

Should I Call or Should I Email?

Michelle Gumbrecht (mgumbrec@psych.stanford.edu)

Department of Psychology, Stanford University, Stanford, CA 94305-2130 USA

Teenie Matlock (tmatlock@ucmerced.edu)

Cognitive Science Program, UC Merced, Merced, CA 95344 USA

Herbert H. Clark (herb@psych.stanford.edu)

Department of Psychology, Stanford University, Stanford, CA 94305-2130 USA

Keywords: Communication; media; conversation; grounding; cost; effort.

Introduction

When people communicate, they have to consider many factors to decide how to present information to their addressees. They have an ever-increasing number of options, including cell phones, Instant Messaging (IM), email, text messaging, Personal Digital Assistants (PDAs), and blogging. Each of these media affects communication due to constraints on *grounding* (Clark & Brennan, 1991). Two people have to use more effort to reach agreement by email than in person. The *costs* of using email include more careful message construction (*formulation* and *production costs*) to avoid possible misunderstandings (*fault* and *repair costs*) (see also Brennan, 1998).

But how important is the situation when deciding how to communicate? How do people calculate the importance of these various costs? What other factors do they consider? We present preliminary results from a survey designed to explore these questions.

Method

Sixty-nine UC Merced undergraduates completed a survey that presented two scenarios: giving driving directions to a friend and revising a group paper with two other people. For each scenario they answered the questions: *What medium of communication (for instance, what program or device) would you use to communicate with?* and *Why?* After the second scenario, they answered the question: *What are the factors that affect your decision to select a particular medium of communicating information?* We also requested that they number the factors in order of importance, with #1 being most important.

Results

People giving directions chose speech-based media (62%) more often than text-based media (38%). Speech-based media included cell phones and face-to-face conversations, and text-based media included email, text messaging, IM,

and handwritten notes. One person explained that using a cell phone is “simple and quick...if the person has more questions, it’s easier to answer them immediately.”

But people working on a group paper selected text-based media (63%) more often than speech-based media (37%). One person explained that using email is “quick, easy, and accessible”, while another person who selected IM stated, “[W]e can discuss things without needing to meet.” A chi-square test showed these differences were reliable, $\chi^2(1) = 10.83, p < .01$.

People ranked *availability* (of medium or addressee) and *importance* of information as the most crucial factors when deciding how to communicate. *Clarity* of understanding, *convenience*, and *people* were the second-most important factors, followed by *ease of use* and *time* (constraints, or investment in using the medium).

Discussion

When presented with a situation, people select media that make their task easier. But the notion of *ease* seems to be task-dependent. People giving directions prefer to decrease the costs of creating and producing messages, and to receive feedback quickly. But when revising a group paper, people prefer using media that allow for more precision to decrease fault and repair costs. In general, people weigh the availability of the medium or addressee and the importance of the message most heavily when deciding how to communicate.

References

- Brennan, S. E. (1998). The grounding problem in conversation with and through computers. In S. R. Fussell & R. J. Kreuz (Eds.), *Social and cognitive psychological approaches to interpersonal communication*. Hillsdale, NJ: Lawrence Erlbaum.
- Clark, H. H., & Brennan, S. E. (1991). Grounding in communication. In L. B. Resnick, J. M. Levine, & S. D. Teasley (Eds.), *Perspectives on socially shared cognition*. Washington, DC: APA Books.