Examining the Potential of Utilizing Social Media to Address Employee #Depression in the Workplace

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Mental health = health. This is the attitude I wish all employers would adopt.

- Research participant, 2017

Introduction

My decision to focus my research on addressing employee depression in the workplace stems from personally experiencing adverse events at a previous job because of my mental health condition - depression. My experience occurred at a reputable school, University of Washington (UW) in Seattle, WA, which, according to niche.com ("Best Colleges for Psychology in Washington," 2017), is ranked as having the best Psychology program in Washington State. University of Washington is an academic and teaching institution that houses the top Psychology program in Washington State. If workplaces like UW are not outfitting their supervisors and managers with the education and skills training needed to prevent or intervene employee depression, what does this tell us about how *and if* organizations and businesses are tackling this issue?

Overview

Despite depression being the most manageable mental health condition, research shows that it will be the top cause of disability in the world by 2020 (Dietrich, 2012; Tan et al., 2014). In developing countries, depression is one of the primary causes of long-term disability and work absences, which creates significant personal, social, and economic costs (p. 1, Joyce et al., 2015). In fact, depression is one of the most costly health problems impacting employee work ability and performance (p. 319, Furlan et al., 2012). As a result, many policy makers recognize depression in the workplace as a significant public health issue, and they are interested in finding effective workplace interventions (p. 1, Joyce et al., 2015).

After reviewing existing research, it seems the most critical aspect of addressing employee depression is to address the prevalence of stigma regarding mental illness. Time and again, mental health studies have shown that stigma is the primary barrier to increased help-seeking by those experiencing mental illness symptoms, as well as a critical barrier to enhancing mental health resources and support in the work environment (p. 1, Bovopoulos et al., 2016; p. 1, Haimson et al., 2014; p. 61, Hamman et al., 2016; p. 4, Naslund et al., 2016). In one study, 31% of the interviewed employee participants reported they were unaware they exhibited symptoms of mental health issue so had not sought out treatment or support (p. 1, Bovopoulos et al., 2016). This is a notable point, as Tan et al. (2014) found that intervening during the early stages is favorable to manage depression or prevent depressive symptoms from worsening (p. 1).

However, most employers respond reactively to employee mental health issues and intervene only *after* employees exhibit depressive symptoms or employees are already on sick-leave (p. 1, Tan et al., 2014). This is unfortunate because, as researchers Nishiuchi, Tsutsumi, Takao, Mineyama & Kawakami (2007) reported, supervisors and managers can have a significant impact on employee well-being. They also purported that supervisors and managers tend to work in close proximity to employees, so they are more apt to be aware of employee issues (pp. 190-191). In this way, the role of supervisors in enhancing and supporting employee mental wellbeing is key; in fact, there have been studies examining supervisor-specific trainings.

As will be discussed further, existing research examines various in-person and web-based supervisor and manager trainings aimed at increasing their knowledge and skills for detecting, understanding, and supporting employee depression (Hamman et al., 2016; Kawakami et al., 2006; Pyc et al., 2017; Nishiuchi et al., 2007). However, despite the increasing prevalence of social media usage in the workplace, there is next to no research examining how social media ("a

group of internet-based applications that allow creation and exchange of user-generated content" (p. 2, Gough et al., 2017)) may be utilized as a tool to prevent or intervene employee depression (p. 2, Maben and Gearhart, 2017).

In their review of studies examining social media-use for promotion of mental health, Guntku, Yaden, Kern, Ungar and Eichstaedt (2017) reported that the greatest number of studies focus on depression (p. 43). This speaks to the prevalence of depression and the need to continue much more research in this area. In their statement, the researchers encapsulate the potential of social media in addressing employee depression, "The widespread use of social media may provide opportunities to help reduce undiagnosed mental illness" (p. 43).

Depression in the Workplace

According to the World Health Organization (WHO), depression is the most common mental health illness in the workplace (Dietrich, Deckert, Ceynowa, Hegerl, & Stengler, 2012; Furlan et al., 2012). Though the negative impacts of depression in the workplace are many, most businesses and organizations do not recognize the need to implement employee depression initiatives (p. 363, Allen, Hyworon, & Colombi, 2010). Additionally, at companies that provide employee assistance programs (EAP), depression is seldom addressed (p. 319, Furlan et al., 2012).

Due to the prevalence of depression in the workplace, it is vital that depression is integrated into employee wellness programs (p. 240, Cockshaw, Shochet, & Obst, 2012). However, Reavley, Jorm, and Morgan (2016) reported that employers have a general, low level of awareness around mental health problems and do not have the resources nor skills to handle these issues in the work environment (pp. 1-2, Reavley et al., 2016).

Haslam, Atkinson, Brown, and Haslam (2005) described depression in the workplace as a complex situation that impacts employees, families, colleagues, supervisors and employers (p. 213). In this paper, I will focus primarily on the social implications of employee depression for employees, supervisors and employers, but the significant economic impact of depression must first be acknowledged.

Economic Costs

In 2010, an estimated $2.5-8.5 trillion of lost productivity worldwide is attributed to mental health issues, and neurological and substance use disorders; that amount is expected to nearly double by 2030 if no action is taken (Chisholm et al., 2016, p. 415). In response, the United Nations included promotion of mental health and wellbeing to the 2015-2030 Sustainable Development Goals (p. 415). This is indicative of the dire need to not only address mental health but to address mental health on a global scale.

Looking more closely at the economic cost in the workplace, Allen et al. (2010) reported that employers spend at least 70% more in direct annual healthcare costs for employees with depression compared to employees who do not have depression (p. 363). At the same time, there is little acknowledgment of or investment in providing mental health care to employees.

Though treatment for depression tends to be effective and can be made accessible to employees, the global investment in employee mental illness treatment and prevention is tenuous (Chisholm et al., 2016, p. 415). The tremendous treatment gap, which inevitably leads to a loss in work productivity and an increase in health expenditures, has significant and inevitable economic consequences for employers (p. 415). Thus far, research purports the need for businesses and organizations to, first, acknowledge the problem of mental health in the

workplace, and then integrate mental health promotion, prevention and intervention measures into their work structure and culture.

Social Costs

Social costs are perhaps the most damaging aspects of missed work due to employee depression. Research shows that employment is critical for employees' level of social connectedness and self-esteem; therefore, obtaining and holding down a job is imperative for mental and physical wellness (pp. 1-2, Reavley, Jorm, & Morgan, 2016). Similarly, Rüsch et al. (2014) reported that employment tends to enhance quality of life, however, an employee's level of stress is contingent upon their work environment (p. 1). Supervisors and managers play a significant role shaping the work environment and mediating employee stress and depression - The roles of supervisors is discussed further in the Main Barriers of Employees Mental Health Support section of this paper.

In their study examining belongingness or "the experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment," Cockshaw et al. (2013) posited that the sense of workplace belongingness may be a protective factor against depressive symptoms (pp. 242-248). Further, they reported that replicated large-scale and longitudinal cohort studies have been consistent in their results that having low social support in the workplace is associated with an increased risk of depression (p. 242, Cockshaw et al., 2013). Other researchers reported that depression is significantly higher among employees who lose social connectedness due to job loss or a prolonged absence from work because of a physical injury (Lee et al., 2017).

Those who experience absenteeism (absence from work) due to illness, often experience social isolation and a decreased sense of well-being, and employees who exhibit presenteeism

(not meeting expected productivity standards due to working while ill) reported feeling discouraged due to their inability to meet their job requirements (pp. 6-7, Lee et al., 2017). Researchers continue to report the importance of employment as a way people stay socially connected, experience a sense of belongingness, and maintain a healthy level of self-esteem (Cockshaw et al., 2013; Reavley et al., 2016).

Miron-Shatz, Margaret, Grajales, Martin-Sanchez and Bamidis (2013) reported that social support has consistently resulted in improved health outcomes across various illnesses, not only depression (p. 164). Having social connections at work appears to be the most significant aspect in terms of employee mental well-being in the workplace. This is where social media can assist. At its core, social media facilitates a sort of "virtual social universe" (p. 145, Elazab, Mahmood, & Hefny, 2017), in which absentee employees can remain connected with their work social circle, albeit remotely (p. 144). For these social network-focused reasons, I chose to explore this research topic using a social systems theoretical lens.

Social Systems Approach

The social systems approach or social network theory centers around the role of interpersonal connections in sharing information, channeling influence, and promoting behavioral or attitudinal change (p.1, Liu, Sidhu, Beacom, & Valente, 2017). I chose to interpret and understand the research using this approach for a few reasons: social systems are an inherent part of the work environment, social connectedness is a significant protective factor for depression, and social media is a form of communication that hinges upon networks and systems of people interacting (p. 164, Cockshaw et al., 2013). In fact, researchers reported that the development of depressive symptoms is often preceded by corrosion of social networks for individuals (p. 241).

Coyne developed the interactional definition of depression in 1976, which describes people who exhibit depressive symptoms as having a tendency to look for proof of authentic relationships via reassurance, approval, validation, and support from others in an interpersonal social system (pp. 242-243, Cockshaw et al., 2013). As other researchers reported, several large-scale longitudinal studies show a consistent association between low social support in the workplace and increased risk of depression; there is strong evidence of a link between feelings of belongingness or social connectedness at work and depressive symptoms (pp. 242-243).

In a Finnish study, participants reported an increased risk of depressive symptoms was associated with low social support in private life and in work life, however, they found a larger effect size associated with the work environment where employee social support would come primarily from supervisors and colleagues (p. 242, Cockshaw et al., 2013). Researchers also found that social support at work has shown to have a positive effect; even if an individual lacks other kinds of support, e.g. emotional, financial (p. 164, Cockshaw et al., 2013). These findings are indicative of the need to conduct further research in the area of addressing employee depression in the workplace.

Main Barriers of Employees Mental Health Support

Stigma and discrimination in the workplace. Stigma is defined as "a mark of shame, disgrace or disapproval" that leads to "being rejected, discriminated against, and excluded" from social life (p. 1, Haimson, Ringland, Simpson, & Wolf, 2014). People with depression often confront stigma and discrimination from individuals and institutions, which compounds the difficulty of living with a mental illness. In turn, people with mental health issues usually

internalize a negative perspective about their mental illness, which tends to lead to self-stigma (p. 1, Rüsch et al., 2014). In some cases, the stigma associated with mental health is deemed as worse than the first-hand experience of the illness (p. 1, Haimson et al., 2014).

Stigmatization and discrimination are key factors that hinder those with a mental illness from gaining employment, staying employed, or receiving a promotion (p. 61, Hamman et al., 2016). In one study, Reavley et al. (2016) conducted phone interviews with 1,381 people who reported experiencing discrimination from potential employers, and found more than 50% of these respondents reported having not been hired because of their mental health issues (p. 9). In addition, 10.8% of the 1,281 reported not taking a job due because they believed stigma was inevitable but did not want to disclose their mental health status to potential employers (p. 9).

Mental health stigma also impacts employees' level of functionality, including lack of motivation to pursue their aspirations or inability to seek mental health care (p. 1, Haimson et al., 2014; p. 4, Naslund et al., 2016). In fact, there has been a rise in the number of sick days and early retirements due to employee mental health issues (p. 62, Hamann, Mendel, Reichhart, Rummel-Kluge, & Kissling, 2016).

Existing research of mental health stigma and discrimination. According to Haimson et al. (2014), stigma reduction campaigns incorporate three elements: protest, education and social contact (p. 1). Hamman et al. (2016) reported that stigma reduction interventions in the workplace have typically incorporated a mental health education component as well as in-person contact with people who have experience with mental illness (p. 61).

In one study, researchers (Hamman et al., 2016) tested a manager-specific education and communication skills workshop aimed at depression stigma reduction (p. 62). In their results,

researchers found that 86% of the 580 participants showed decreased levels of depression stigma (p. 62). Participants completed pre- and post-surveys that incorporated the personal stigma subscale portion of the Depression Stigma Scale (DSS; Griffiths et al., 2004) --which looks at participants' level of depression stigma-- as well as stigma-at-work-specific questions generated by the researchers (p. 61).

The manualized workshop intervention was led by psychologists or psychiatrists and consisted of didactic lectures, small group exercises (e.g. role plays), and videos that included basic information about mental disorders, skills training for depression prevention and detection, and a component examining a manager's role in supporting employees with depression (p. 61, Hamman et al., 2016). Results from this study confirm existing research findings that a variety of anti-stigma mental health initiatives in the workplace are encouraging (p. 63).

There are a variety of ways to tackle a mental health anti-stigma effort. In one study, Haimson et al. (2014) purported that social interaction between those *with* mental illness and those *without* mental illness, is the most promising way to reduce stigma because it humanizes mental health conditions (p. 1).

In another study, Allen et al. (2010) suggested using a standardized employee depression assessment tool as a way to inform employees of the concept that depression can be screened for just as high blood pressure screening methods (p. 373). Mental illness is an invisible disability, so presenting depression in comparison with physical ailments can help to validate mental health issues as clinical illnesses. Hence, an institutionalized depression screening at workplaces may contribute to de-stigmatization efforts as well as engage employees with mental illness, not as patients, but as collaborators of their care (p. 373, Allen et al. (2010).

Further, incorporating a standard depression screening at worksites lends itself to providing employees with information about depression. In one study involving 60,556 Australian employees, researchers found that 30% of participants reported that they were not aware they exhibited symptoms of mental health issues, so did not consider seeking help; among those who were aware of their mental health issues, most either put off seeking treatment or did not attempt to receive treatment at all (p. 1, Bovopoulos et al., 2016).

It is part of their role that supervisors and company leaders accommodate and support employees, including accommodations and support for employees with mental health problems; this includes providing a work environment that incorporates protective factors against mental health problems (pp. 63, Hamann et al., 2016).

The role of supervisors and managers. Research shows that supervisor support is an aspect of worksite social support that has a beneficial impact on employee well-being (p. 28, Kawakami, Takao, Kobayashi & Tsutsumi, 2006). The hierarchical nature of the supervisor-employee relationship means that supervisors are in a role with more power and access to resources compared to employees under their supervision (p. 4, Liu et al., 2016). The supervisor-worker dynamic, alone, can make a significant impact on reducing or preventing employee stress or depression in the workplace.

Also, supervisors and managers are in a prime position to provide support to employees because they can detect or observe employee issues before they worsen (p. 190, Nishiuchi, et al., 2007). In any case, problems at work cannot change without a supervisor or manager taking action (p. 191, Nishiuchi, et al., 2007). Research has shown that supervisor support (e.g. emotional, informational, social) of employees has a positive effect on workers' health, and supervisors are key in preventing or mediating job stressors (p. 28, Kawakami et al., 2006).

Existing research about supervisor roles regarding employee depression.

Unfortunately, supervisors generally tend to be more critical of workers' job performance when employees are strained by depression as opposed to employees experiencing a decrease in performance due to a physical illness (p. 2, Bovopoulos et al., 2016). Researchers found that poor supervisorial support impacts employees' risk of long-term absenteeism due to mental health illness by twofold (p. 2). The good news is that supervisors can have a significant impact on employee health in a positive way by working to prevent job-related stress (p. 28, Kawakami et al., 2006).

Lee et al. (2017) found that supervisor support for employees taking leave from work due to mental illness tends to focus on economic instead of emotional support; this impacts employee rehabilitation and often makes their returning to work more difficult (p. 7). Reavley et al. (2016) found two common sources of employer discrimination against employees with mental illness: a low level of awareness around mental health and a limited or lack of skills to address employee mental health issues (pp. 2, Reavley et al., 2016).

In one study, Kawakami et al. (2006) created a 4-week web-based supervisor training program ("E-Learning Worksite Mental Health for Supervisors," Fujitsu Infosoft Technology, Co. Ltd, Japan, 2002) aimed at increasing supervisor mental health support of employees (p. 28). Researchers found a statistically significant increase in supervisor support post-intervention training and an increased 'friendliness' in the work environment, as assessed by their subordinates (p. 30-31, Kawakami et al., 2006).

The supervisor training incorporated teaching the following supervisor skills: listening, supporting employees returning to work after an absence due to mental health problems, maintaining improved relationships with employees, working with occupational health

professionals, and stress management (pp. 30-31, Kawakami et al., 2006). Indeed, part of a supervisor's role is to pay attention to and support employees struggling with mental issues, which increases the likelihood of creating a pleasant work atmosphere (p. 31). Kawakami et al. reported that creating and maintaining a friendly ambiance at work are key supervisor responsibilities (p. 31).

As to the feasibility of web-based supervisor training, participants provided positive feedback that the web training was flexible so they could complete the training when they have time, versus attending in-person lectures; they also commented their appreciation of having the option to repeat lessons online or reference training information, if they so choose (pp. 28-29, Kawakami et al., 2006).

In another study, Nishiuchi, Tsutsumi, Takao, Mineyama & Kawakami (2007) developed a half-day supervisor training program that incorporated a lecture on basic mental health improvement education and an "Active Listening Training" which included role-play exercises (p. 191). Prior to training, participants in the intervention and control groups were given a brochure about promoting mental health. Participants were given questionnaires at three and six-month follow-ups, and those who received training showed a notably better understanding a of mental health compared to the control group (p. 193). However, researchers found no significant improvement in supervisor attitudes toward mental health (p. 193). Providing supervisors with the guidance on how to support and assist an employee who discloses they have depression may help to improve supervisor attitudes of mental health.

Employee disclosure of mental illness at work. In many cases, employees' depressive symptoms are not obvious. In this case, I think it critical that those employees initiate help-

seeking and disclose to their supervisor or colleague-confidante. However, disclosure of mental health issues tends to be difficult due to concerns such as fear of judgment or appearing weak.

Bovopoulos et al. (2016) proposed that employees experiencing mental health problems might be more apt to disclose their health issues if they and their co-workers are taught Mental Health First Aid (MHFA) skills (p. 8). MHFA was originally developed for the general adult public and is similar to physical first aid skills; in their study, researchers enhanced MHFA with work-specific guidelines as a way to arm employees with knowledge and skills to detect and support colleagues who may exhibit depressive symptoms.

There are no standardized guidelines on how colleagues support employees with mental illness, but MHFA training courses have been shown to increase knowledge of mental health issues and decrease stigma and unsupportive attitudes in the workplace (p.1). The training objectives include knowing signs and symptoms of mental health issues, how work can contribute to mental health issues, ways to approach and talk to a colleague in a compassionate and non-discriminant way, manager-specific guidance on how to offer MHFA to employees, and how to handle crisis situations (p. 6). To this end, promoting employee awareness, knowledge and support of mental health issues is another way of combating stigma in the workplace.

Addressing Employee Depression at Work

Why at work? Tan et al. (2014) posit that the workplace is the optimal setting in which to address mental health issues because 60% of the world population are employed and they are at work 60% of their waking hours (p. 2). Dietrich et al. (2012) echo these findings that the workplace is a prime venue to address employee depression, where a large adult population can be reached (p. 1). Considering people spend a great amount of time at work and given the importance of social connections at work regarding employee depression prevention and

intervention, tackling employee depression in the work setting makes sense. At the very least, employers can prioritize mental health awareness and education as a critical component of employee support. Social media is an efficient communication tool that can assist in promoting and enhancing employee mental wellness.

Why social media? A social media study published in 2015 (McKeown, 2017), showed that 65% of adults in the United States are using social networking sites (p. 2). Gough et al. (2017) suggested that social media substantially changes the way individuals and organizations communicate (p. 2). Further, McCoster (2017) purported that "a number of reports warned of substantial transformation in the future of work" regarding technology, including an adoption of social media networks (e.g. Slack) internal to worksites (p. 122). As social media is quickly becoming a more prevalent mode of communication, it is natural that its use is elevating within the workplace.

Maben and Gearhart (2017) reported that many businesses and organizations have adopted social media as a communication tool; for instance, 86% of 2016 Fortune 500 companies have a corporate Twitter account and 84% of these companies also have a corporate Facebook page (p. 2). The researchers suggested that workplaces consider how they can connect with their social media followers in more significant and meaningful ways, as social media provides another and more widespread opportunity for empathic connections and communication (pp. 2-10). Here, the researchers are referring to social media accounts businesses use to connect with their clients, but this can also apply to social media systems used internally in the workplace.

Moreover, social media is 14 times more effective in providing opportunities for social connections as compared to distributing hard copy brochures or handouts, and it allows for

greater access to information garnered and distributed by employers (p. 2, McKeown et al., 2017). In one study, researchers tested utilizing Twitter to disseminate public health information about skin cancer, and they found a trend toward improved knowledge and awareness after the close of the campaign; with a humorous social media post being the most effective and informational post being most re-tweeted (p. 2). Of course, employees at each worksite will have different needs and so social media tools different kinds of social media. Regardless, social media is reported in another research field --marketing-- as a leading-edge way to engage people (p. 4, King & Lee, 2015).

The Utilization and Benefits of Social Media

According to a 2009 survey administered by the Pew Internet Group, 61% of adults in the United States reported searching for health information online (p. 1, Peek, Richards, Muir, Chan, Caton, & MacMillan, 2015). In a more recent study, Gough et al. (2013) found that 81% of adults in the United States use the internet and 59% reported using the internet to access health information, specifically (p. 162). In fact, there has been increasing interest in using social media as a tool for public health over the past few years (p. 2, De Choudhury, Gamon, Counts, & Horvitz, 2013).

With social media becoming a more widely used communication and social networking tool (King & Lee, 2015), it behooves us to explore what social media has to offer in terms of addressing employee depression in the workplace (p. 2). In fact, Naslund, Aschbrenner, Marsch, and Bartels (2016) reported that people with serious mental illness are utilizing social media more and more (e.g. Facebook, Twitter).

Regarding the workplace, communication and information sharing using social media can reach a large number of people, which would be particularly helpful for large businesses with

multiple locations. Peek et al. (2015) reported e-mental health modalities have decreased operating costs and provided the ability to scale to reach a large number of people (p. 88). There are many benefits to using social media for addressing depression at work, specifically.

What does social media offer? Leftheriotis and Giannakos (2014) reported that using social media in a work context provides employees different ways of engaging with colleagues, and it helps to fortify existing connections as well as create new ties (pp. 134-135). Miron-Shatz, Margaret, Grajales, Martin-Sanchez, and Bamidis (2013) reported on benefits of using social media specifically as a mode of social support: emotional support, an emphasis on reciprocal support, a forum to share experiences, and a lack of hierarchical roles in the social media space (p. 165).

As the social systems theory posits, increased (or any) social support can serve as a protective factor or mediator for employee depression, and social media has the potential to strengthen social ties at work. Research shows that using social media as a communication tool at work can decrease organizational operating costs and the ability to scale social media communications to reach a large number of people instantaneously (p. 1, Peek et al., 2015). This purported decrease in operating costs speaks to the feasibility of organizations implementing a work-specific social media network, regardless of organization size.

An additional benefit of using social media is the ability to utilize data infographics (e.g. diagrams, charts), an effective and intriguing way to interact and engage with users (pp. 2-3, Haimson et al., 2014). In their conference paper (Haimson et al., 2014), researchers discuss the potential of utilizing the ingrained strengths of social media to advocate awareness of depression and promote anti-stigma campaigns (p. 4). They developed a social media application, BlueFriends, “an application that seeks to reduce stigma by displaying a shareable information

visualization graphic aimed at increasing both education and social contact" (p. 1). In essence, the application collects 'depression data' from an individual's Facebook friends as a way to determine the prevalence of depression among an individual's Facebook contacts, as compared to the prevalence of depression in the United States and other social concerns (p. 3). Not only is social media an engaging mode of communication, but the information shared can be "an innovative avenue for raising self-awareness and combating stigma surrounding mental illness" (p. 2, Haimson et al., 2014).

It must be noted that Haimsen et al. (2014) have not conducted research to test the feasibility and efficacy of BlueFriends; rather, they propose research be conducted to test its potential (p. 1). Though the authors don't specifically discuss utilizing this tool to address depression stigma in the work environment, specifically, it could work in the same way. After all, social media content is generated by users and is related to the context and setting in which it is used (p. 49, Fergie, Hunt, & Hilton, 2016). Additionally, the way users interact with social media hinges on their understanding of its purpose (p. 52, Fergie, Hunt, & Hilton, 2016).

Lastly, anonymity is deemed as an advantage of using Internet-based interventions; particularly regarding mental health (p. 275, Lehr et al., 2017). Though, privacy and confidentiality are common concerns and are critical to address to avoid this issue being a barrier to using social media in the workplace for employee depression (pp. 52-53, Fergie et al., 2016).

The downsides of social media. Briefly, it must be acknowledged that social media use has the potential to exacerbate or encourage depressive symptoms among users. Lin et al. (2016) reported that there have been mixed results in research looking at the association between social media and depression; some studies resulted in an increase in life satisfaction and perceived social support, and in other studies, researchers found that frequent usage of social media is

associated with a decrease in life satisfaction, well-being and in-person community engagement (Introduction section, para. 3).

The researchers suggested a few reasons social media use may be harmful to social media consumers: passive use of social media has been associated with a deterioration of social ties, feelings of guilt due to "wasting time," frequent exposure to idealized representations of peers can lead to envy and distorted beliefs that others are happier in their lives, and a risk of cyber-bullying by peers; for some, these experiences can lead to a sense of inferiority and depressive symptoms (Discussion section, para. 22). However, the potential of social media usage having a negative impact on employees can be avoided if organizations acknowledge and pre-emptively address the potential negative effects of social media as a communication tool in the workplace.

Purpose of Research

Research tells us that employee depression is a common problem in the workplace and there needs to be more research looking at more innovative solutions to tackle this issue. According to recent studies, social media appears to be a viable and likely way that mental health issues may be addressed. In fact, there is a term, "e-health," that was coined in 2000 and it is "the use of emerging information and communication technology, especially the Internet, to improve or enable health and healthcare" (p. 259, Lehr et al., 2017).

There are some research looking at social media and its usage as a workplace communication tool and its utility in mediating mental illness but there are no studies looking at how social media can be utilized as a workplace tool to address employee depression, specifically. As such, the main aims of this study are to:

- Examine employee and employer attitudes, beliefs and behaviors regarding depression in the workplace.

- Gain an understanding of how employees and employers perceive and manage depression in a work environment.
- Explore the potentiality and feasibility of using social media as a tool to address employee depression in the workplace**.**

Method

Recruitment

A convenience sample was used to select participants who are currently or have ever been employed. Participants were selected through Craigslist Seattle as well as through the author's personal accounts on various social media platforms: Facebook, Twitter, Instagram, LinkdIn and Craigslist. A survey invitation in the form of social media graphics the Principal Investigator created with Canva --a free online tool used to create infographics and other informational visual products-- was sent via these modes of social media on six of the seven days that the survey was accessible to potential participants (data collection was July 10th – July 17th, 2017).

Inclusion/Exclusion Criteria

The only inclusion criteria to qualify for the study was that the participant is employed or has ever has ever been employed. If a person has not ever worked, they were excluded from the study. Participants did not have to have or have ever experienced depressive symptoms to qualify for the study.

The purpose of this research was to capture a general view of employee and supervisor/manager experiences, perspectives, attitudes and beliefs about depression in the workplace. The study was not examining a particular population or demographic; for instance, a participant did not need to fall within a particular age group or work in a particular industry.

Participant criteria was set up this way because there is very little research in this area and researchers wanted to collect participant data from a large variety of people with a wide variety of backgrounds.

Survey

Participants were asked to complete a web-based survey created by the author using SurveyMonkey. The survey consisted of 16 questions (multiple choice, 5-point Likert-scale, and open-ended) and included skip logic based on two participant factors: whether an employed participant has or has had depression and whether the participant is a supervisor. Participants fell into one of four categories: Depressed Employee, Not-Depressed Employee, Depressed Supervisor, Not-Depressed Supervisor. (See Appendix A for the full set of survey questions and Appendix B, a survey question flowchart.)

Survey questions were determined with the aim of collecting particular data researchers wanted to capture: the beliefs, attitudes, experiences and behaviors regarding depression at work and the potential of using social media as a tool to address employee depression at work. Survey questions were worded from an "I" perspective to encourage honest responses and to present the questions in a reader-centric way (e.g. "I have had depression" vs. "Have you had depression?")

My advisor, a core faculty member in the School of Applied Psychology at Antioch University Seattle, assisted in developing the survey and general guidance in this research. In addition, an associate professor in the Biomedical Informatics and Medical Education Department at University of Washington reviewed the survey questions and provided feedback on the survey questions' wording to avoid participant bias and to ensure the questions were sound and posed to solicit the type of data I was seeking.

Definition of depression. A non-clinical and more general definition of depression was used and provided at the beginning of the survey. However, the general definition used was influenced by the researcher's understanding of Major Depressive Disorder (MDD), as written in the Diagnostic and Statistical Manual of Psychiatric Disorders: DVM-5 (American Psychiatric Association, 2013).

A more general definition of depression was used in order to capture more inclusive data of those who self-reported or self-identified as experiencing depressive symptoms rather than limit the responses to those who have received a clinical diagnosis. The criteria for MADD, as listed in the DVM-5, is too specific and is not intended for laymen use. Its use does not serve the purpose of this study. The text that was provided in the survey is as follows:

For the purpose of this survey, please use the definition of Depression provided below. This survey intentionally does not use the clinical, diagnostic definition as written in the Diagnostic Statistical Manual (DSM V). Depression can present different symptoms, depending on the person. But *for most people, depression changes how they function day-to-day, and typically for more than two weeks*. Common symptoms include:

- Changes in sleep
- Changes in appetite
- Lack of concentration
- Loss of energy
- Lack of interest in activities
- Hopelessness or guilty thoughts
- Feeling sad for no apparent reason
- Changes in movement (less activity or agitation)

- Physical aches and pains
- Suicidal thoughts

Results

For the most part, data results in this study are in line with what research has shown regarding the prevalence of depression in the workplace, employee attitudes and beliefs about depression and social media usage, and attitudes around how to address depression in the workplace. Analyses included calculating percentages of participant demographic data as well as calculating percentages of participant responses to multiple-choice and likert-scale questions. The average survey completion rate was 84%.

Demographics

A total of 161 participants completed the survey (n = 161). Most of the participants surveyed were between the ages 35 and 44 (43.75%), 25% were between the ages of 25 to 34, 15.63% were ages 45 to 54, 6.88% of the sample fell in each of these age ranges, 55 to 64 and 65 to 74, and only .063% were either between the ages of 18 to 24 or 75 or older. Most of the participants self-identified as female (84.38%), followed by males (13.75%), one person self-identified as Transgender Male, and one person Gender Variant/Non-Conforming. There were overwhelming more White/Caucasian participants (83.75%), followed by 10% Asian/Pacific Islander, 4.38% identified as having Multiple Ethnicities, 3.75% Hispanic, 1.25% Black/African American, and 1.25% American Indian/Alaskan Native.

Forty percent of participants indicated that they graduated from college, 32.50% completed graduate school,16.25% completed high school, 6.25% completed community college, 1.88% completed a PhD program, and 3.13% selected Other (Master Degree In-Progress, Completed Some College, Medical Degree, and Certificate in Management).

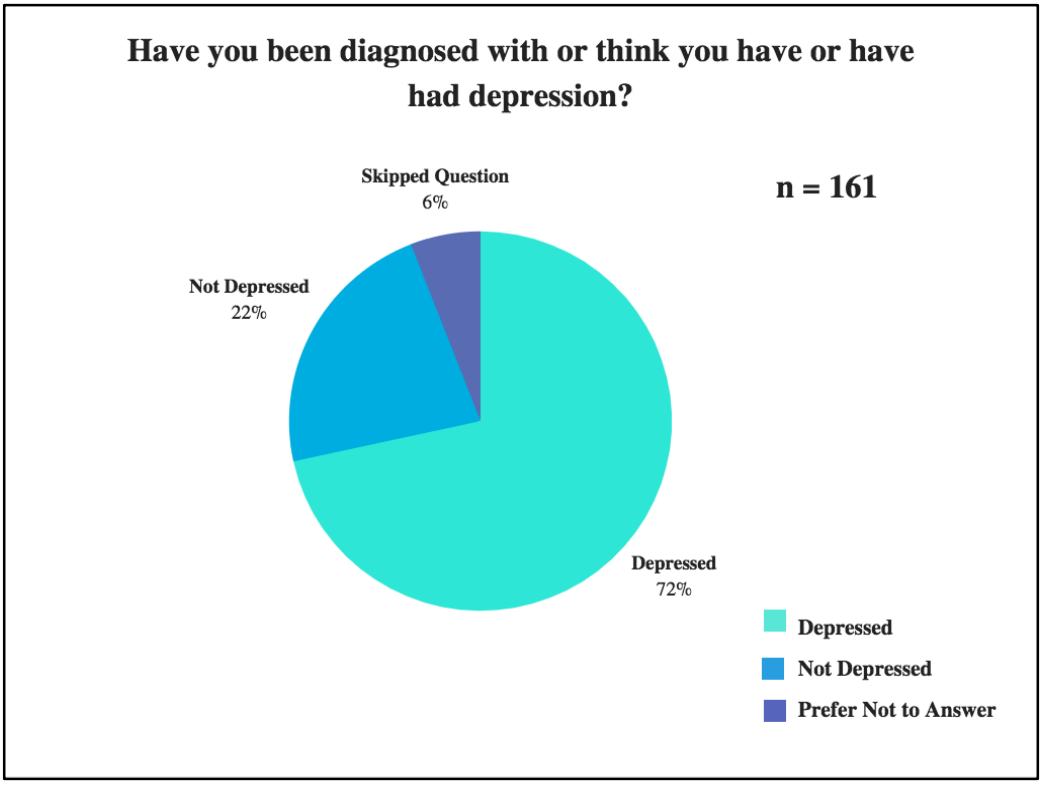
Most participants live in North America (91.88%), 3.13% live in Europe, 2.5% in Asia, and one person in each of these locations: Africa, Antarctica, and Australia (each 0.63%).

Finally, of the 156 people who responded to this particular question, 61 people (39.10%) self-reported as being a supervisor or manager, 95 (60.89%) self-reported that they were not a supervisor or manager. Of the 161 participants, 14 people (8.69%) skipped this question.

Quantitative Results

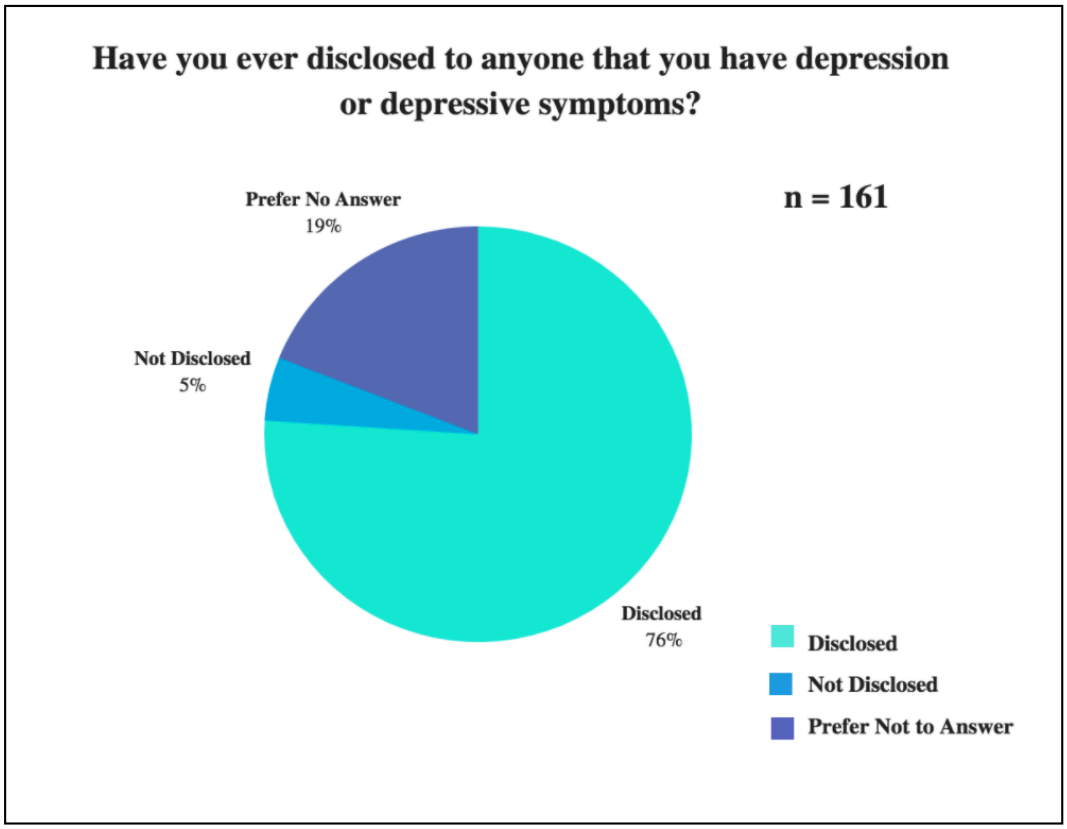
Self-reported depression. One-hundred and eighteen employed respondents (including supervisors/ managers) reported that they have or have had depression or depressive symptoms, and 39 participants reported they have never had depression nor experienced depressive symptoms (See Figure 1).

Figure 1. Self-Reported Employee Depression



Disclosing depression. Survey participants were asked if they had ever disclosed their depression to anyone and, if so, to whom. Of the 161 participants sampled, 143 people responded to this question (27 participants opted to skip this question.) Of the 143 respondents, 108 (75.52%) reported that they disclosed their depression to someone, 7 (4.90%) people reported that they had never disclosed their depression to anyone, and 27 (18.88%) reported that they do not have depression (see Figure 2).

Figure 2. Employees Who Have Disclosed Their Depression

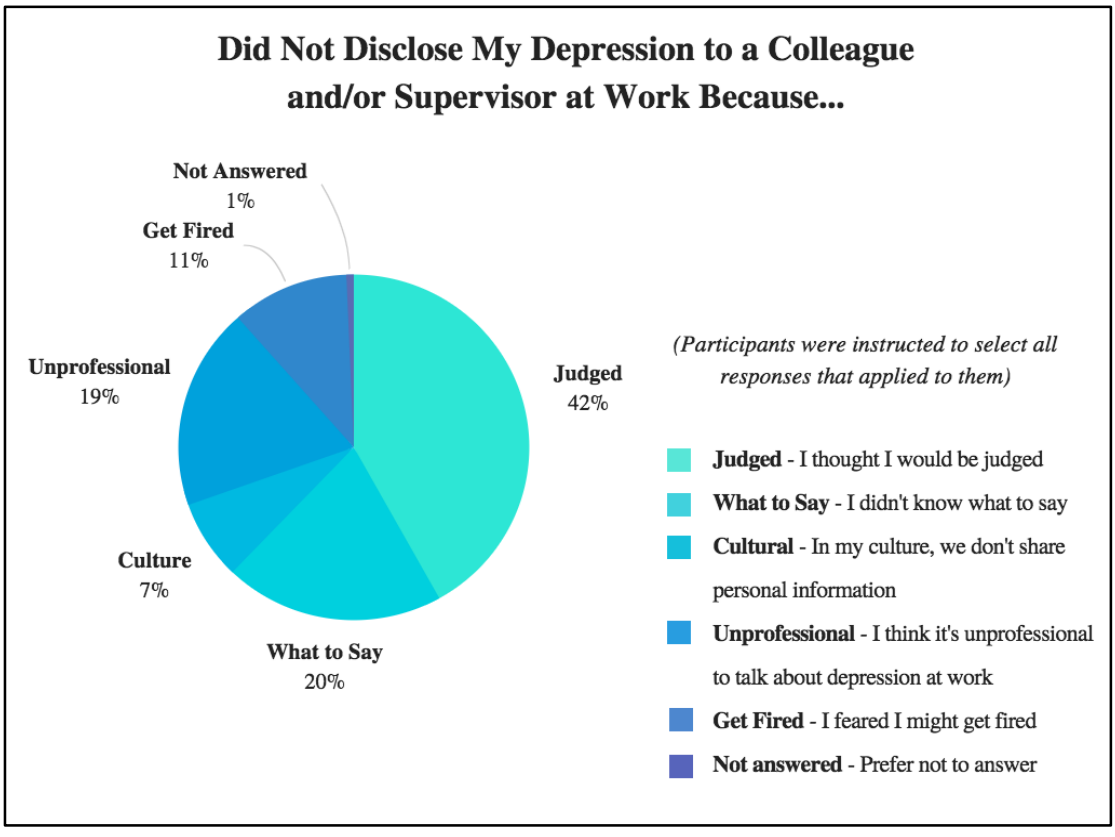


Of the 108 people who disclosed, 66.43% reported disclosure of their depression to a family member(s), 65.03% to a friend(s), 39.16% to a colleague(s), 24.48% to supervisor(s)/manager(s). (Note: Participants were asked to select all responses that applied to their experiences. Therefore, the aforementioned percentages are in aggregate.)

It is notable that the lowest number of depression disclosures were made to supervisors and managers, and the second lowest to colleagues. Based on these results, we see that depression, if disclosed at all, is twice as frequently disclosed to friends and family, as compared to how frequently participants report depression disclosure to people at work. There were no comparable disclosure rates to be found in the literature.

Reasons for not disclosing depression. Participants who reported that they *had depression* but had *not disclosed* to anyone were asked why they never disclosed to a colleague or supervisor/manager at work. Almost half of the respondents were concerned they would be judged (see Figure 3).

Figure 3. Reasons for Avoidance of Disclosing Depression to a Colleague and/or Supervisor



Wellness and mental health training. Eleven of 61 (18%) self-identified supervisors/managers reported that they had received supervisor-specific mental health or well-being training. Responses to how helpful participants found training they received ranged from 'somewhat' to 'very helpful.' Regarding non-supervisor employees, almost half (49%) reported that they had received wellness or mental health training at work (see Figure 2). Data reflecting their rating of how 'helpful' training was, was not captured for the employee (non-supervisor) participants (see the Methodological Problems section for more details).

Figure 2. Wellness and Mental Health Training (WMHT)

Social media usage. As this research examines the use of social media, participants were asked how they found the survey. One hundred seventy people responded. (See Table 1 for results.) Participants were also asked about their usage of social media. Of the 151 people who

Table 1. How Respondents Found This Survey

Social Media Type	% of Respondents (# of Respondents)
Word-of-mouth/Someone I know sent it to me	24.71 (42)
Craigslist (Seattle, Volunteer section)	2.94 (5)
Facebook	70.59 (120)
Instagram	0.59 (1)
Twitter	0.59 (1)
Prefer not to answer	0.59 (1)

responded to this question, Facebook was overwhelmingly reported as the most commonly used type of social media (98.01%), followed by: Instagram (52.98%), LinkdIn (44.37%), Twitter (31.79%), and 5.30% selected “Social media isn’t really my thing.” (Note: Participants were asked to select all responses that applied to them. Therefore, the aforementioned percentages are in aggregate.)

These numbers indicate that social media is commonly used among working adults who participated in the survey, and they echo findings from a Pew Research Study in that Facebook is most widely used -- about 40% more common than other kinds of social media (See Table 2).

Table 2. Social Media Usage Reported by Participants Compared to Results from a Pew Research Study (Social Media Fact Sheet, 2017) of Adults in the U.S.

Social Media Type	Research Participants Responses*	Pew Research Study Results (2017)
Facebook	98%	68%
Instagram	53%	28%
LinkedIn	45%	25%
Twitter	32%	21%

*Percentages are rounded to whole numbers to be comparable to Pew Research Study results.

Potential for using social media at work. Participants were also asked whether they were open to using social media in the workplace as a way to address employee depression, whether or not they were social media users. One-hundred-fifty-one responded and about half (48.34%) responded 'Yes, they thought social media would be a great tool to use,' 34.44% reported that they were not sure how social media would be helpful, and 15.23% selected 'No, they do not think social media is a good option for addressing employee depression at work.' These are some examples of respondent comments pertaining to this question:

Qualitative Results

Participants were asked two open-ended questions. One question was optional:' What has been/has not been helpful? What suggestions or ideas do you have to improve mental health support at your workplace?' Despite this being a supplemental question, 56 (34.78%) people commented.

The other open-ended question is the last on the survey and gives participants an opportunity to provide comments about the survey or the research topic of addressing employee

depression in the workplace. Thirty-one (19.25%) people commented. The rich qualitative data signifies the need for more research to combat employee depression.

Looking at the comments from both questions, some common themes and concerns emerged: fear of stigma or discrimination due to mental illness; concern about privacy and data security (e.g. managers having access to employee data); belief that part of a supervisor's role is to acknowledge mental illness as a health problem, and promote mental health education and support; consensus that work culture around mental health is mostly silent on the issue stigmatizing. One participant's comment captures the culture of mental health in the occupational environment:

> The workplace suffers from the same issues that society does in that there is a stigma/taboo when discussing mental health or deep personal issues. The more (open and honest) communication we can partake in the better off we will be.

Fear of stigma and discrimination when disclosing depression. Overwhelmingly, participants pointed to the fear of stigma and discrimination as the predominant barrier to employee mental health support (e.g. "I have certain concerns that people might open up about depression and then be used against them later (e.g. performance evaluations)"). These are a couple more poignant respondent comments that illustrate this issue:

- My manager knows about my depression, but it took me a long time to share. I didn't think I would get fired, but I did (and still do to some extent) worry about not being considered for promotions or increased responsibility.
- A mental health day would not be an acceptable excuse to miss work at my place of employment...I never really thought about it until now, about why mental health is looked at as something that is within your control?

Privacy and anonymity concerns using social media. Reflecting the research (Fergie et al., 2016), top concern of respondents was the potential for security issues using social media, especially regarding a sensitive topic (e.g. “My concern is about privacy and data collection of the social media in a corporate training.”) On the other hand, one respondent commented, “Anonymity can have a negative effect on empathy.” We did not conduct research regarding anonymity, but it is a fine point and worth looking into further.

Role of supervisors as mental health advocates. As they can make a great impact on employee wellbeing, supervisors have the responsibility to manage and support their employees (Hamman et al., 2006; Kawakami et al., 2006; Nishuichi et al., 2007). The significance of a supervisor’s role on employee mental health is exemplified in one respondent's comment, “[An] inexperienced management team has been the most stressful.” Additional participants provided their opinions and beliefs about supervisor’s roles in employee mental health:

- When supervisors notice an employee is under extreme stress due to his/her workload, explore solutions, with the employees, of ways to reduce the stress level. Most important, CARE ABOUT YOUR EMPLOYEES.
- My workplace has a huge focus on diversity and inclusion, but we haven’t talked much about support for people in different states of mental/emotional health I think it’s an issue that doesn’t have a lot of workplace awareness beyond work stress and work/life balance.
- “Supervisors need to set the stage and make it very openly OK to take time to help yourself.”
- “[S]upervisors should be trained on promoting mental health and wellness and the staff oriented properly.”

Wellness and mental health training. The research has shown that mental health training can be effective, particularly for supervisors and managers (Junge et al., 2015; Kawakami et al., 2006; Nishiuchi, 2007). A handful of participants commented that Employee Assistance Programs (EAP) are available at their workplace, but the mental health content of the program and organizational leaders' awareness and acknowledgment of the issue have been insufficient or nonexistent. These are some examples of participants' reported experiences with mental health training or related human resources activities:

- "EAP staff was brought in to coach us [but] we learned nothing to assist."
- "EAP...I feel like it's more like crisis intervention services and was not helpful."
- "Education for employees delineating that depression is a mental health issue [is needed]…"
- "Train management on how to approach the subject."

Work culture around mental health.

Participants provided many suggestions for elevating mental health awareness and knowledge in the workplace including: "In-house peer groups," "Take a 'Mental Health First Aid' class," "Talking about it publicly to take away the stigma," "The openness and ability to just talk about it has been helpful." Additional comments are:

- "Let employees know what their mental health options and benefits are."
- "Helpful tips/info shared by HR (through email, office messenger, apps, etc."
- "I think addressing the workplace belief that being depressed is "just being sad" and that it can be cured by "just thinking about it" as well as offering resources to employees would help immensely.

- "It's just not talked about at all. Even with use of our "wellness day" or use of sick time there is no discussion about if it is okay to miss work due to depression or anxiety or other mental wellness concerns."

Discussion

Overall, findings from this study closely resembled what was found in the research. The predominant findings in this study align with existing research in the following ways:

- High prevalence of depression among employee participants (Dietrich et al., 2012; Furlan et al., 2012)
- Participant concern about mental health stigma preventing employees from disclosing their depression to someone at work (Bovopoulos et al., 2016; Haimson et al., 2014; Hamman et al., 2016; Naslund et al., 2016)
- Participant concern about anonymity and privacy using social media for mental health purposes (Fergie et al., 2016)
- Poor work culture around employee mental health (e.g. mental health is not addressed, EAP is provided but not helpful) (Allen et al., 2010; Furlan et al., 2012; Reavley, 2006).
- Supervisors are key in supporting employees with depression and in creating a work environment that is supportive, welcoming to employees with depression (Hamman et al., 2016; Kawakami et al., 2006; Nishiuchi et al., 2007)

Limitations

The recruitment method in this study limited potential participants to only people I am connected with on social media. Over 90% of participants reported they live in North America (91.88%), 80% of the sample self-identified as Female, 84.38% self-identified as

White/Caucasian, and 40% of participants reportedly graduated from college. Participants in the sample were not representative of society, which skews the results.

Also, the survey program used (SurveyMonkey) produced aggregate results, which greatly limited our ability to more closely scrutinize the data. If the data were available to export as a spreadsheet with individual responses, we could calculate and analyze the percentages of self-disclosed depression among each age group.

Lastly, more time and resources would have made this study a much more rich and comprehensive endeavor.

Methodological problems

There are a number of methodological problems in this study. To begin, because the participants were recruited, for the most part, via my social media accounts, the sample was influenced by being a friend or a follower on these accounts; I have many more Facebook friends than connections on my other social media accounts, so it is not surprising that 70% of the respondents accessed the survey via Facebook (The 2015 Pew Research Study reported a similar percentage (68%) for general usage of Facebook).

Some participants may have felt obligated to participate because they know me. Also, because Craigslist is organized by city, the invitations to participate were posted only on the Seattle site in the Volunteers section. Data could contain biases since this was a nonrandom convenience sample.

Secondly, data wasn't collected for one of the questions – a Likert-scale question directed at employees (not supervisors or managers) who received mental health or well-being training at work. Participants were asked about the helpfulness and effectiveness of the wellness training

they received. As such, we do not have data to compare to supervisor training experiences. This error may have been a technical glitch or a researcher oversight when building the survey.

As this study involved a self-report survey, some participants may have been swayed by social desirability when responding to the questions. Also, I realized after the survey had been administered that I did not provide a definition or clarification for one of the terms used in a question - "effectiveness" with regards to participants reporting on the quality of training they received - what does "effective" look like? Although, open-ended responses from participants do point to specifics as far as the quality of training they received and if they found their training to be effective.

Also, as a self-report survey, some participants who indicated that they do not have depression, may indeed have depression, but are not aware of the signs and symptoms of depression, as was seen in a study led by Bouvopolis et al. (2016) In this way, the percentage of participants in this sample who have or have had depression may be larger. This could have been mediated by administering a separate survey to friends or family of participants to gather data on a second-hand perspective of participants' state of mental health. However, researchers found that self-report surveys for mental illness have high reliability and validity; second only to clinical interviews (p. 45, Guntuku et al., 2017).

Future Research

Reavley, Jorm, and Morgan (2016) reported there is scant research around preventative measures related to mental health discrimination in the workplace (pp. 1-2). In addition, researching social media as a mode of promoting health is limited and there have been calls to conduct more research in the area of social media and other communication technologies (p. 2, Gough et al., 2017).

Research look at capabilities of social media in disseminating mental health information and decreasing mental health stigma in the workplace is needed. According to the research, information sharing and anti-stigma campaigns appear to be two of the more effective ways to increase awareness and knowledge, but the use of social media in these efforts has not be adequately researched.

More testing is needed to determine if pyschoeducation disseminated via social media helps to humanize mental illness. In their study of depression in the workplace, researchers suggested that an employee with depression partnered with an employee without depression helped to humanize mental illness, sort of a "depression buddy" (p. 1, Haimson et al., 2014). Research in this area would be helpful, but more specifically exploring the potential benefit of using social media to maintain these kinds of social connections at work.

More research is needed to examine the cost and feasibility of developing and implementing a social media-led campaign in the workplace (p. 2, Peek et al., 2015). Finally, Guntuku et al (2017) suggested further studies comprised of collaborative, interdisciplinary and research teams, including professionals in a variety of relevant fields (e.g. policy makers, ethics experts, lawyers) to look together and deeper at this issue of employee depression. This approach would greatly help to address the systemic issues entrenched in employee depression in the workplace, however, perhaps the most important research participants are the employees with depression *and* without depression.

Contributions and Benefits

Therapy profession. This research benefits the therapy profession in that, findings may lead to a new type of therapeutic work. Therapists may potentially collaborate with businesses and organizations to assist with integrating a mental health-related social media

campaign - a therapeutic social media communications consultant? Also, therapists may use social media with their clients as another method of disseminating psychoeducation. This research reinforces the importance that social connections have in preventing depressive symptoms, and enhances our understanding of how social media can benefit organizations regarding employee mental health.

Society. As a byproduct of participating in the survey, participants may directly benefit by realizing or acknowledging depressive symptoms in themselves or others that they would not have otherwise. Further, they may decide to seek support for themselves or offer support to others. Participation may also lead some to explore social media resources for mental health information and support. Participation may also result in greater awareness of depression and greater attentiveness to one's work culture regarding mental health.

Additionally, participants who are supervisors may be more mindful and thoughtful about their role in supporting employees, and may seek out or implement a depression awareness and anti-stigma campaign at their place of work. This research enriches existing data to further suggest there is potential to create a more empathetic, supportive, and compassionate work environment, as well as increase employee help-seeking and self-care behaviors. Also, this type of research could eventually impact policies or company-specific regulations regarding increased support and resources for employees and supervisors.

Personal. Conducting this research has deepened my understanding of social media and has given me an appreciate for its many potential benefits to change the culture of employee depression (in and outside of the work environment). Social media and depression are two topics I am highly interested in, so it was rewarding to dive into existing research and conduct my own study about depression and the utility of social media. The knowledge gleaned and research

skills I gained from this experience may assist me in finding or creating a new kind of occupation. Perhaps I will develop a social media ‘curriculum’ or act as a consultant to help businesses and organizations elevate support of their employees by addressing mental health issues in a humanizing, informative and non-stigmatizing way.

Finally, this project reinforced the dire need to tackle depression, and especially in the workplace, where mental health stigma and lack of mental health support are common barriers to employee mental health support.

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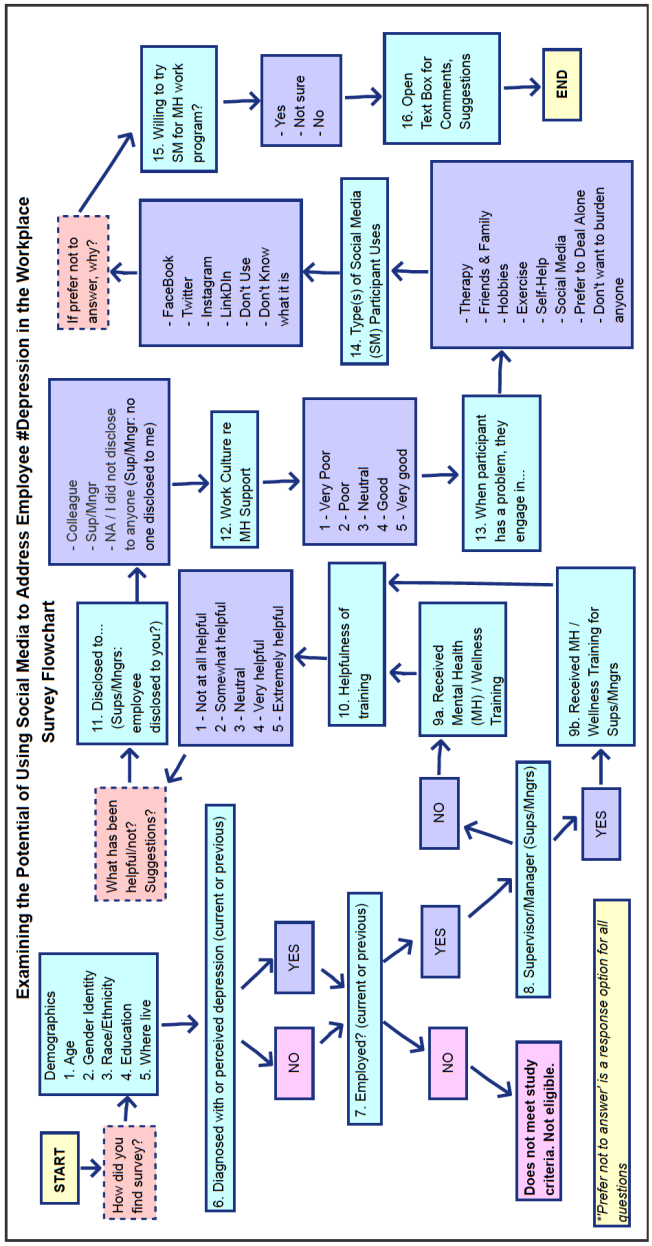
Appendices

Appendix A. Survey Questions

Appendix B. Survey Flowchart

APPENDIX B.


Examining the Potential of Using Social Media to Address Employee #Depression in the Workplace
Survey Flowchart
START
How did you find survey?
Demographics
1. Age
2. Gender Identity
3. Race/Ethnicity
4. Education
5. Where live
6. Diagnosed with or perceived depression (current or previous)
YES
NO
7. Employed? (current or previous)
YES
NO
Does not meet study criteria. Not eligible.
8. Supervisor/Manager (Sups/Mngrs)
YES
NO
9a. Received Mental Health (MH) / Wellness Training
9b. Received MH / Wellness Training for Sups/Mngrs
10. Helpfulness of training
1 - Not at all helpful
2 - Somewhat helpful
3 - Neutral
4 - Very helpful
5 - Extremely helpful
What has been helpful/not? Suggestions?
11. Disclosed to... (Sups/Mngrs: employee disclosed to you?)
- Colleague
- Sup/Mngr
- NA / I did not disclose to anyone (Sup/Mngr: no one disclosed to me)
12. Work Culture re MH Support
1 - Very Poor
2 - Poor
3 - Neutral
4 - Good
5 - Very good
13. When participant has a problem, they engage in...
- Therapy
- Friends & Family
- Hobbies
- Exercise
- Self-Help
- Social Media
- Prefer to Deal Alone
- Don't want to burden anyone
14. Type(s) of Social Media (SM) Participant Uses
- FaceBook
- Twitter
- Instagram
- LinkDIn
- Don't Use
- Don't Know what it is
If prefer not to answer, why?
15. Willing to try SM for MH work program?
- Yes
- Not sure
- No
16. Open Text Box for Comments, Suggestions
END
*'Prefer not to answer' is a response option for all questions