primary goals. We did not find prior research that tests the relationship of secondary goals to persuasion outcomes. Due to lack of precedence, we present a single exploratory hypothesis regarding secondary goals, rather than attempting to predict effects relating to specific persuasion outcomes:

H3: Secondary goals of interaction, identity, and arousal management will provide distinctive predictions of persuasion outcomes.

RESEARCH METHOD

The research was conducted as a correlational study using online administration. A custom web application was developed that allowed subjects to log in to the study and view a request asking them to volunteer their time. The web application then collected subjects' responses to a set of open-ended and multiple-choice questions. Subjects were 119 students enrolled in an undergraduate business communication course at a university in the Midwest U.S.

Goals Instrument

Part of the online questionnaire assessed subjects' goals regarding the message. We hypothesized that subjects' primary goals would center on obtaining benefits and avoiding costs associated with the message. New items were written for each primary goal construct. Benefit goal items centered on positive and beneficial perceptions of the message, and cost goal items centered on perceptions of downsides and costs.

Secondary goals of identity, interaction, and arousal management also were assessed. Items for each of these constructs were drawn from a previous questionnaire that was validated initially by Dillard et al. (1989) and subsequently tested in an online communication context by Wilson and Zigurs (2001).

Persuasion Measures

Persuasion outcomes were assessed through measurement of involvement with the communication, attitude toward the sender, attitude toward the message issue, perceptions of information quality of the message, and behavioral intention to comply with the request. Items in the majority of measures were drawn from previously-validated scales: involvement was implemented using a personal involvement instrument (Zaichkowsky, 1994); attitude toward the sender was implemented using a source credibility instrument (McCrosky, 1966); attitude toward the issue implemented related items drawn from Bruner, James, and Hensel (2001); and perceived information quality utilized a scale developed by Moon (1999). New items were written for the behavioral intention measure, centering on self-assessed likelihood that the subject would volunteer to work or donate money toward the cause.

RESULTS

In order to test the structure of goals in the study and establish construct validity of the scales, reliability analysis was conducted on the questionnaire items to assess convergent validity within each of the underlying constructs. Reliability (Chronbach's alpha) of the constructs ranged from .67 to .92. An unconstrained factor analysis then was conducted, and the five-factor structure that emerged clearly supports Hypothesis 1.

To assess the relationships between primary and secondary goals and persuasion outcomes, structural equation models (SEM) were constructed using AMOS 4 software (Arbuckle and Wothke, 1999) to assess which goals significantly predict each persuasion measure. Goals with non-significant predictions were then pruned from each model. Results of SEM analysis, including model fit statistics, are summarized in Table 1.

Benefits goals showed a strong positive relationship with all persuasion measure, predicting 45% or more of the total variance for each of the measures. The effect size of this relationship is much larger than that of any of the other goals, supporting both Hypotheses H2a and H2c. Effects related to cost goals were weaker. Cost goals significantly predicted only involvement, attitude toward the issue, and perceived information quality measures, although for these measures the relationship was stronger than all others except benefit goals. Neither Hypothesis H2b nor H2d is supported by the results.

Secondary goals provided several distinctive predictions beyond those of the primary goals, supporting the exploratory propositions of Hypothesis 3. Arousal management goals predicted involvement and source credibility. Interaction goals predicted attitude toward the issue. Identity goals did not provide unique predictions of any persuasion measure, and none of the secondary goals uniquely predicted perceived information quality or behavioral intention to comply.

Table 1. Distinctive predictions of persuasion measures.

Persuasion Measure	Significant Predictor Constructs	*Total R^2*	Fit Statistics of Pruned Model
Involvement	Benefit goals (β = .75) Cost goals (β = -.25) Arousal management goals (β = -.14)	.69	GFI = .794 AGFI = .731 TLI = .892 RMSEA = .100
Attitude toward issue	Benefit goals (β = .70) Cost goals (β = -.28) Interaction goals (β = .18)	.68	GFI = .848 AGFI = .788 TLI = .914 RMSEA = .090
Attitude toward sender	Benefit goals (β = .67) Arousal management goals (β = -.31)	.55	GFI = .824 AGFI = .770 TLI = .929 RMSEA = .085
Perceived information quality	Benefit goals (β = .713) Cost goals (β = -.31)	.60	GFI = .906 AGFI = .844 TLI = .881 RMSEA = .097
Behavioral intention to comply	Benefit goals (β = .70)	.49	GFI = .971 AGFI = .893 TLI = .951 RMSEA = .101

CONCLUSION

The results generally support our opening proposition that communication goals can provide the basis for effective modeling of persuasion in online communication. Our research model predicted approximately half to two-thirds of the measured variance across an array of persuasion measures, suggesting that the research model represents key cognitive factors within the online persuasion process. It will be important for future research to study aspects of the topic that could not be addressed in the presents study, including investigation of the relationship of communication goals to characteristics of the message, medium, and source, assessment of the stability of communication goals, and articulation of communication goals with other models of persuasion.

The design of this research emphasized exploration and construct validation rather than establishing specific linkages between goals and external factors that are important to practice (e.g., emotional vs. logical appeals). For this reason, implications for practice are necessarily general, although these could become important. The findings suggest that having your message perceived as offering real benefits is critical. False advertising and come-ons are not a substitute for value, as goals are activated to some extent during the communication rather than in advance. Goals related to avoiding costs took a distant second place to obtaining benefits in our findings. Similarly, concerns for social appropriateness (interaction goals) and personal comfort (arousal management goals) suggest that fear appeals will not be particularly effective in online communication. Finally, our findings suggest that moderate changes in content and format of online messages have little effect on persuasion outcomes.

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