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# Mindful Discourse: A Critical Review of Mental Health in Human-Computer Interaction

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**Abstract**

Mental health is a growing area of interest and inquiry within many spheres. Despite increased interest, however, discussion surrounding mental health remains largely limited, stigmatized, and tied to medical narratives of illness, treatment, and recovery. Technological development is neither objective nor void of values. The ways scholars discuss mental health influences trajectories of research, design, and participation. In this workshop paper, we present preliminary findings from a critical discourse analysis of mental health-related work conducted by researchers in the field of human-computer interaction (HCI). We examine how the discourse of mental health in HCI is shaped, validated, and enacted with an eye toward dominant power dynamics and social practices, as well as how norms may restrict the field's understanding of this space. We begin to uncover gaps in the current literature and examine their underlying causes.

**Author Keywords**

Mental health; mental illness; mental wellbeing; critical reflection; discourse.

**ACM Classification Keywords**

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

## **Introduction**

Mental health is a rich component of individual, social, and cultural experience. Nevertheless, our understanding of mental health is frequently entangled with traditional perceptions of illness and disease, as well as morality (i.e., perceptions of personal morality impacting mental state) [16]. Even as social narratives around mental health shift to accommodate the rejection of harmful attitudes and stigma, the practices and power dynamics associated with historical views and institutions remain entrenched. By emphasizing treatment and a prescribed mental norm rather than embracing related concepts, such as mental illness, as part of lived experience, mental health remains categorically divided between normal and abnormal. Healthy and unhealthy. It's frequently the extremes of these spectrums that motivates our research and design.

Over the past several years, interest in mental health and computing has increased exponentially in the field of human-computer interaction (HCI). 2018, for example, marks the 3<sup>rd</sup> Symposium on Computing and Mental Health [25], an opportunity for technologists and mental health professionals to join in discussion around design and evaluation of mental health-related technologies. This symposium is not alone in its interests or approach [1]. However, understanding values related to mental health may be particularly complex given the diversity of individuals involved (e.g., patients, caretakers, practitioners, researchers), varying attitudes and perceptions of mental health, and implicit bias toward deviations from the perceived norm. For example, individuals with mental illnesses and healthcare practitioners may have different interpretations of lived experiences. Practitioner

attitudes toward mental health (e.g., stigma) have also been demonstrated to impact care [15]. Research at the intersection of mental health and HCI benefits from approaching interactions with technology from multiple, often conflicting perspectives [5]. Approaching from various perspectives could offer opportunities to reshape how we conceptualize mental health.

In this work, we draw from traditions of critical social analysis to understand the dominant values underpinning current mental health research, and the ways these values impact certain populations and technology development. Specifically, we use concepts and practices from disability studies [8], feminism [4], and critical discourse analysis to examine the roles and relationships between mental health, people, and technology in HCI literature, and to understand how these impact research, design, and participation.

## **Background**

The history of mental health begins with madness [21]. The eventual grounding of madness in natural forces, rather than supernatural ones, influenced trajectories of diagnosis, treatment, and stigma [10]. This shift in etiology introduced a medical approach to the mind, rather than a religious one. Conceptual descendants of this ancient approach [14] gained authority following initial dissemination and practice. Though, as Bertolote describes, authority and knowledge in this vein are fragmented [6]. No single, coherent field of study is devoted to mental health. Rather, many fields (e.g., psychology, psychiatry) prioritize mental illness.

Language surrounding mental illness, rather than madness, rose following the Second World War. This era witnessed the publication of the American

Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM) [3], which took a medical stance to the mind. This stance would later meet critique and resistance from the anti-psychiatry movement, which promoted the humane treatment of individuals with a range of mental experiences, rejected the pathologization of natural human experience (e.g., sadness, anxiety), and empowered individuals who were perceived as mentally ill. Within the context of this movement, mental illnesses were framed as socially constructed phenomena [22]. Nevertheless, medical narratives continued to dominate cultural perceptions of mental health. These constructions are not harmonious, however, and divide mental health into superficial categories (e.g., mind illnesses, brain illnesses).

Many approaches to mental health grant authority and power through expertise rather than lived experience. For example, though mental health solutions and interventions are typically designed for an individual with a mental illness, they do not necessarily examine and support living with that condition. Nor do they necessarily empower the voice of the individual receiving treatment. Personal accounts of mental health are important to understanding attitudes regarding the lived experience [12,18]. This understanding is one way to support new avenues for design and research.

### **Methodology**

We assembled a corpus of related articles for our analysis by conducting a systematic search of the ACM Full-Text Collection using a single search term (i.e., mental health) as an entry point [24]. We searched the ACM Digital Library using our search term and the author keyword field. The field constraint provided a

pragmatic approach to building a corpus of literature by allowing us to utilize author-defined boundaries of articles categorized within 'mental health'. We expanded this sample by crawling citations and conducting key word searches of related concepts (e.g., mental illness). Currently, our corpus comprises of 144 results. As others have argued [11], exhaustiveness of literature is not a goal in this type of work. Instead, we constructed a representative corpus that could be critically analyzed as contributing to the discourse of mental health through the inclusion of regulated language, practices, and roles.

To analyze the articles in our corpus, we recontextualized practices from critical discourse analysis (CDA) [9] to understand how language contributes to meaning, and how meaning relates to other social elements, such as power and institutions (e.g., medicine, media). Analysis involves describing and evaluating existing realities [9]. Therefore, our analysis prioritizes a number of particular elements, including material and semiotic relationships endemic in the field of HCI (e.g., human-centered interactions with technology), as well as concepts and practices tied to other social critiques and theories.

### **Discourse of Mental Health**

In this section, we present preliminary findings from our critical analysis. In particular, we discuss how the discourse of mental health is shaped, validated, and enacted within HCI.

#### *Motivation through Social Burden*

We found that a dominant narrative in the motivation and funding of work in mental health and HCI research involves economic burden and societal cost [13]

[17][23]. This motivation stands in stark contrast to how we solve mental health-related problems, such as mental illnesses. Solutions are typically proposed and evaluated at the level of the individual, rather than the society. While individuals are, of course, implicated in societal change, alternative framing for motivation in this space could emphasize personal experience (i.e., challenges associated with mental illness, such as emotional and financial strain) [7]. Further, by approaching mental health through the lens of illness, and positioning it as an inherent negative to be cured or treated, we miss opportunities to empower individuals living with mental illnesses, as well as to portray mental health positively.

#### *The Medicalization of Mental Health in HCI*

Our preliminary analysis also indicates that the narrative around mental health in HCI is predominantly influenced by language and practices stemming from the field of medicine. Research is thus bound to similar power dynamics (i.e., patient, physician) and applications (i.e., diagnosis, treatment). Work shaped by medical conceptions of mental health focuses on illness, as well as the individual, who is transformed from 'the user' [5] into 'the patient', a poorly defined construct within HCI that disempowers individuals with mental illnesses and positions them, and their lack of expertise and authority, in contrast to healthcare providers and caretakers. Mental health technology shaped by medical constructs often advances associated ideals (e.g., technology as proxy to an expert [13]; technology to monitor adherence [17]), rather than supporting social experiences (e.g., acceptance, normalization) [2].

#### *Siloed Communities and Experiences*

Finally, there is a tendency to divide mental health-related topics through strict medical boundaries and categories (e.g., anxiety, depression, dementia). While examining each of these topics in isolation is important, these boundaries may not capture lived experience. Strict categories also support distinctions between what is and is not mental health, as well as the values we conduct our work within. For example, workshops such as the HCIxDementia Workshop [19], as well as Brain-Computer Interfaces for Artistic Expression [20], demonstrate the breadth of areas related to mental health. However, not all of these research spaces acknowledge their connections with mental health in HCI as a whole.

#### **Conclusion**

Mental health covers a diverse spectrum of experience that should not be reduced to any singular facet (i.e., mental illness) or approach. In HCI, as in other fields, we tend to rely on medical interpretations of mental health to contextualize and frame research in this space. Relying heavily on any one field, however, restricts the roles, practices, and actions of participants, as well as the scope of technologies researchers and designers consider. As our collective interest in mental health grows, we have an opportunity to advance how we conceptualize mental health. Scholars in HCI do not need to align with traditional medical perspectives or practices, but can, instead, forge ahead by incorporating views currently at the margins to advance perceptions of mental health, as well as opportunities for future work.

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