Reference librarians perceptions of information overload: the influence of personality traits, professional and environmental characteristics / Orna Shachaf

Abstract

Reference librarians in academic libraries play a vital role as information intermediaries for their users - students, researchers, and faculty - to assist in fulfilling their information needs.

Technological developments, especially the transition to digital information and the rise of the Internet, have led to a significant increase in the volume of information and facilitated its accessibility, resulting in noticeable changes in the work methods of reference librarians. Today, these librarians are required to deal daily with vast amounts of various types of information, both in the physical collections of the library and in the digital databases to which the library subscribes, as well as in the sources available to all on the internet. However, even though information is such an important and essential factor, too much information can be a hindrance, as the amount of information the human brain can process at a given time is limited. When the amount of information people need to absorb and process exceeds their capacity to do so, they may experience information overload.

Although reference librarians operate in an environment characterized by information overload, which presumably affects their work, this topic has been scarcely researched. The aim of this research was to examine the phenomenon of information overload from the perspective of academic information professionals, the reference librarians, and to identify personal, professional, and environmental factors that could predict librarians, perception of the phenomenon.

The research population consisted of reference librarians working in Israeli academic libraries, with at least one year of experience. The research was conducted using a mixed-method approach. In the qualitative part, in-depth interviews were conducted with 29 librarians on various aspects of information overload. The interviews were analyzed using qualitative content analysis. In the quantitative part, the relationship between the perception of information overload and the personal, professional, and environmental characteristics of the librarians was examined using questionnaires filled out by 146 librarians and analyzed using statistical tools. Univariate MANOVA analyses were conducted to test the relationships between personal characteristics and other research variables. Pearson correlations were used to examine the study hypotheses and the

relationships between variables, and hierarchical regression analysis, consisting of five steps, was conducted to assess the contribution of different variables to the explained variance of information overload. The research provided a deep understanding of the perception of information overload among academic librarians, combining qualitative and quantitative perspectives.

The findings of the qualitative research revealed that librarians are aware of the phenomenon of information overload and its potential implications for their work. However, thanks to their professionalism and expertise in working with information, they do not perceive the situation as a challenge they cannot cope with. On the contrary, many of them see the abundance of information as an advantage that helps them fulfill their roles and even allows them to highlight their professional advantage and contribution to users.

The reference librarians identified two situations specifically related to information overload: the first is the need to choose a suitable database from a wide range of databases, and the second is the need to deal with a very large amount of search results. Their coping mechanisms for these situations reveal similarities indicating strategies that allow them to deal with the overwhelming amount of information and achieve satisfactory results - filtering, withdrawing, ignoring information, and selecting sources based on convenience. Furthermore, findings indicate that librarians tend to follow the principle of bounded rationality and implement a satisficing strategy. This enables them to address the information need in a way that they estimate is good enough, considering the effort required, but not necessarily optimally, in order to provide a quick and satisfactory response to information consumers. This approach enables them to cope with information overload without feeling overwhelmed, since the librarians express confidence in their ability to provide a suitable response.

The referenc librarians indicated that their main role is to assist users in finding the information they need and teach them to do so themselves. They emphasized the importance of their engagement in information evaluation, given the availability of abundant yet uneven and uncertain quality of information. Considering the anticipated continued growth of information overload, the librarians believe their role will remain essential. However, some also fear that their role might become obsolete in the future due to alternative ways of meeting user needs. They estimate that the role needs to be constantly adapted to users' changing needs.

Due to the vast amount of information available on the Internet today, an important component of reference librarians' work is information literacy instruction for students. Findings from the interviews as well as the literature in the field show that librarians consider information literacy

instruction as a central part of their role. These findings align with researchers, assertions that information literacy provides knowledge and tools to cope with information overload.

The quantitative research revealed that the characteristics of librarians contributing to the perception of information overload are (listed in order of their contribution): perception of threat, self-efficacy, the field of the library they work in, and conscientiousness. The perception of challenge contributes to the perception of overload through interaction with self-efficacy. It was found that professional characteristics and the library's field (among environmental variables) significantly contribute to the perception of information overload to a greater extent than personal traits.

These findings suggest differences among librarians working in different academic fields. Exact science librarians reported a higher sense of challenge, a lower sense of threat, as well as a lower perception of information overload compared to librarians from other academic fields.

The differences identified in the perception of information overload can be explained by various factors that have been identified as contributors to the perception of information overload, particularly the perception of threat in situations of information overload, conscientiousness, and self-efficacy in dealing with information searches.

Another reason for the differences found among librarians from different fields may be related to the nature and characteristics of the information. The literature indicates that each field - exact sciences, social sciences, and humanities - has unique characteristics in terms of central information sources used by researchers, their information needs, information structure, and information retrieval strategies. These characteristics influence librarians work and the knowledge they require in each discipline. Therefore, differences in the nature of information among different fields can explain some of the differences found in the study regarding the perception of information overload.

This research highlights the importance of using mixed methods to gain a comprehensive understanding of librarians' perceptions of information overload and its causes. The quantitative findings identified librarian characteristics that can predict perceptions of information overload, while qualitative findings expanded on them, adding different aspects of librarians' perceptions and their personal experiences. Using only one research method would have provided a partial picture.

This research has several practical implications. Unlike personality traits that are very difficult to change, professional characteristics can be strengthened, thereby improving librarians' ability to cope with information overload. Similarly, efforts can be made to enhance librarians' ability to

deal with the information sources in their discipline by deepening their familiarity with the discipline and its central literature sources. New librarians should be trained through specialized courses, and working librarians should update their knowledge in the field through further training and collaborations with researchers in the field. Additionally, it is recommended to increase the librarians' sense of challenge in their work, reconnect them with their sense of purpose, and clarify the meaning and relevance of their role in the information-rich environment. In terms of user interface, updating the reference interview to allow for a more precise expression of users' information needs and adapting the reference services to users' changing needs and new technologies are also recommended.

To the best of our knowledge, this is the first study to examine, using mixed methods research, the relationship between librarians' personal characteristics and their perception of information overload. The research contributes to the body of knowledge on information overload concerning a population that has been largely understudied - reference librarians. The combination of qualitative and quantitative findings sheds light on librarians' perceptions of information overload, presenting a rich picture that integrates their authentic voices and perceptions of various aspects of the phenomenon of information overload and working in an information-rich environment. Additionally, it identifies librarian characteristics that can predict perceptions of overload. The integration of these findings can not only offer explanations for librarians' perceptions of information overload and differences in overload perception among librarians working in different fields, but also suggest strategies to improve librarians' ability to cope with the overload.

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