ABSTRACT  A general framework is presented for communication behavior where contact decisions play an important role. The contact decision component of the conceptual framework is analyzed in detail and empirically tested using stated preference models of contact decision behavior. Face-to-face interviews were conducted in six universities representing classical schools, business schools, and technological schools in Austria and Switzerland. The empirical results indicate the importance of the contact decision context variables in general, and in particular the perceived attractiveness of specific contact places in different cultural regions, cost, and language skills of the potential contact partner.

1. INTRODUCTION

There is a significant lack of conceptual and operational models to explain how knowledge-based networks are formed and how communication media choices are made. Research undertaken by the authors in the framework of the ESF Network on European Communication and Transport Activities Research (NECTAR) makes a modest attempt to fill this gap by pursuing three major objectives:

(a) Develop a conceptual framework and methodology for analyzing the context-specific nature of communication behavior at the individual level.
(b) Identify the key factors and barriers influencing media choice behavior and knowledge-based network-forming behavior.
(c) Understand the role of cross-cultural differences in communication media choice and in the formation of communication networks.
Universities were chosen as the focus for this research for two reasons. First, there is an increasing proportion of knowledge-makers in information societies, and universities play an important role in the production, dissemination, and exchange of academic and scientific knowledge. Thus, a study of communication networks in a university setting may provide a model of how professionals in other knowledge-intensive fields function effectively. Second, the key factors determining the use of sophisticated telecommunication media and resulting network developments have remained unknown. Such aspects are of utmost relevance in the academic community which relies so strongly on communications in general. Furthermore, research collaboration across universities is increasing in importance as a result of the substantial savings thus achieved in financial and intellectual resources (see Galegher, Kraut, and Egido 1990; Cicarelli and Spitzman 1984).

While two earlier papers by the authors focused on media choice behavior (see Fischer, Maggi, and Rammer 1990, 1992), in this paper the issue of contact decision behavior is emphasized. The contact decision is conceived as the decision to establish a direct (i.e., face-to-face) contact with a potential contact partner. The main purpose of the study is (a) to develop a conceptual framework for analyzing contact decision behavior in the university setting where special emphasis is placed on the context-specific nature of this choice process, (b) to identify the major factors and barriers influencing contact decision behavior, and (c) to identify cross-national differences in contact decision behavior.

2. THE CONCEPTUAL FRAMEWORK

The complexities inherent in the process of communication behavior led to the development of an integrated framework for communication choice within a university setting (outlined in Figure 1) (see also Fischer, Maggi, and Rammer 1990). This figure depicts, in a simplified manner, the interaction of a department's supply of communication facilities (such as telephone, facsimile, electronic mail, traditional mail, courier mail, etc.) with the demand for communication. The demand for communication evolves from the organizational structure of the department, including the department's objectives (especially with respect to research) as well as formal and informal rules governing individual behavior. Such supply and demand factors give rise to a need for a certain quantity and type of communication activity. While most of the communication needs are met by communication within the existing contact network, either by using communication media or by travel to face-to-face meetings (conferences, workshops, lectures, etc.), others may be satisfied only by establishing new direct contacts. An important feature of the conceptual model developed here is the feedback from communication outcomes to both the supply of communication facilities and the demand for communication.

Contact decision in the context of this paper refers to the situation where an individual (termed the contact decision maker) decides on a possible new face-to-face contact which itself is conceived as a necessary, but not sufficient, condition to extend the person's personal (knowledge-based) contact network (see Figure 2). The choice process is conceptualized as including the following stages: