Sociocultural Factors of Assistive Technology Adoption among Individuals with Reading Disabilities

Abstract

For people with disabilities, many aspects of daily life can be inaccessible. Computer-based assistive technologies are one way to enable people with disabilities to participate equally in work, school, and other aspects of daily life. However, assistive technologies are only beneficial if they are adopted and used, and currently at least a third of all such technologies are abandoned after purchase. Abandoned technologies represent a waste of time, funds, and resources for the purchaser, caregivers, suppliers, disability support specialists, and the people who funded and developed the technologies. Moreover, negative experiences with one assistive device can lead to increased disillusionment about the potential of other technologies to positively impact the life of the user. Research aimed at understanding the various factors that lead to the adoption or abandonment of assistive technologies is one attempt at preventing these consequences. Such studies have created a body of literature that informs current accommodation practices and the design of assistive technologies.

Existing research literature on assistive technology adoption has, however, tended to lump together users with different disabilities, ranging from mobility impairments to sensory disabilities to cognitive disabilities. Although such studies succeed in identifying general themes about assistive technology adoption, they tend to gloss over and ignore the diversity of both the disabilities and the associated technologies. As a consequence, sociocultural factors that shape the relationship between users and technologies are lost. Factors particular to a disability group can limit the effectiveness of assistance programs, policies, and technologies based on these general findings. To truly understand the full process of adoption, research in general has to begin disaggregate and focus on the issues and factors that shape the experiences of lives of individuals with particular disabilities.

This talk entails one such effort focusing on the sociocultural factors surrounding reading disabilities. Through a review and analysis of the research literature, this talk will identify and explore these factors and how they impact individuals with reading disabilities as well and influence the research on assistive technologies and technology adoption for this population. Such factors will include the critical importance placed on reading in today’s information society and how this leads to expectations of low performance from people with reading disabilities. The invisible nature of reading disabilities which can allow a person to hide from the potential stigmas of the disability will be discussed. Additionally, medical and educational models of reading disabilities and how these have influenced accommodation approaches, policies, and research will be covered. Looking towards the future, this talk will conclude with suggestions for the next steps in research and how to better incorporate sociocultural factors into current models of assistive technology adoption.