

## **He Said, She Said: Exploring Linguistic Gender Differences in Health-Focused User-Generated Content**

Kristen L. Walker, California State University, Northridge

Marie Yeh, Loyola University of Maryland

Kimberly V. Legocki, St. Mary's College of California

Meike Eilert, University of Nebraska

### ***Statement of Key Contributions***

To fill the vacuum of authentic and processable information about mental health conditions and treatments, some consumers have been motivated to create YouTube review videos to help inform others about psychiatric medications and to share about their firsthand experiences in taking these drugs. We also know that significant differences exist in the adoption, use, impact, and efficacy of psychiatric drugs between the sexes (Moore and Mattison, 2017; Simoni-Wastila, 1998). Gender can impact drug efficacy and reactions, including side effects (Abel, Drake and Goldstein, 2010; LeGates, Kvarita and Thompson, 2019; Jacobson, 2014; Seeman, 2004; Simoni-Wastila, 1998; Yonkers, et al., 1992) and extant research indicates a distinct gender patterns in mental health conditions after age 13 (Landstedt et al., 2009). Examining differences in how men and women portray their experiences on these review videos is also important since the mental health conditions and their outcomes differ by gender.

Understanding the linguistic differences in video content sheds light onto which types of experiences they can encounter on social media and how they respond. Our research connects prior research on gender, applies linguistic analysis, and explores the differences that can help shape marketing efforts by industry and promote equitable and effective communication

strategies for consumer well-being. This research can help identify paths to create content that is more purposeful to help break down mental health stigma and motivate consumers to seek or continue treatment or identify opportunities to create intentional communities that respond to the specific needs of different consumer segments. Marketing research on mental health influencers' reviews of psychiatric medications on YouTube is unexplored and limited.

### ***Extended Abstract***

Digital channels are a critical component of patient journeys. An industry study finds that nearly three-quarters of American consumers start their patient journey using a search engine with nearly 20% seeking it out on a weekly basis, a substantial increase since a Pew Research Center study in 2013 found 59% of U.S. adults sought out health information online (Weber Shandwick and KRC Research, 2018).

While a large body of research in marketing has substantiated the power of user-generated reviews in influencing consumer decision-making, due to their (perceived) authenticity and credibility (among others), such content is especially powerful in the context of healthcare where patient experiences and outcomes are idiosyncratic, consumers may be unwilling to ask questions or seek out in-person help due to stigma or inaccessible or inequitable care, and where information flow between companies and consumers is regulated (Boyd et al., 2015; Kranke et al., 2010; Pound et al., 2005).

In this research, we examine how consumers engage with each other in a digital channel - YouTube - through health-focused, user-generated content. We focus on mental health influencers' reviews of psychiatric medications - medications taken by one in six U.S. adults

(Moore and Mattison, 2017) - given that mental health conditions are often attached with stigma still today and consumers may be limited in the information they are able and willing to receive from actors in the marketplace through other, non-digital channels.

To fill the vacuum of authentic and processable information about mental health conditions and treatments, some consumers have been motivated to create original content, for example, in the form of YouTube review videos to help inform others about psychiatric medications and to share about their firsthand experiences in taking these drugs. We refer to these consumers as mental health influencers as they - intentionally or unintentionally - shape the opinion of their audience around a topic (Abidin and Ots, 2016), and therefore can constitute an important source of information for others deciding on whether to start or progress on their own mental health treatment journey.

These mental health influencers establish expertise by revealing high levels of intimacy (personal disclosure) and personal experience led certain individuals to develop higher levels of authenticity, credibility, and trust: "Over a long period, those who achieved the status of Valued Contributor or Champion relay in intimate detail personal mental health and life circumstances often involving times of severe mental ill health and transitions towards successful coping and recovery practices" (McCosker, 2018, p. 4756). Health influencers share intimate details in a way that encourages support, connect and foster dialogue rather than reinforcing existing societal stigma or personal shame. It is efforts such as this that makes the internet an alternative for stigmatized populations hesitant to seek information regarding mental health via face-to-face channels, including young men (Pretorius et al., 2019).

We specifically address how mental health influencers and their audience engage in conversations with a focus on linguistic differences based on the influencer's observed gender. Our research question is: How is the content created by mental health influencers and its audience linguistically different based on the influencer's observed gender?

Examining these differences is important for various reasons as the experience of mental health conditions and their outcomes differ by gender. For example, significant differences exist in the adoption, use, impact, and efficacy of psychiatric drugs between the sexes. Gender is a positive and significant predictor of anxiolytic and antidepressant use with 21.2% of females reporting the use of psychiatric drugs versus 11.9% of males (Moore and Mattison, 2017; Simoni-Wastila, 1998). Moreover, gender can impact drug efficacy and reactions, including side effects (Abel, Drake and Goldstein, 2010; LeGates, Kvarita and Thompson 2019; Jacobson, 2014; Seeman, 2004; Simoni-Wastila, 1998; Yongers, et al., 1992). Extant research indicates distinct gender patterns in mental health conditions after age 13 (Landstedt et al., 2009); For example, anxiety and depressive symptoms are twice as common in girls (Hankin et al., 1998).

In addition, girls are also more likely to self-harm and attempt suicide while mortality by suicide is higher in boys and men (Wannan and Fombonne, 1998). Researchers and other experts have recognized that especially boys and men are often less likely to seek treatment for mental health conditions than women and pointed at masculine norms as a contributing factor to this behavior in the U.S. (Chatmon, 2020), highlighting the limitations of face-to-face or in-person channels for certain genders as (perceived) stigma increases. Understanding these linguistic differences in content sheds light onto which types of experiences they can encounter

on social media and how they respond. For example, are the shared mental health treatment experiences engaging and supportive? Are they using rhetorical techniques to build trust and relationships? Are these consumers responding to these techniques as observed in their responses to the mental health influencer's content?

To address these questions, we conduct a linguistic analysis of the content of publicly available YouTube videos with data collection taking place in August 2020. We focused on the top 20 drugs used to treat primarily depression that were among the top 25 most prescribed psychiatric drugs (Grohol 2019). Our final sample includes 116 videos by 102 unique mental health influencers with over 1,041 minutes of narration for analysis. Collectively, these videos have 5,493,684 views and 29,583 comments which garnered 70,943 likes and 4,276 dislikes. By answering these questions, this research can provide insights into whether consumers of different genders have access to relatable, informative patient experiences through user-generated content and potentially access to a support community. This research can help identify paths to create content that is more purposeful in linguistics to help break down mental health stigma and motivate consumers to seek or continue treatment or identify opportunities to create intentional communities that respond to the specific needs of different consumer segments.

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