Chapter 7.14
The Effect of Choice and Announcement Duration on the Estimation of Telephone Hold Time

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ABSTRACT

If a caller is placed on hold when they call a business, about half will hang up before the call is answered. Of those that hang up, only half of those will call back (Staino, 1994). Optimizing the on-hold experience has the potential to reduce hang-ups and make being put on hold more palatable to the caller. The current study assessed the influence of the opportunity to make a music choice and the length of pre-music announcement duration on perceived on-hold durations and customer satisfaction. Subjective assessments of on-hold times were significantly shorter with longer announcements, but satisfaction did not change. The chance to choose music improved satisfaction, but did not significantly reduce subjective time estimates. To test if multiple within-subject trials might have led to prospective time judgments, a between-subjects design replication was conducted, with each participant estimating only one time interval. A similar pattern of results was obtained.

INTRODUCTION

Many companies provide one or more customer support phone numbers for customers to call when they wish to get information, solicit technical assistance, lodge a complaint, or otherwise make contact with the company. The call to customer support is one contributor to the consumer's overall user experience, and research shows (Tax, Brown, & Chandrashekaran, 1998), is a major factor in brand loyalty.

The provision of good customer support is therefore an important concern of companies. Along with the quality of information received in the call (defined roughly as the ability of that information to lead to a successful resolution of the consumer's problem or completion of the consumer's task), one key variable influencing the consumer's judgment of the call is the time spent on hold. One way to minimize the consumers' time spent in the hold queue is to oversupply the call center with customer support representatives. Of course, this is costly, and will ultimately influence the cost of the services and products passed along to the consumer. Therefore, companies attempt to optimize the size of the customer support force, in hopes of keeping the force maximally utilized, while at the same time minimizing the cost to the consumer, in terms of time spent on hold.

The correlation between the length of a time segment and a person's estimate of the length of that segment is less than +1.0. Put another way, human beings' perception of the length of time segments is not determined solely by the length of that segment. Rather, many other variables influence the perceived length of time, including variables in the stimuli that fill the time span, variables in the context of that time span, and variables in the person who is perceiving the time span (Block, 1990).

Because time is a limited resource, most people view it as valuable (Feldman & Hornik, 1981). Considering this view, a lengthy hold time may result in customer dissatisfaction regardless of the level of service a customer ultimately receives. There is considerable interest in the telecommunications industry in identifying methods to reduce caller dissatisfaction due to long hold queues for consumer call centers. Telephony and software experts are employed to maximize the efficiency of the call center applications and minimize the average actual time on hold. For times when it may not be possible for a call center to reduce the *actual* length of time that consumers are placed on hold, it is still possible to change the content presented in the hold time interval so as to reduce the *perceived* length of the hold time. Two experiments are reported here that advance the understanding of: 1) the role of the caller's ability to choose content while in the hold queue; and 2) the length of the automated announcement before being placed on hold on the person's judgment of the length of time they are on hold.

Related Research in Cognitive Psychology

The topic of time perception is one that has been of interest to experimental psychologists and others interested in human information processing for a long time. Researchers have shown that, *ceteris paribus*, time spans that are filled with content (such as music) or a task to occupy a person's attention are judged to be shorter than time spans with nothing filling the time (Predebon, 1996). Research on time perception suggests that an individual's estimate of the duration of a time interval is altered by various attributes of stimuli presented in a given interval. Several studies have shown that the apparent duration of a time interval decreases as the cognitive processing demands increase (Brown, 1985; Chastain & Ferraro, 1997; Fortin & Rousseau, 1987; Fortin, Rousseau, Bourque, & Kirouac, 1993). Qualities of that content that have been shown to influence the perceived time duration include the amount of information memorized during the time period (Zakay, 1989), the complexity of the stimulus (e.g.,

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