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## Shedding Light on Biopsychosocial Relevance of Digital Health Technologies

Polina Durneva  
*Florida International University, pdurneva@fiu.edu*

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## Shedding Light on Biopsychosocial Relevance of Digital Health Technologies

Polina Durneva, Florida International University, [pdurneva@fiu.edu](mailto:pdurneva@fiu.edu)

Personal relevance, a personally meaningful connection to the individual (Priniski et al., 2018), can be a valuable aspect of user experience with digital health technologies for self-management of chronic conditions. Specifically, personal relevance has the potential to improve user engagement, which is critical for driving health behavior changes and improving health outcomes (Birnbaum et al., 2015). Even though the importance of personal relevance is recognized, the literature review does not yield any study that conceptualizes this construct. To conceptualize personal relevance of digital health, we leverage the biopsychosocial model of health. The biopsychosocial model of health is one of the prevailing models in healthcare that holistically accounts for the multi-dimensional experiences of chronically ill individuals (Borrell-Carrió et al., 2004). The model views individual health in terms of biological experiences (e.g., pain), psychological experiences (e.g., stress caused by chronic condition), and social experiences (e.g., interference of chronic condition with a social life). In alignment with this model, this study explores personal relevance of digital health in terms of biological relevance, psychological relevance, and social relevance. We leverage the context of chronic headache pain, which is a biopsychosocial phenomenon affecting 10-15% of people in the world (Terwindt et al., 2003). This study conducts 25 semi-structured interviews with individuals who suffer from chronic headaches and use digital health to self-manage their headaches. Preliminary findings indicate that biological relevance entails user's perception of the usefulness of digital health with respect to keeping track of and managing their headache pain. Psychological relevance entails users' perception of the usefulness of digital health with respect to providing users with resources to improve their emotional states (affected by headache pain) and their feeling of empowerment stemming from the technology use. Finally, social relevance of digital health entails users' perception of emotional and informational support they receive from their interactions with other digital health users and their overall use of digital health (e.g., viewing digital health as their friend).

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