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Conceptualization, Original Draft Preparation. **Erica Woodin:** Supervision.

Talking Back to Mental Health Stigma: An Exploration of YouTube Comments on Anti-Stigma Videos

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Stigma Videos

Abstract

Mental illness continues to be stigmatized, creating challenges for individuals with mental illness including help-seeking hesitancy, negative impacts on personal relationships, and barriers to basic rights such as housing, finances, and education. Stigma resistance are individual and public behaviors that stigmatized individuals use to counteract the negative impacts of stigmatization. We analyzed YouTube comments on amateur videos that purport to de-stigmatize mental illness in order to determine how individuals react to such content, as well as to examine the presence of stigma resistance strategies. We collected 12,842 comments from 20 YouTube videos, of which 985 comments were randomly sampled for thematic analysis. Five themes were identified: 1) community building, 2) personal experiences of mental illness, 3) personal experiences of stigma, 4) debates of mental illness validity and 5) providing explanations for mental illness. We identified comments that suggest both positive (e.g., building relationships, sharing and validating experiences) and negative (e.g., perpetuating stigmatizing beliefs, reminding viewers of being stigmatized) outcomes of viewing purportedly anti-stigma videos on YouTube. Based on comments, it appears many viewers experienced benefits from watching videos aligned with strategies used for stigma resistance, including a sense of community and a safe space to share personal experiences.

Keywords: mental health stigma, social media, mental illness, anti-stigma

Highlights:

- Individuals share their lived experiences of stigmatization towards mental illness through social media.
- Social media may create a safe space for individuals to share experiences of mental illness and stigmatization.
- Viewing anti-stigma materials may bring up distressing memories of stigmatization and further entrench stigmatizing beliefs.
- On social media, biomedical explanations for mental illness are predominantly shared.

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1: Background

Mental illness and neurodevelopmental disorders continue to be stigmatized (Walsh & Foster, 2020), resulting in a variety of impacts, including challenges reaching out for help (e.g., Clement et al., 2015; Schnyder et al., 2017), as well as impacts on housing, finances, school and work life, and relationships (Stuart & Arboleda-Flórez, 2012). To address this stigma, campaigns and discourse that seeks to de-stigmatize and/or raise awareness of mental illness through strategies such as indirect contact and education have been created. Videos that discuss mental illness typically involve a person with lived experience sharing their experiences (indirect contact) and providing information about mental illness (education; Corrigan, 2012). Typically, such efforts aim to increase help-seeking, decrease stigma, raise awareness, or some combination (Corrigan & Al-Khouja, 2018; Niederkrotenthaler et al., 2014). These efforts also commonly focus on messaging about mental illnesses being brain-based disorders (Corrigan, 2016), and provide professional resources (e.g., helplines, websites) (Ftanou et al., 2017). Formal video based intervention effectiveness is debated with some evidence that video interventions are effective in decreasing mental illness stigma in young people (Janoušková et al., 2017; Ito-Jaeger et al., 2021), while overall there is a lack of evidence to support the efficacy of video-based interventions in mental health education (Goodwin et al., 2021). When social media campaigns have been evaluated, findings suggest that utilizing mass media may be a feasible way to challenge the mental health stigma and should be further explored (Evans-Lacko et al., 2013; Sampogna et al., 2017; Vyncke & Van Gorp, 2020). The purpose of the present study is to examine YouTube comments on amateur videos which purport to de-stigmatize mental illness,

with the goal of furthering our understanding of the reactions individuals have to such messaging in a real-world context.

1.1 Stigma Resistance

While some suggest that stigma necessarily results in the devaluation of self, others suggest that it is possible for individuals to engage in stigma resistance (Campbell & Deacon, 2006; Firmin et al., 2017; Thoits, 2011; Wahl, 1999). Rather than stigmatization resulting in a negative view of the self, individuals who engage in resistance may experience similar levels of higher self-esteem, more positive quality of life, and better psychological health than those who do not resist stigma due to the sense of empowerment that may result from resisting stigma (Lau et al., 2017; Thoits & Link, 2016; Thoits, 2011; Wahl, 1999). Concretely, stigma resistance can occur through multiple strategies and at multiple levels. At the individual level, stigma resistance can involve challenging internal stigma, learning about mental health and recovery, proving stigma wrong through life choices and behaviors, and developing multiple identities besides that of having a mental illness (Firmin et al., 2017). Individuals may also resist stigma via deflection, meaning individuals may accept the stereotypes towards individuals with mental illness broadly, but reject the stereotypes for themselves personally via viewing themselves as different or better than other individuals with mental illness (Thoits, 2011). Stigma resistance can also occur at the public level, through challenging others' beliefs about mental illness (Firmin et al., 2017; Thoits, 2011). Individuals who engage in challenging tend to not only reject stereotypes of mental illness for themselves personally, but also for individuals with mental illness generally. Individuals engage in challenging with peers and publicly via attempting to educate others about mental illness symptoms, causes, and treatments, disclosing their own experiences of mental illness and stigmatization, or through advocacy and activism (Firmin et al., 2017; Thoits, 2011). In

particular, collective forms of stigma resistance are thought to be beneficial as they foster ingroup support, decrease individual risks, and increase potential for agency (Thoits, 2011).

1.2 Social Media Platforms and Stigma Resistance

Much of the research observing social media interactions has focused on social media engagement on amateur content, as opposed to responses to institutional videos or formal mental health awareness campaigns (e.g., Berry et al., 2017; Naslund et al., 2014). As these analyses focus on analyzing the content available on social media, they should not be seen as necessarily the “true” impacts of social media, which is beyond the scope of this paper, but rather the themes that emerge from what people choose to share on social media. Past research typically focuses on general experiences of sharing about mental illness, and does not have an explicit focus on responses to content that aims to de-stigmatize mental illness. Findings across these studies show that the content of online discourse about mental illness can be categorized into three themes: 1) addressing stigma, 2) creating safe communities of support, and 3) sharing information.

First, individuals share content or respond to discuss stigma, even when the video itself does not have an anti-stigma focus (Berry et al., 2017; Hernandez et al., 2019; Sangeorzan et al., 2019). In many cases, individuals with lived experience share that they feel they can combat misconceptions by being positive role models and educating others about mental illness (Sangeorzan et al., 2019). There is evidence that those who do discuss stigma online have increased confidence (Balani & Choudhury, 2015). This suggest that individuals may be engaging in stigma resistance through social media, using several common strategies including disproving stigma via sharing their own experiences and behaviours, as well as educating others (Firmin et al., 2017; Thoits, 2011). However, discussions of stigma also arise when individuals without mental illness use social media to stigmatize (e.g., wish illness upon others, associate

illness with undesirable characteristics and stereotypes, joke about certain conditions) and trivialize mental illness (Robinson et al., 2019). Thus, even when stigma is not the explicit topic of online content, comments that aim to stigmatize and de-stigmatize often arise.

Second, themes within social media comments suggest that social media is also a place where safe and supportive communities can be created for people with mental illnesses through discussions with others sharing similar experiences. Since this literature focuses only on what individuals post online, it cannot be known whether this is truly the impact, as it is possible that those who do not share have negative experiences, or those who do share positive experiences may not truly experience positive impact. However, when asked to post their reasons for sharing about their illness online, individuals described experiencing supportive community online, including reciprocity, openness, and safety for sharing about their experiences of mental health challenges (Berry et al., 2017). This is affirmed by findings that sharing of symptoms and experiences of mental illness online is commonplace (Cavazos-Rehg et al., 2017; Hernandez et al., 2019; Pereira et al., 2016), and that individuals with serious mental illness share experiences online that minimize isolation, provide hope, and allow for learning from shared experiences (Naslund et al., 2014; Sangeorzan et al., 2019). In fact, some felt that sharing online was a coping mechanism (Berry et al., 2017; Sangeorzan et al., 2019), and many seek or offer support on social media in addition to receiving treatment (Pereira et al., 2016). Thus, it appears that the type of community fostered through social media may provide the type of collectivity and social support necessary to engage in stigma resistance (Thoits, 2011).

Finally, information about mental illnesses is often shared online. This information tends to align with the biomedical model, and includes biological information, illness management strategies, and discussions of medication and treatment experiences (Devendorf et al., 2020;

Hernandez et al., 2019; Naslund et al., 2014). This is unsurprising, given that the biomedical model is the most dominant model of mental illness presently (Lebowitz & Appelbaum, 2019). Thus, by sharing information about this model, individuals may be attempting stigma resistance via sharing information about their perceived causes of mental illness (Firmin et al., 2017; Thoits, 2011). Although this information may not intend to stigmatize those with mental illness, by suggesting information attributed to chemical imbalances or the use of prescription drugs this discourse has the potential to reinforce stigma through attributing mental illness to individual deficiencies (Andersson & Harkness, 2018; Deacon, 2013; Devendorf et al., 2020). This discourse often emphasizes a division between abnormal and normal functioning, further restricting these conversations of mental illness to medical professionals and contributing to the classification of mental illness as a taboo topic (Jacob, 2017; Kemble, 2014). While biomedical explanations have been associated with a desire to create more distance from an individual with mental illness, those with biomedical views have also reported favouring external explanations for causes of mental illness, suggesting the potential for less blame (Kvaale et al., 2013). In order to reduce negative beliefs about mental illness, it has been suggested that biomedical messages be accompanied with psychosocial explanations that emphasize treatment, normality, and intergroup contact (Lebowitz & Appelbaum, 2019; Ojio et al., 2020). Interestingly, a previous analysis of discussions of depression on YouTube found that that depression was rarely described this way and YouTube video creators described depression from a biological or psychosocial explanation but not a combination of the two (Devendorf et al., 2020).

With increasing technological advancements, research on the utility of social media discourse is on the rise. Previous studies have suggested that sharing a diagnosis or personal mental health experience has yielded therapeutic benefits, such as decreasing negative affect

(Coppersmith et al., 2015; Ernala et al., 2017). One reason for these benefits can be attributed to social media enabling more private and anonymous discussions of mental illness while still promoting individual autonomy over what is being discussed (Guntuku et al., 2019). Moreover, social media data has often been utilized by anti-stigma efforts to educate and protest stigmatization, as well as promote a more positive representation of mental illness in mainstream media (Betton et al., 2015).

1.3 The Current Study

The current study aims to examine public online discourse in response to amateur YouTube videos that purport to de-stigmatize mental illness, with the goal of furthering our understanding of the range of reactions to amateur messaging on mental illness. We chose to focus on amateur videos, as opposed to organizational, as amateur videos tended to have more views and comments than organizational, consistently allowed for comments (as opposed to being closed to comments), and consistently featured a person with mental illness speaking (as opposed to animations with voiceover). While there is some literature on sharing about mental illness online that is not explicitly done to raise awareness or de-stigmatize, there is a lack of evidence on how individuals respond to online content that explicitly positions itself as having the aim of raising awareness or reducing the stigma of mental illness. It is also unknown to what extent individuals engage in both stigma resistance as well as further perpetuation of stigma via social media. As a result, the current study is an important adjunct to the formal evaluation of anti-stigma campaigns, as it examines the impact of informal, but popular, online attempts to de-stigmatize mental illness. Such an analysis will provide information about reactions that may inform future evaluations and aims of professional mental health awareness campaigns, as well

as will provide information about the potential and constraints of amateur content to impact viewers.

2. Methods

2.1 Ethics of Social Media Data Collection

There are several key ethical issues in the use of social media data. To ensure that the privacy and confidentiality of commenters has been protected in our study (Walker et al. 2018), we did not include any usernames of commenters in our data collection, analysis, or reporting. We also collected comments from YouTube, and ensured that all comments collected were publicly posted, as opposed to being posted on a website requiring an account to view comments (Lafferty & Manca, 2015; Moreno et al., 2013; Woodfield & Iphofen, 2017). This research was approved by the XXX Research Ethics Board.

2.2 Study Sample and Data Collection

In March 2020 the research team searched YouTube for videos using the search terms “*mental illness is fake*”, “*depression is real or fake*”, “*depression isn’t fake*”, “*mental illness isn’t fake*”, “*mental disorders are real*”. The search terms were determined to address mental illness stigma, without using the word ‘stigma,’ which is more commonly used by larger organizations. To be included in the sample, videos were required to: 1) have been publicly posted with no sponsorship, 2) posted by an individual, 3) include someone addressing mental illness stereotypes, stigma, or awareness, and 4) be in English. Results on YouTube were displayed through a continuous scroll webpage with no visible number of search results, so it was not possible to determine the total number of videos that resulted from the search terms. Results were scanned by the research team until 15 videos in a row were deemed irrelevant. Once a video is selected on YouTube, the website provides recommended videos for the viewer based

on videos the viewer has previously watched. Videos that were recommended from YouTube that were within the search criteria were also included in the sample. The selected videos were not required to have a minimum number of comments to be included in the sample, however, as can be observed in Table 1, the videos were quite far reaching in the number of views and subscribers of the YouTube video creators. We continued sampling until 20 videos were obtained (mean views = 123991, range 273-926,815; mean comments = 665, range 8-5788). A total of 12,842 comments were collected.

Table 1. Summary of Number of Views, Likes, Dislikes and Number of Subscribers of YouTube Comments on Videos Purporting to De-stigmatize Mental Illness

Video Number	Number of Views	Number of Likes	Number of Dislikes	Number of Subscribers
1	319	20	9	13.5K
2	330,194	7.3K	666	979K
3	926,815	40K	3.8K	44.4K
4	1094	200	13	35.1K
5	7340	569	46	58.2K
6	83,308	Unavailable	Unavailable	Unavailable
7	877	102	5	194K
8	503,281	17K	225	7.91M
9	213,844	10K	205	1.12M
10	3432	99	44	340
11	104,237	5.6K	148	470K
12	480	29	2	506
13	1563	43	8	36.2K
14	3749	81	14	82.9K
15	273	Unavailable	Unavailable	Unavailable
16	509	37	2	96.4K
17	2208	347	1	72.6K
18	229,050	12K	777	4.18M
19	306	13	6	371
20	66,943	3.1K	252	138K
Date Collected	March 2020	November 2021	November 2021	November 2021

2.3 Qualitative Analysis

Our analysis operates from a critical realist perspective, in which we assume that reality exists independently of beliefs and constructions, but that the knowledge that is communicated is constructed by individuals' beliefs and constructions (Maxwell, 2012). Thus, we do not aim to provide an objective account, but rather a description of individuals' knowledge and beliefs (Maxwell, 2012). Emerging research has started to section thematic analysis into three categories, with one being a 'codebook' thematic analysis, which guided our analytic approach when gathering and analyzing qualitative data (Braun & Clarke, 2020). Codebook thematic analysis was chosen to facilitate instruction in the coding process to novice coders (Braun & Clarke, 2020). Codebook thematic analysis does not emphasize consensus between coders and inter-coder reliability as a measure of quality and develops an original structured coding framework at the beginning of analysis (Braun & Clarke, 2021). Within codebook thematic analysis, researchers have the ability to refine and develop additional themes as the analysis continues throughout the data collection (Braun & Clarke, 2020).

To create the code book for qualitative analysis, we coded 100 randomly selected comments from the twenty videos. The first two authors were the primary coders, and the third author trained these coders and reviewed the codes. The two coders reviewed the 100 comments and highlighted key words that repeatedly appeared while also taking notes. The comments were broken down into all possible themes and the coders reviewed patterned thoughts or concepts that emerged and compared them all across the 100 randomly selected comments. From the 100 comments, 188 original codes were observed. The researchers then analyzed themes across the 188 codes to create the five overarching themes and subthemes that made up the codebook. Following codebook thematic analysis approach, this original codebook provided the overall

framework for coding, however, several more nuanced subthemes were added during data analysis as necessary.

After the code book was created, comments were randomly sampled for data analysis. When sampling comments from videos for data analysis, 100 comments were randomly sampled from each video. If a video had fewer than 100 comments, then all comments from that video were used. Of the 12,842 comments collected, 985 comments were randomly sampled for analysis. Two researchers coded 200 of these comments together. The two coders completed 150 of the comments together and then completed 50 of the comments individually and compared the coding together afterwards to ensure there was mutual understanding and definitions of the codes between coders early on in the coding process (O'Connor and Joffe, 2020.) The remaining comments were coded individually. A shared log of ongoing questions and clarifications was kept throughout coding, and the two coders continuously discussed this log to resolve discrepancies. Of the total 1878 times comments were coded, 230 of these were determined to be indecipherable and were excluded from formal analysis.

3. Results

Five overarching themes emerged: 1) community building, 2) personal experiences of mental illness, 3) personal experiences of stigmatization, 4) debates regarding the validity of the mental illness construct and 5) providing explanations for mental illness (see Table 2 for summary of themes and subthemes).

Table 2. Summary of themes and subthemes of YouTube comments on videos purporting to destigmatize mental illness

Theme	Subthemes
Community Building	• Gratitude and encouragement • Requests or questions • Disqualifying skeptical perspectives • Desire to share the video with others

Personal Experiences of Mental Illness	• Sharing diagnosis • Description of symptoms • Treatment or recovery experiences
Personal Experiences of Sigma	• Describing stigma from others • Changed relationships due to mental illness or neurodevelopmental disorders • Self-judgment of mental illness • Experiences of minimization of mental illness or neurodevelopmental disorders • Fear of reaching out
Debates of Mental Illness Validity	• Debating whether mental illness is ‘real’ or ‘not real’ • Describing ‘acceptable’ versus ‘unacceptable’ coping mechanisms • Debating whether people use mental illness or neurodevelopmental disorders as an excuse • Questioning if a diagnosis determines the legitimacy of mental illness or neurodevelopmental disorders • Skepticism about the biomedical model • Disqualifying or ridiculing mental illness or neurodevelopmental disorders
Explanations for Mental Illness	• Biomedical model • Familial environments • Willpower • Lack of social support • Moral or political beliefs • Multiply determined

3.1 Community Building

Community was built in the comments through validating those with mental illness, providing encouragement, and asking for further advice. Four subthemes were established within community building: 1) gratitude and encouragement ($n = 289$), 2) requests or questions ($n = 78$), 3) ridiculing/disqualifying skeptical perspectives of mental illness ($n = 88$), and 4) a desire to share with others ($n = 27$).

Many commenters expressed gratitude or provided encouragement in the comments section towards the video creator or other viewers ($n = 289$). Gratitude was often a simple “thank you” directed towards video creators and other commenters for providing information or support,

while encouragement was seen through comments that provided support for others. For example, one commenter encouraged another by stating “there is always a way to go through [mental illness] ...it can take years but there still is. It will maybe always be part of your life in some cases, but you can still live.”

In addition to supporting others, viewers also asked questions about mental illness ($n = 78$). Viewers asked about others’ personal mental illness experiences, symptom presentations, how to provide support for others, or asked specific questions related to their own experiences with mental illness. For example, one commenter wrote,

I was diagnosed with OCD and dealt with it for years, yet after I was diagnosed with depression, my OCD symptoms went away almost entirely, perhaps because my depression was causing me no[t] to "care" anymore. Is this normal, or could there be something else going on?

Others expressed a desire to connect further (e.g., “Do you know [or] want to start a forum for us BPD sufferers. About time we connect”).

Commenters also built community by collectively ridiculing or disqualifying those who stigmatize mental illness ($n = 88$). Commenters connected with other viewers by challenging individuals who disqualifed mental illness. For example, one commenter wrote of a negative article towards mental illness that was discussed in the video, “That article made me pretty angry. I have no idea what was going through this person's mind while writing this but surely enough nothing intelligent or worth paying attention to.” Commenters also shared how their stigmatizing beliefs towards mental illness had changed in a positive way ($n = 9$). For example, one commenter wrote:

thank you for bringing this to people's attention. I'm guilty of saying to my friend with anxiety, 'you're overthinking it, everything is going to be fine' I meant it in a comforting way but it's not something I'll say now.

Individuals also expressed their desire to share the creator's video with others ($n = 27$). Viewers provided different reasons for wanting to share, including wanting to help loved ones understand mental illness (e.g., "I could most definitely use [this video] in order to explain this to my family members who do not understand depression, anxiety, etc."), showing the video to educate the general population on mental illness (e.g., "Wow, this is perfection in a video! This should be shown in schools and to our government."), and to inform others of the impacts of mental illness.

3.2 Personal Experiences of Mental Illness

Many viewers shared their personal experiences in the comments section. These comments included sharing a personal diagnosis ($n = 233$), symptom descriptions ($n = 112$), and individual treatment and recovery experiences ($n = 60$).

Two hundred and thirty-three commenters shared a personal diagnosis of a mental illness ($n = 194$) or a neurodevelopmental disorder ($n = 39$). At times, individuals generally shared that they had a mental illness (e.g., "my mental illness got me a lot of attention I didn't want"), while others shared specific diagnoses they had received (e.g., "this made me mad [because] I suffer with depression"), and others shared self-diagnoses (e.g., "I have self-diagnosed SAD"). Commenters also shared symptom descriptions ($n = 112$), often done seemingly to express what they wished others would understand about their experience:

Of course, my anxiety will increase during situations that cause me stress, and some days more than others. But I also feel anxious ALL the time, just when I'm sitting around thinking, sometimes that's even when it's the worst, and that is why I have a diagnosis.

Commenters also shared their recovery experience or treatment advice ($n = 60$). This was done in to promote hope, to illustrate how challenging it is to overcome mental illness, or to provide information or suggestions. Some individuals encouraged formal treatment experiences, as one commenter wrote “The only way to get rid of [anxiety] is to seek therapy to manage it.” Others commented on medication experiences: ““I've actually been taking Ritalin for around six weeks or so for my ADHD, and I can confirm that it has been helping me a lot.” Individuals also shared lifestyle changes that promoted wellbeing:

I stopped drink soda, started reading more, switched from chewing to vaping, I sold a bunch of my collectibles and am working on being a minimalist... been dealing with depression for about 8 years. This is the happiest I have been in years.

3.3 Personal Experiences of Stigmatization

Many commenters ($n = 223$) shared personal experiences of stigmatization related to mental illness. These comments included viewers sharing experiences of: 1) stigma from others ($n = 90$), 2) changed relationships due to their mental illness ($n = 23$), 3) self-judgment of mental illness ($n = 20$), 4) sharing their frustrations with the minimization of mental illness or neurodevelopmental disorders ($n = 87$), and 5) fear of reaching out ($n = 3$).

Commenters described a range of negative interactions related to mental illness, including having legitimacy questioned, feeling judged by others, or receiving feedback on how they should behave. Individuals shared how their family and friends have not believed in their

diagnoses (e.g., “I remember when I was diagnosed with ADHD and NO ONE in my family believed it.”) Others discussed experiences of judgment:

I have a whole slew of (mostly invisible) health issues including crippling pain and dislocations--and the whole anxiety-OCD-depression trifecta, which is all interlinked to my chronic pain. It's so demeaning and dismissive when people are like "why don't you just eat healthier?" like, KAREN, I EAT HEALTHY I JUST HAVE AN INCURABLE GENETIC **CONDITION** OK CALM YOUR JUDGEMENT.

Some commenters shared examples of judgment occurring when seeking treatment, as one commenter wrote “Having only been identified as BPD for a short time, I was astounded by the stigma associated with the diagnoses and the disdain general and mental health professionals alike provide treatment.” Other commenters discussed interactions where they received hurtful feedback or unsolicited advice regarding their mental illness from others. Commenters discussed both specific advice they received in personal relationships (e.g., “[My family says] things all the time like I'm not trying to get better... They say that I just need to exercise.”), as well as general feedback commenters received from a variety of sources, for example:

As someone who is bulimic it's honestly so damaging to hear people constantly tell me I can't be bulimic [because] I don't force myself to throw up. Purging can have many different forms, and my existence outside of the norm doesn't invalidate me.

Commenters also shared how mental illness had changed features of their social lives. A few commenters expressed how they had lost an important relationship in their lives, whether that be a friend, co-worker, or strained family relationship because of mental illness:

I remember when I was in my second year of high school, I told my best friend at the time that I had been diagnosed with depression and she said "You can't have depression! You're always so happy!" Needless to say, I didn't really talk to her about it after that.

In contrast to viewers sharing how relationships have dissolved due to their mental illness, others shared how people in their lives have accepted their mental illness or neurodevelopmental disorder (e.g., "My friends don't see my BPD as a label, they see me as me.")

In addition to being stigmatized by others, a smaller number of commenters also shared how they have questioned the legitimacy of their own mental illness (e.g., "I don't want to ask others for help because there is still a possibility that I am faking it"). Others shared how they have felt that they have exaggerated or faked their mental illness symptoms to access mental health services (e.g., "I've self harmed before for attention because I just wanted help") or for attention (e.g., "err anyways, I've also had the thought of faking mental illness for attention.")

Many commenters expressed frustrations with the minimization of mental illness or neurodevelopmental disorders. Viewers expressed frustration with jokes (e.g., "One thing that I really hate is how jokes about suicide are so common these days.") or statements ("I hate hearing 'Oh you have anxiety? well, just stop having anxiety!'") that are made at the expense of mental illness. One commenter provided a personal experience of minimization, writing "I have lifelong depression but I'm excellent at hiding it... Overheard a co-worker say that line about, 'They like to be miserable! that's what they do, just sit around thinking of ways to be miserable.'"

As a result of the experiences of stigma discussed, a small number of commenters shared how they are afraid of reaching out for help, as one commenter wrote "these stigmas have prevented me from seeking help during some of my darkest times."

3.4 Debates Regarding the Validity of the Mental Illness Construct

170 comments focused on debating the validity of various mental illness experiences. Subthemes include discussions of: 1) ‘real’ or ‘not real’ mental illness or neurodevelopmental disorders ($n = 53$), 2) acceptable vs. unacceptable coping of mental illness ($n = 12$), 3) mental illness or neurodevelopmental disorders being used as excuses ($n = 9$), 4) whether people are faking or exaggerating mental illness or neurodevelopmental disorders symptoms to achieve a social or tangible goal ($n = 33$), 5) whether diagnoses determine the legitimacy of mental illness or neurodevelopmental disorders experiences ($n = 21$), 6) skepticism about using the biomedical model for mental illness ($n = 19$), 7) comments that directly ridiculed or disqualified mental illness or neurodevelopmental disorders ($n = 12$).

Fifty-three commenters discussed whether neurodevelopmental disorders or mental illnesses are real or not. Some viewers clearly affirmed the reality of mental illness (e.g., “My biggest pet peeve is that people think anxiety is not real or self induced when it is an actual mental problem.”) Skepticism was demonstrated by commenters discussing and analyzing the severity of disorders, the causes of mental illness, and the process of diagnosis. For example, one commenter wrote about what they perceived to be legitimate versus illegitimate causes of depression, “With the over diagnosis of depression it is hard to take seriously as it’s hard to find a case of genuine clinical depression versus those that have environmental depression caused by something ‘real world’ happening around them.”

Viewers also discussed what they perceived as legitimate or illegitimate ways of coping. Some went so far as to provide treatment advice and criticize how people treat their mental illness:

[Doctors] prescribe you medicine that you take for like 5 months and [you're] cured so please to all of the people who think mental illness is incurable please stop it and get some help you can cure it with a damn psychiatrist not a therapist.

Commenters also discussed whether mental illness is used as an excuse or a means to receive special privileges. Some reflected on their own mental health and determined that they may use a diagnosis as an excuse themselves:

I'm pretty sure I am somewhat OCD and somewhere on the autism spectrum, but I don't want to get tested for them, because it would be way too tempting to use them as an excuse when I fuck up or want to piss someone off.

Commenters applied these same criticisms towards their peers or loved ones (e.g., "Sometimes I feel [friend] does use her [mental] illness as an excuse to yell at, manipulate, or bully her way through with family and friends.")

Viewers expressed differing views on whether a diagnosis of mental illness determined the legitimacy of a person's experiences with mental illness. Some viewers felt that self-diagnosis was a legitimate means of communicating that someone is struggling:

I used to work in the admissions unit of a very large NHS hospital and I can tell you there are people who say they are mentally ill without a diagnosis HOWEVER I would also say that if a person is desperate enough to self-diagnose and "fake" signs of mental illness for "attention", then that in itself is a sign that something is wrong and that person probably requires some kind of help NOT a verbal bashing.

Others implied beliefs that only those who have been diagnosed have mental illnesses (e.g., "I also very much dislike when people say they have a mental illness when they haven't been properly diagnosed.")

Commenters also criticized how the biomedical model addresses mental illness. Many viewers criticized professionals' lack of knowledge (e.g., "What I want to know is why are so many doctors clueless on mental illness still!!!") while others more broadly questioned whether there is biological evidence for mental illness (e.g., "Is there ACTUALLY proof of ... neurological/biological cause [of mental illness]?") Viewers also used this as a space to question how biomedical treatments function for mental illnesses (e.g., "I've always felt that nearly all medications have some sort of side effect or don't work effectively enough to be worth it.")

Some commenters outright disqualified or ridiculed mental illness or neurodevelopmental disorders. These comments varied in intensity with some commenters simply stating that specific mental illnesses were not real (e.g., "the sad truth is.... depression IS NOT real"), while others provided alternative personal interpretations of mental distress:

If I wanted to I could look at my symptoms and blame it on mental illness, I meet a lot of the symptoms. People that believe in mental illness refuse to think people can go through the same exact thing as them and have a different outlook on the situation and not blame mental illness.

3.5 Explanations for Mental Illness

Commenters explained their perspectives on why mental illness occurs, why it continues, and how it can impact individuals in unique ways ($n = 197$). Comments associated mental illness with the biomedical model ($n = 116$), certain familial environments ($n = 15$), willpower or personal strength ($n = 26$), a lack of social support or a result of certain social structures ($n = 15$), a result of lifestyle choices ($n = 12$), a result of certain moral or political beliefs or values ($n = 2$), or multiply determined ($n = 6$).

Most commenters shared explanations of mental illness aligned with the biomedical model. As a result, this category was further divided into four subcategories, 1) authority of professionals ($n = 37$), 2) comparison of mental illness with medical illnesses ($n = 27$), 3) information aligned with the biomedical model ($n = 37$), and 4) references to need for education in the biomedical model ($n = 15$). Authority of professionals included comments that asserted a need for professional help for mental illness, (e.g., “There are ‘temporary’ mental illnesses [which] can be cured with a therapist”). Comparison of mental illness with medical illnesses included comments that compared medical and mental illnesses or referred to mental illness as a disease (e.g., “[mental illness is] a disease, and as a disease it can be healed, completely or partially”). Many comments included information aligned with the biomedical model, including those that mentioned different imaging techniques, such as brain scans, and brain abnormalities, as well as comments discussing the use of medications. Commenters also referenced a need for education, including that others should learn about the symptoms of mental illness and the need for credible research.

Fewer commenters discussed explanations outside of the biomedical model for mental illness. Commenters explored how familial environments may cause or exacerbate mental illness (e.g., “I believe depression is mostly an environmental issue opposed to an innate biological one. If you have grown up with a horrible upbringing or suffered from a traumatic event (losing a loved one) thoughts tend to loom and remain.”). Other commenters discussed whether mental illness is a result of little willpower, (e.g., “Just you wait, you’ll see it and it’ll finally prove that you’re just a wimp that can’t do what normal people do.”). Commenters also referenced how mental illness develops from a lack of social support or from social structures, such as financial barriers to treatment, or in response to current Western culture:

Mental illnesses are the by-products of fleeing time designed by modern society and people chasing around false successes and they couldn't keep up with the pace of the world and they neglect their own nature of the mind and the mind responds with illness. Others affirmed the role of social support in mental illness (e.g., "People battling mental illness are always better off when they receive love and support.") A small number of comments discussed the role of lifestyle factors in mental illness, such as diet and exercise. Two comments mentioned Christianity and the role of God in mental illness, stating that they trusted God to lead them to a place of happiness and cure their mental illness.

A small number of commenters asserted that mental illness is multiply determined. In these comments, individuals referenced many different reasons for the onset and continued experience of mental illness (e.g., "[Mental illness] depends on the environment you live in, your parents' mental health, and your character"). One comment in this category referred to how everyone's experience is unique (e.g., "Depression can be the result of many underlying factors, different from what yours was").

4. Discussion

To our knowledge, this is the first study to qualitatively examine online discourse responding to messaging that seeks to de-stigmatize mental illness. We found five themes: 1) community building, 2) sharing personal experiences of mental illness, 3) sharing personal experiences of stigma, 4) debates about mental illness validity, and 5) explanations for mental illness. With the exception of individuals who perpetuated stigmatizing beliefs about mental illness, all of these themes are aligned with strategies used for stigma resistance (Firmin et al., 2017; Thoits, 2011) Both positive and negative reactions to anti-stigma messaging were observed. Positive reactions include fostering a sense of solidarity among those with shared

experiences, as well as creating a safe space for commenters to share about their own experiences of both mental illness and stigma. At the same time, some comments suggest the potential for negative impacts, including reminding viewers of potentially unpleasant experiences of stigma, and some viewers re-affirming ongoing stigmatizing beliefs they hold.

Several of the themes identified in the current study, such as community building and sharing personal experiences, align with stigma resistance, as well as previous research on mental health discourse on social media. Community building that is done via social media fosters the collectivity and righteous anger characteristic of those who may engage in directly challenging stigmatizing beliefs (Thoits, 2011). Further, sharing personal experiences in order to both educate and assist others with shared experiences has been theorized as a public means of challenging stigma (Firmin et al., 2017). Similar themes have been seen in past analyses of social media discourse. Specifically, it has been established that individuals share about their symptoms and experiences of mental health online in such a way that allows for minimizing isolation, providing hope, and learning from others (Berry et al., 2017; Cavazos-Rehg et al., 2017; Hernandez et al., 2019; Naslund et al., 2014). Due to the consistency of this finding across social media platforms and content (e.g., personal stories versus anti-stigma messages), it appears that personal sharing and connecting with others may be a core feature of mental health dialogue online, regardless of the explicit focus of conversation. The use of these platforms for community building makes sense, as potential anonymity could allow users to disclose information they may not be comfortable disclosing if they were identified (Guntuku et al., 2019), and the wider reach of these platforms may allow a unique opportunity to connect with others with shared experiences that one may not have access to in their geographic region. It could also be that amateur content creators reinforced this personal sharing, as content creators

often positioned themselves as relatable individuals who had experienced mental health challenges. This personal sharing is important, as it has been shown that sharing personal experiences with others can yield therapeutic benefit (Coppersmith et al., 2015; Ernala et al., 2017).

While previous studies have found comments that seek to de-stigmatize mental illness (e.g., Berry et al., 2017; Hernandez et al., 2019; Sangezoran et al., 2019), our study was unique in finding that commenters not only sought to share de-stigmatizing information, but also shared personal stories and experiences of being stigmatized. Again, sharing these types of experiences has been described as a means to resist stigma, as sharing the experience as something “wrong” supports the individual in resisting stigmatizing messages of self-devaluation (Thoits, 2011). Further, it has been theorized that individuals with mental illness experience hermeneutical injustice, where individuals lack the resources to label experiences as discriminatory as the result of a lack of open conversation about ongoing discrimination against individuals with mental illness (LeBlanc & Kinsella, 2016). Because of this lack of discourse, it may be that individuals typically do not have the interpretive resources to understand and communicate when they are being stigmatized or discriminated against (LeBlanc & Kinsella, 2016). Therefore, when individuals with mental illness view videos discussing stigmatizing beliefs and experiences, they may find validation for previous experiences of stigmatization. This is of particular importance as mental health and illness is a stigmatized topic all over the world (Isaksson et al., 2017; Maunder & White, 2019; Xu et al., 2017), making it challenging to question stigma if it is a part of the overarching narrative of mental health and illness. Previous research has observed positive impacts when discussing mental health stigma online, such as increased confidence (Balani & Choudhury, 2015). It is possible that commenters sharing personal experiences of stigmatization

within the current study may have similar benefits, though further research would be needed to affirm this.

We also found that participants provided comments reflective of their own explanations for mental illness, mostly aligned with the biomedical model. This, too, likely reflects attempts to resist stigmatization, as attempts to educate others about symptoms, causes, and treatments for mental illness are recognized as another means of challenging others' misconceptions (Firmin et al., 2017; Thoits, 2011). This aligns with previous research of social media discourse including sharing biomedical information (Devendorf et al., 2020; Hernandez et al., 2019; Naslund et al., 2014). The dominance of the biomedical model is to be expected, as it has become increasingly popularized in academic settings, mainstream media, and anti-stigma efforts (Corrigan, 2016; Ratner, 2017). Biomedical explanations appear to decrease blame placed on the individual for their mental illness, attributing cause to external factors (Kvaale et al., 2013). Biomedical messaging is widely used and has been suggested to mitigate stigma surrounding mental illness by citing trusted healthcare professionals who promote external, medically related, explanations (Ojio et al., 2020). Overall, biomedical messaging appears to align with societies shift towards medical explanations that proport blame. While the biomedical model is often viewed as de-stigmatizing, it has been suggested that only adhering to biomedical views may contribute to mental health stigma (Corrigan, 2016; Stuart & Arboleda-Florez, 2012). Thus, while the biomedical model is commonly used both in anti-stigma campaigns and, in the current study, it may be beneficial to begin incorporating psychosocial explanations into mental health messaging to reduce statements classifying mental illness as a personal problem, rather than an outcome of many factors.

We also observed instances of mental illness topics being debated. Although outright disqualifying and skeptical perspectives were rare, our results suggest that social media discussions of mental health stigma hold the possibility of further entrenching those who hold stigmatizing beliefs. This is aligned with previous findings that social media discussions can be stigmatizing and trivializing of mental illness (Robinson et al., 2019). This is perhaps expected, as if commenters are engaging in stigma resistance via challenging beliefs and stereotypes, it is expected that, while some individuals may experience stigma reduction, others may return the challenge in line with ongoing stigmatizing beliefs. It is unknown what effect reading such stigmatizing comments may have on viewers.

There is also evidence that mental health stigma campaigns that make use of “myths and facts” formats can increase mental health stigma, as individuals may remember and internalize the myths presented, rather than the facts (Dobson & Wolf, 2021). The videos we analyzed were similar in format, as video content centred on presenting a stigmatizing belief (e.g., depression is fake) and “debunking” the argument. Though stigmatizing beliefs were evidenced in a minority of comments, our results provide some further support that directly discussing stigmatizing beliefs or mental illness “myths” may be riskier for entrenching stigma as opposed to approaches that solely present accurate, de-stigmatizing information (Dobson & Wolf, 2021).

4.1 Limitations and Future Directions

While this study offers a valuable window into reactions to amateur anti-stigma messaging without researcher interference, we also note several limitations. First, no demographic information was collected about commenters, and thus it is unclear who is being reached by these videos. It could be that only certain demographics view and comment on these videos, or that different demographics would respond differently. Second, we could only analyze

available comments, which represent those viewers who were moved to engage further with the video. It is unknown if those who viewed the video but did not comment would have different reactions than those that did. As has been noted by researchers using similar approaches (Robinson et al., 2019), it can be challenging to infer the meaning of social media comments devoid of context, and thus in this study some comments were deemed indecipherable, and at times reasonable inferences were made. Having the ability to follow-up with participants to clarify meaning and intent may be helpful in future research. Thirdly, our search terms were limited to videos mentioning mental health stigma more broadly. Future research may choose to focus on specific mental illnesses to widen the search. Finally, because we analyzed comments on pre-existing amateur videos, we could not control the content of these videos. Some videos were lengthy, and thus it is unclear from this study if certain components of the video were more impactful than others.

There are several fruitful directions for future research. First, the current study points to potential avenues for future evaluation of anti-stigma materials. This evaluation may involve investigating new variables in larger-scale organizational anti-stigma campaigns, or may involve more formal evaluation of the utility of already existing amateur content that aims to destigmatize mental illness. It is noteworthy that some of the videos included in this study had many views (over 900,000), thus suggesting the potential for wide reach of amateur content. Regardless of type of content to be evaluated, several new variables merit inclusion based on the results of the present study. First, while evaluation of anti-stigma campaigns often focuses on the impact on help-seeking behavior (e.g., Klimes-Dougan & Lee, 2010) or observed attitude changes in the general population (e.g., Livingston et al., 2014), results of the current study suggest that dimensions such as sense of belonging or solidarity for individuals with mental

illness may be impacted by anti-stigma messaging, and thus should be included in future evaluations. Additionally, we noted in the current study that anti-stigma messaging may be especially likely to give rise to memories of stigmatization. It is unclear if this is a potentially positive experience that allows individuals to identify and feel validated in their previous experiences of prejudice and discrimination or whether remembering such instances is distressing, or some combination of both. Future research should seek to evaluate what the short and long-term outcomes may be of remembering, and potentially reframing, these experiences. The videos included in the current study were lengthy and had multiple points of discussion. Future research may seek to break down anti-stigma content and examine whether certain components are more likely to be effective in fostering positive outcomes and minimizing negative outcomes. Finally, if further evaluation of amateur content is to be pursued, it would be important to recruit participants to measure their responses to the videos, thus ensuring that a wide range of reactions and responses are gathered, as opposed to solely the responses of those who chose to both view and comment on the content.

4.2 Conclusion

This study is the first to qualitatively analyze social media responses to content that aims to de-stigmatize mental illness. Within social media responses, we found ample evidence of commenters engaging in multiple forms of stigma resistance via building community, sharing personal experiences of mental illness and stigma, and sharing information about mental illness. While some of our themes align with social media discussions of mental illness that are not focused on stigma (i.e., community building, sharing personal stories of mental illness, sharing information aligned with the biomedical model), others were unique to the current study, including sharing personal experiences of stigmatization and debating the validity of mental

illness. The current research suggests the potential for both positive and negative outcomes as the result of viewing purportedly anti-stigma materials, with more comments reflecting potential positive outcomes (e.g., finding community and encouragement) as opposed to negative outcomes (e.g., further entrenching stigmatizing beliefs about mental illness). Aligned with the current findings, future research on anti-stigma efforts should both broaden the scope of potential themes, as well as more thoroughly investigate the potential benefits and drawbacks of anti-stigma materials, including amateur-created YouTube videos.

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