Chapter 5

Environmental Context of Information Seeking Behavior: Applying a Diffusion Model to Account for Intervening Variables

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ABSTRACT
Most current models of information seeking behavior (ISB) do not explicitly address the effects of the environmental context on ISB. Wilson (1996) identified several intervening variables, but these have not been systematically considered. This chapter explores the use of the Katz, Levin and Hamilton (1963) model of diffusion of innovations to provide a framework for examining the various elements of an environmental context. In particular, this model provides the means to account for the cultural, social, communicative, and actor components of ISB. The model is described and its use as a supplementing analytic framework in ISB is examined, paying particular attention to its use in research in developing nations.

INTRODUCTION
Over the last 30 years, many models have emerged in the Library and Information Science field to explain information seeking behavior (ISB). These models have attempted to capture the processes used by individuals as they work out their information needs, and look for and select information to answer these needs. The most widely accepted and used models are from Wilson (1981; 1996), Dervin (1992; 1999), and Kuhlthau (1991; 1994), but many others have contributed to the development of information seeking theory as well (see Fisher, Erdelez and McKechnie [2005] for a collection of current concepts and models). Information seeking behavior, and information behavior more generally, has continuously provided a rich terrain for research for the past 40 years, and interesting new avenues have recently opened up. Although the core models of ISB remain the fundamental basis for stimulating new research, as they captured quite well the process of seeking
information, there are still areas for refinement and further exploration. This chapter will address one such area: the environmental context and the role it plays in understanding ISB.

Examining the environmental context is important for understanding how it can affect the ways in which information needs arise and the actions undertaken to seek information. The term “environmental context” is used here to denote the web of social, cultural, technological and physio-psychological structures within which an individual exists. Most models of ISB at least mention the environmental context in passing, acknowledging that information seeking does not happen in a vacuum. Current ISB models have focused mostly on the emotional and mental effects of the search process, delving into the seeking individual’s psychological response to information needs and the seeking process. Dervin’s sense-making model, articulated by Dervin (1992; 1999) and discussed in depth in Dervin, Foreman-Wernet, and Lauterbach (2003), treats the cognitive gap experienced when an information need is recognized. Kuhlthau (1991; 1994) addressed the uncertainty and other emotional responses experienced when recognizing an information need and conducting the search process. A few other researchers have included mention of the larger context and environment within which an individual conducts the search (Ellis, 1989; Foster, 2004), but this area has not been of primary concern. Only Wilson (1981; 1996) has taken a more detailed look at possible contextual factors affecting ISB. The several that he identified were grouped as personal, social or role-related, and environmental. Even so, the discussion of these factors was not fully developed and an organizing structure other than broad categories was not proposed. These attempts to address the larger context within which ISB takes place are a good start, but more must be done to develop the consideration of such factors and their effects.

The overall picture of information seeking behavior is not complete without a thorough examination of the environmental context. Context provides the source of meaning for information behavior, enabling one to interpret the stimulus of information needs and the process of information seeking (Dervin, 1997). As Sonnenwald (1999) pointed out, contexts have boundaries, insiders, and outsiders, and characterizing a context requires multiple viewpoints. This chapter takes a very broad view of context; as mentioned above, environmental context as used in this chapter encompasses cultural, social, technological and physio-psychological structures and spaces. These all both enable and limit what is considered appropriate information needs, appropriate information to answer those needs, and appropriate methods of obtaining the information. They should be considered in every study on ISB in order to provide a more detailed and nuanced understanding of the behavior.

Examining the environmental context is especially important when attempting to transpose current ISB models to research carried out in the developing world. The major ISB models have been worked out in a context of the Western developed world, usually couched in academic settings. Given that the theorists developing these models were working within the same cultural and often social structures as their own, they did not need to articulate the effects of those aspects of context. The context they did not know was the internal, physio-psychological context of their participants, so perhaps this explains their focus on this area. Now that ISB studies have expanded into looking at information behavior in the developing world, the other aspects of environmental context become more salient. While it may be argued that information behavior *grosso modo* is the same for all humans, given that a perceived information need is a basic human experience, one’s environmental context does play a signifi-