

**Addressing Mental Health at Work: Managerial Interventions to Promote Employee
Utilization of Resources**

By

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Abstract

Mental health is becoming a growing crisis in the United States, with significant costs to the workplace. Despite the availability of company-sponsored mental health resources, they are often underutilized. Previous research has established that managers can improve resource usage through active promotion, and self-disclosure can play an important role in challenging stigma. However, existing research focuses on Employee Action Programs (EAPs) rather than a broader set of mental health resources, and self-disclosure literature revolves around employee self-disclosure but ignores manager self-disclosure. To address these gaps, I investigated how manager endorsement and self-disclosure influence resource utilization. I conducted interviews and a study that varied endorsement. I found that there is a relationship between managerial endorsement, perceived quality of the resource, and utilization. Study findings also point to future extensions such as conducting a cost-benefit analysis of self-disclosure, having a control condition in which mental health resources are not mentioned at all, and the effect of regular, active promotion.

Keywords: Utilization, managers, employees, mental health, self-disclosure, endorsement

Disciplines

Organizational Behavior Theory

Table of Contents

Acknowledgements	3
Introduction	5
Literature Review	7
Methodology	13
Exploratory Interviews	14
Development of Hypotheses	19
Findings and Future Directions	21
Conclusion	30
References	31
Appendix I - Interview Guides	35
Appendix II - Survey	37

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Introduction

The World Health Organization (WHO) found that as of 2019, one in every eight people in the world lived with a mental disorder, with anxiety and depression being the most frequent diagnoses. The prevalence of these disorders has continued to rise, and in 2020, the number of people with anxiety and depression increased by 26% and 28% respectively (World Health Organization, 2021). In September of 2022, a panel of medical experts in the US recommended the screening of all adults under age 65 for anxiety given increased pressures and stress levels observed since the onset of the COVID-19 pandemic (Baumgartner, 2022). Further investigation by the American Psychological Foundation found that in 2022, 76% of adults experienced negative health impacts from stress and 27% of adults reported that their stress was debilitating and affecting their ability to function (APA, 2022).

The mental health crisis begets significant financial costs to the workplace. Kessler et al. (2007) found that due to productivity loss, depression is one of the most costly health problems for employers. Through WHO Questionnaire data, the authors found that depression was a statistically significant negative predictor of work performance (Kessler et al., 2007). Wellness programs and interventions can play a key role in addressing workplace costs, as wellness programs reduce the costs of insurance and absenteeism as well as improve productivity by about 10% (Gubler et al., 2017). In addition to work performance, other researchers have found a positive association between strong mental health and workplace loyalty (Mousa & Samara, 2022). These studies validate the importance of treating mental health disorders, as improved mental health is tied to positive outcomes for organizations and employees. Managers therefore have an incentive to address poor mental health in the workplace and promote mental health resources to drive optimal productivity and organizational efficiencies.

Due to the significant costs of mental health disorders in the workplace, firms are seeking to improve workplace mental health. While numerous firms offer resources or healthcare benefits to their employees, these resources are underutilized (Dimoff & Kelloway, 2016). Drawing on existing research on such underutilization, I argue that managers play a crucial role in driving discussions around mental health challenges (Azzone et al., 2009). In particular, I investigate manager endorsement and self-disclosure of resources and their impact on utilization. In this context, I define endorsement as public support of the resource (Brykman & Raver, 2021). Self-disclosure is defined as when a person shares novel, ordinarily private information about themselves, such as their use of a mental health resource (Fisher, 1984). I also explore the role of perceived quality, stigma, and accessibility as mediators, and manager competence as a moderator. To explore these questions, I first conducted semi-structured interviews with managers and employees to gain a deeper understanding of how managers in today's workplaces currently discuss and approach mental health. Leveraging the insights gained from the interviews, I ran an experiment in which explicit endorsement of a resource was varied. By manipulating managerial endorsement, I provided insight into the role explicit endorsement plays on resource utilization.

Below, I will explore literature that relates to this topic, and then I will detail the data gathering and analysis process, discussing how literature and exploratory interviews brought me to the key hypotheses. From there, I will detail the results of my second study and explore potential future extensions. In doing so, I will demonstrate that managers play an important role in connecting employees with resources and promoting their usage.

Literature Review

For the purposes of this literature review, I will first summarize different mental health resources available in the workplace. Next, I will investigate the barriers associated with employee utilization, touching on stigma as a key challenge. After establishing the barriers preventing adequate resource usage, I will detail the crucial role that managers can play in addressing mental health concerns. I will then investigate the role manager interventions play in EAP utilization, a context that I draw upon heavily in building my study. Finally, I consider the topic of self-disclosure and explore the potential for managers to drive utilization of mental health resources through self-disclosure.

Existing Resources

Companies offer numerous resources related to mental health and wellness. These resources include traditional methods and innovative solutions such as online or blended options. Some examples of resources are detailed below:

<u>Resource</u>	<u>Details/Examples</u>
Employee Action Plans (EAPs)	<ul style="list-style-type: none">• Programs that assist employees with personal or work-based problems (Gartner, 2022)• EAPs historically were used primarily for issues such as alcohol or substance misuse. However, they now cover broader wellness matters and personal or workplace challenges. EAP vendors and providers offer these services via phone, video-based counseling, online chatting, email interactions, and in-person counseling (Society for Human Resource Management, 2023)

	<ul style="list-style-type: none"> • EAPs are typically short term and focused on referrals (U.S. Department of Health and Human Services, 2023)
Online Therapy	<ul style="list-style-type: none"> • Apps such as Talkspace allows users to connect with licenses therapists online, streamlining the process (Artemis, 2022) • BetterUp offers AI-driven matches between employees and coaches. This service is geared towards professional success and building a stronger workplace (Artemis, 2022) • Some firms offer access to platforms that connect users to treatments and providers such as Lyra Health (Artemis, 2022). Lyra has a substantial provider network and helps members book appointments for in-person, live, or onsite (in-office) therapy sessions (Artemis, 2022)
Medical Plan Resources	<ul style="list-style-type: none"> • Oftentimes mental health resources are included in medical benefits, in the form of long-term counseling, substance abuse treatment, and other medical plans (Castle, 2023)
Wellness Activities	<ul style="list-style-type: none"> • Firms offer reimbursement or stipends for wellness activities such as gym memberships or other ways to stay active (Castle, 2023) • Meditation apps such as Calm.com offer audio tracks for sleep, meditation, and relaxation more broadly. These included guided meditation, bedtime stories, music and nature sounds, and more (Artemis, 2022)

These solutions attempt to tackle workplace challenges related to mental health through multiple angles, including short-term workplace interventions, streamlining the therapy process, medical plan benefits, and wellness activities or apps.

Resource Utilization

Even when organizations offer mental health resources as detailed above, research suggests that underutilization is a major problem. Specifically, research on EAPs finds that only 4.5% of employees who have access to an EAP utilize it (Dimoff & Kelloway, 2016). To explain this underutilization, Dimoff and Kelloway (2016) propose three key barriers. The first barrier is that employees don't recognize they need the resources (Dimoff & Kelloway, 2016). For example, an employee may not realize they are in crisis or exhibiting maladaptive coping behaviors (Dimoff & Kelloway, 2016). Therefore, the employee will be unlikely to take action and seek resources (Dimoff & Kelloway, 2016). The next challenge is ignorance and lack of knowledge around these resources (Dimoff & Kelloway, 2016). The authors argue that if an employee is unaware of the resources available to them, they cannot use it (Dimoff & Kelloway, 2016).

The final component of Dimoff and Kelloway's drivers of underutilization is stigma (Dimoff & Kelloway, 2016). They found that employees often do not seek treatment due to fear of being stigmatized, discriminated against, or judged by others (Dimoff & Kelloway, 2016). According to Brohan and Thornicroft (2010), stigma has three key drivers: knowledge (ignorance or misinformation), attitudes (prejudice), or behavior (discrimination). For example, employers may have misperceptions about what it means to hire and work with someone with a mental health disorder, which drives prejudiced behaviors (Brohan & Thornicroft, 2010).

Misinformation and prejudiced beliefs can cause repercussions to an employee who self-discloses poor mental health such as micro-management, exclusion from promotion opportunities, and social exclusion (Brohan & Thornicroft, 2010). Literature on stigma suggests that managers play a crucial role in combating underutilization, as employees who are unaware of the resources available to them will not seek out help. Additionally, ignorance and stigma surrounding mental health disorders can prevent employees from seeking out resources when needed, as employees fear repercussions associated with self-disclosure. Therefore, managers can combat underutilization by assisting employees in realizing when they could benefit from intervention, combating ignorance of the resources, and working to reduce stigma of mental health disorders in the workplace.

Manager Support of Mental Health

In other contexts such as anti-bullying and safe workplace practices, manager intervention is crucial to behaviors being adopted (Skarbek et al., 2015; Thompson et al., 1998). Of the limited work that has explored these ideas in the context of mental health, it tends to focus solely on whether managers respond (versus how they respond) and what organizational training managers receive on engaging with employees. This leaves us with an incomplete understanding of what managers can do during interactions to encourage resource utilization. In order to explore how managers learned of and responded to an employee's mental health issues, Woods and Dawkins (2018) conducted interviews with managers and analyzed their transcripts to explore patterns and themes. The authors found a pattern where managers become aware of the issue, take action to understand the situation and develop a response, implement the response, and manage the ongoing situation (Woods & Dawkins, 2018).

Similar to Woods and Dawkins' (2018) focus on managers' experience dealing with mental health, Shann et al. (2014) investigated how organizational leaders experience mental health in the workplace, surveying leaders and HR specialists. They found that 68% of respondents had worked with or managed someone with depression, and common workplace issues noted were work performance and absenteeism (Shann et al., 2014). Managers took approaches including general support, referral to counseling outside the workplace, referral to workplace-funded EAPs, and a negotiated work role or accommodations (Shann et al., 2014). Of survey respondents, 63% felt confident supporting someone with depression, while only 14% had taken specific training for mental health in the workplace (Shann et al., 2014). Nevertheless, 39% reported to promote mental health in the workplace (Shann et al., 2014). Thus, most managers deal with mental health disorders at work in some capacity and recognize the challenges associated with these disorders, but fewer managers have received specific training or actively promote wellness. In the case of Woods and Dawkins (2018) and Shann et al. (2014), manager interventions were explored in a reactive rather than a proactive sense. Therefore, existing literature tends to frame mental health promotion as something that can be done in response to an employee in crisis rather than a way to promote a healthy workforce.

Building upon research on manager interventions, literature suggests that managers can play a particularly strong role in EAP utilization. Employees are more likely to seek out EAPs for workplace stress if EAPs are actively promoted and if providers have on-site resources (Azzone et al., 2009). Additionally, greater focus on wellness and unusual stress was associated with lower EAP usage (Azzone et al., 2009). This finding seems contradictory, particularly usage during unusual stress, but the authors consider that during traumatic times, employees may be hesitant to seek adequate resources (Azzone et al., 2009). Additionally, if an employee worries

about his or her future at the company, they may be less likely to utilize these resources (Azzone et al., 2009). These findings reinforce the need for proactive communication, as employees are less likely to seek resources in a crisis.

In the case of EAPs, managers play a significant role in driving their usage. Walton (2006) found that constant and regular promotion of counseling by the employer and EAP increased utilization. However, employees had concerns for confidentiality, particularly that their manager may find out they had attended counseling (Walton, 2006). Thus, manager promotion plays a role in EAP usage; however, extraordinary stress and fear of poor performance are barriers to utilization. The desire for confidentiality reflects how stigma can prevent employees from seeking help when needed, further reinforcing Brohan and Thornicroft's (2010) work. Additionally, while managers are able to drive EAP utilization through active promotion, there is little research trying to extend this finding to other mental health resources.

Self Disclosure as a Solution to Promote Utilization

Another area that has been explored related to manager-employee relationships is self-disclosure. Self-disclosure is considered crucial in building and maintaining work relationships (Tardy & Smithson, 2018). As it relates to mental health, self-disclosure is critical to challenging stigma (Marino et al., 2016). However, when deciding whether or not to self-disclose something personal at work, the person sharing must weigh the rewards (personal, relational, and professional) against perceptions of associated risks (Tardy & Smithson, 2018). Factors affecting self-disclosure at work include fear of negative repercussions such as rejection, discrimination, and unfair treatment (Tardy & Smithson, 2018). Additionally, organizational

values and practices can affect self-disclosure. Social support is also considered a critical factor in self-disclosure (Tardy & Smithson, 2018).

While existing literature highlights the benefits of self-disclosure as well as potential barriers, there is little research on the impact manager self-disclosure can have on employees, specifically their endorsement of a mental health resource. This invites a conversation around when and how manager self-disclosure can be effective in promoting mental health resources.

Methodology

Recognizing the gap in manager promotion of non-EAP resources as well as manager self-disclosure, I employed a two-pronged methodology to identify and test strategies that may help employees utilize mental health resources. First, I interviewed four managers and five employees to better understand existing strategies managers use in sharing mental health resources. Similar to Woods and Dawkins (2018), I looked through interview transcripts to identify themes in manager strategies. I used these findings combined with academic research to formulate my hypotheses and inform the two conditions in my survey study. I launched the survey on Prolific with 300 survey participants, all of whom were US residents fluent in English, and who had a direct supervisor or manager. I modeled Sundar and Kim's (2005) approach of having participants engage with a situation and react accordingly. These scenarios allowed me to collect quantitative and qualitative survey data that measure the effects of manager self-disclosure.

Exploratory Interviews

In order to form a more informed hypothesis around resource utilization, I sought to better understand the current state of conversation around mental health in the workplace. I chose semi-structured interviews because Woods and Dawkins (2018) found that these are best for understanding the experiences of others and making meaning of those experiences through broad, open-ended, and neutrally-worded questions. I then followed up with relevant questions to better understand the interviewee's perspective and lived experiences.

Each interview was conducted via Zoom and took approximately 30 minutes. I interviewed four managers and five employees in a variety of industries ranging from financial services to religiously affiliated organizations. Interviewees were sourced mainly from personal connections. The questions asked were adapted from Shann et al.'s (2014) research and can be found in Appendix I. Each interview began with a set of introductory questions to establish a rapport. These questions asked about their roles, team size, culture of their organization, their relationship with their manager/employees, and awareness of mental health resources. For employees, I asked them how their manager shares mental health resources, asked them to recall a conversation where they discussed resources, and asked if their manager had disclosed using a resource. I then asked follow up questions about their reaction to the conversations. Managers were asked similar questions but framed around their experience leading these conversations. Additionally, I asked about their perception of utilization, their comfortability in disclosing use of a resource if they were to use one, and best practices or methods they've employed. The interviews wrapped up asking interviewees for any closing thoughts.

In order to translate the interviews into concrete takeaways, I employed the technique of open or substantive coding (Strauss & Corbin, 1990). This technique consists of generating

codes from theory and patterns in the interview. This stage revealed themes and commonalities across interviews. After grouping interview takeaways into categories, I synthesized key examples, as detailed below.

Table I: Employee Interview Takeaways

Subcategory	Examples
Confidentiality/Fear of Repercussion	<ul style="list-style-type: none"> • “There’s a huge conflict - the staffer decides your bonuses and has a massive amount of control over your life. I can understand why someone wouldn’t want them to evaluate your mental wellbeing... I would want to make it clear that it’s confidential and that whatever you say won’t get back to people that make judgments ” • “I liked when the PTO facilitator was random/not someone I worked with”
Desire for proactive, personal engagement	<ul style="list-style-type: none"> • “I would want outreach to come across as genuine. If a blast email went out, “e.g. Dear Employee,” that would be less helpful. I’d want it to be more personalized.” • “The benefits were initially communicated as part of typical onboarding when we were going over health insurance, dental insurance, etc. Since then, there have been emails about resources available” • “It comes up when there’s a problem and not when there’s something that’s neutral” • “If I was going through something and was told to use a resource, I’d be less receptive”
Examples of Workplace Conversations on Mental Health/Self-Disclosure	<ul style="list-style-type: none"> • “My manager told me if you’re ever not feeling 100%, you can take a mental health day. You have PTO. The best way for us to be productive is if we are fully in it” • “We had a casual team dinner where my manager brought up her therapist. This conversation made my manager seem more personable, approachable, and relatable... My manager is open, and it’s good in out-of-work settings. It would need to be balanced in work settings” • “A partner disclosed their struggle with mental health

	<p>and need for PTO. This didn't change my perception of them, but it gave an added data point"</p> <ul style="list-style-type: none"> • "I had a manager who said things like 'I'm breaking for an hour. I'm going to watch "Love is Blind with my fiancée.' This normalized taking breaks over something that isn't a bodily need. The team noticed and thought it was awesome. It made it normal for others and made them want to work with this person."
Resources mentioned	<ul style="list-style-type: none"> • Org 1: Lyra (free 8 sessions and then \$5 copay), LGBTQ+ navigation provider at no cost, Teladoc - 24/7 access to mental health professionals for behavioral health, Aetna health insurance - \$5 in network, 20% out of network • Org 2: Not sure entirely what they are, benefits such as access to therapist in health package • Org 3: Knows they exist but don't know much about them. Company has a mental health room • Org 4: Spring Health, therapy included in health care resources, mentorship • Org 5: Nothing official but wellness resources such as exercise classes
Desire to continue conversation	<ul style="list-style-type: none"> • "This conversation has made me want to mention the resources when I supervise people in the future"

Table II: Manager Interview Takeaways

Subcategory	Examples
Rising risks	<ul style="list-style-type: none"> • "The pandemic has played a role - I have never seen people suffering as much. It's a debilitating mental health crisis - I've had no shows at work and had to call their emergency contacts"
Boundaries/Legal risks	<ul style="list-style-type: none"> • "Depression and anxiety diagnoses are treated as disabilities under the ADA" • "Managers have their positions because they're subject matter experts. They're scared they'll cross lines" • "You have to be careful and not become the counselor, therapist, and the person they vent to. Managers, show up for them and be there for them"

	<p>like they do for you. Managers should have resources ready”</p> <ul style="list-style-type: none"> • “We’re not family, we’re not doctors. We’re still a professional environment” • “There are legal risks they could get themselves into. Show them what resources are out there, give them understanding they won’t be in trouble for it. Treat it as any other sickness” • “Full disclosure, I’m not a psychologist”
Reactive rather than proactive	<ul style="list-style-type: none"> • “Utilization is pretty low - a lot of people ask for resources but they want something that’s easy to use” • “The pandemic has played a role - I have never seen people suffering as much. There are debilitating mental health crises. I’ve had no shows where I’ve had to call their emergency contacts”
Sharing resources with employees	<ul style="list-style-type: none"> • “It was brought up during orientation” • “I have brought up resources to employees. They’re usually very grateful I’m willing to support them and appreciate the empathy component” • “I haven’t talked on-one-one but have shared out emails with links to places” • “I can’t give mental health advice but I can help steer you to some resources, and they are no cost to you or just the cost of your copay” • “I encourage people to use resources, to use PTO and sick time for mental health reasons as well”
Examples of Self-disclosure	<ul style="list-style-type: none"> • “When an employee came to me asking for support, I mentioned EAPs and shared that I myself had an experience where I found EAPs useful. The person was very receptive and grateful. It was hard for her to talk about, and having a personal attribute helped her” • “I’m transparent about using an outpatient therapist. I was nervous when first sharing with my employees, but I knew the employee was struggling. I knew the employee was going through a tough time, so I asked if the employee wanted additional resources or the name of a therapist I’ve spoken to. The employee was grateful but in the process of finding someone else” • “I nonstop mention the use of resources to employees. I try to normalize it and create an open culture. I consider disclosure a way of leading by example”

Resources mentioned	<ul style="list-style-type: none"> • Org 1: EAPs, \$50 reimbursements on mental health apps/gym • Org 2: Looked into Talkspace but expensive. Will do a spa day once in a while and will let employees schedule therapy. Trying to help with copays for therapy • Org 3: Don't have budget for premium add-on benefits but on cigna • Org 4: Full time organizational psychologist
Desire to continue conversation	<ul style="list-style-type: none"> • "This brought up for me that I should send a reminder about all the offerings. Things get forgotten really easily"

These interviews added additional color to literature, reaffirming some key themes and adding contrast to others. Literature supports that conversations around mental health are generally in response to employee challenges (Woods & Dawkins, 2018; Shann et al., 2014), but I had yet to consider work-life balance as a more general proxy for managers speaking around mental health. Additionally, as Brohan and Thornicfort (2010) noted, fear of repercussion prevents people from disclosing resource utilization or discussing resources with one's manager. Manager interviews revealed to me another challenging dimension of self-disclosure, which is boundaries and fear of legal repercussion.

While these interviews were relatively small in number and were not sourced in a random manner, they allowed me to better dive into the state of conversations surrounding mental health in the workplace. Firstly, the resources available to the interviewees were generally consistent with the types I had researched (Castle, 2022; Artemis, 2021). While the majority of literature on mental health resources in the workplace centers around EAPs, these interviews prompted me to look into other contexts, as EAPs were not readily identified in all interviews. Considering the interviews alongside my research, I landed upon four broader buckets of resources to include in my study: discounted gym memberships, online therapy, in-person therapy, and mediation apps.

Furthermore, the interviews reaffirmed my desire to look into self-disclosure particularly in a proactive context, as interviewees noted a desire for resources to be shared more regularly rather than when an employee was showing need.

Development of Hypotheses

Combining research with exploratory interviews, I landed on key challenges related to utilization and decided to focus on manipulating endorsement and self-disclosure as a single variable. Drawing on Azzone et al.'s (2009) research which finds that active EAP promotion drives usage, I decided to explore self-disclosure's role in mental health resource utilization. Nielson et al. (2007) found that for manager interventions, appraisal and perception of the quality of the intervention was a key determinant in its success. Based on this finding, I hypothesized that endorsement would drive positive employee appraisals of the resources. When considering mediating effects, I drew upon findings that stigma causes underutilization and that self-disclosure is crucial in combating stigma (Dimoff & Kelloway, 2016; Marino et al., 2016). Given that employees are more likely to use EAPs that are viewed as accessible, I hypothesized that manager self-disclosure will make the resources seem more accessible and, in turn, drive utilization (Azzone et al., 2009). Additionally, self-disclosure literature points to the importance of manager relationships (Marino et al., 2016). Thus, I considered manager competence, particularly manager competence as the moderator of the effectiveness of the intervention. These findings led me to the following hypotheses:

H1: Manager mental health resource endorsement positively predicts resource utilization, such that employees are more likely to utilize a resource following endorsement from their manager.

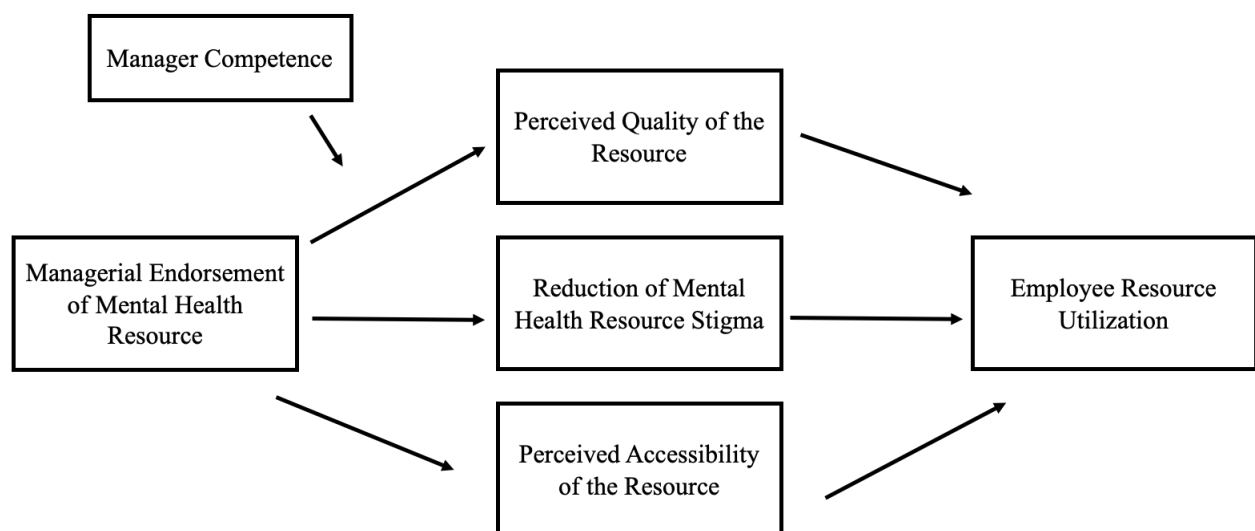
H2a: Perceived quality mediates the relationship between manager mental health endorsement and employee resource utilization, such that manager endorsement will enhance perceived quality, in turn driving utilization.

H2b: Reduction of stigma mediates the relationship between manager mental health endorsement and employee resource utilization, such that manager endorsement will decrease stigma, causing an increase in utilization.

H2c: Perceived accessibility mediates the relationship between manager mental health endorsement and employee resource utilization, such that resources will be considered more accessible following manager endorsement, which will lead to increased utilization.

H3: Manager competence moderates the effects of H1 and H2, such as when managers are more competent, the relationship between manager mental health endorsement and employee resource utilization is strengthened.

FIGURE I
Manager Endorsement and Employee Mental Health Resource Utilization



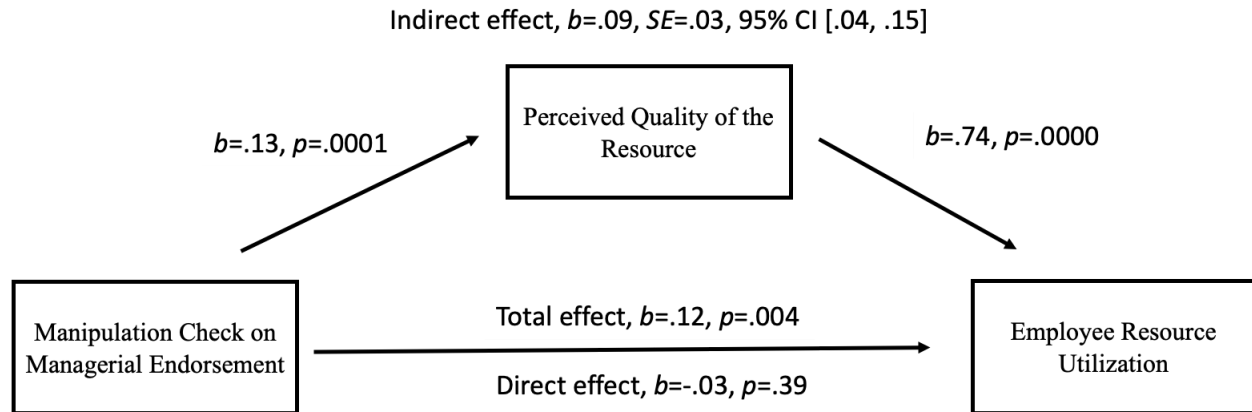
Findings and Future Directions

In Study 2 (Prolific US workers, n=300), I examined whether manager endorsement influences utilization through mediators of perceived quality, stigma, and accessibility. Additionally, I looked into manager competence as a moderator, measured through competence and trust. In the study, participants were first asked to recall their manager. After recalling their manager, participants were asked to imagine a discussion with their manager. Participants were assigned one of two conditions, a control condition where the manager shares resources related to mental health as well as a condition where the manager endorses the resources and shares they have used the resources personally. In both conditions, the four items were online therapy, in-person therapy, meditation apps, and discounted gym memberships. Participants were subsequently asked questions on 7-point scales measuring utilization intention (adapted from Azjen, 1985) with 1 = Extremely unlikely to 7 = Extremely likely, quality (adapted from Azjen, 1985) with 1 = Extremely bad to 7 = Extremely good, stigma (adapted from Griffiths et al., 2018) with 1 = Strongly disagree to 7 = Strongly agree, and accessibility (adapted from Wang, 2020) with 1 = Strongly disagree to 7 = Strongly agree. For utilization, we asked participants to indicate to what extent they were “likely to use the following resources” and then listed each resource. Similarly, for quality, we asked participants to “indicate the quality” they associated with each resource. The adapted stigma scale asked participants to react to phrases such as “using mental health resources is a sign of personal weakness.” To measure accessibility, I asked participants to rate their response to phrases such as “it is easy to access mental health resources at my organization.”

Next, participants were asked questions about their manager to measure if manager competence moderates the use of resources. Participants recalled their manager and answered 7-part scales on benevolence and ability (Mayer & Davis, 1999). In order to control for participants' experiences with mental health and existing relationships with their manager, I used the K6, a measure of depression, to measure their existing mental health conditions (Kepler, 2006) and the LMX scale to measure their existing relationship with their manager (Tekelab & Taylor, 2003). Finally, I ran a manipulation check and asked participants to respond to their manager and describe their impression of their manager. The entire survey can be found in Appendix II.

I tested each mediator in Hypothesis 2 using PROCESS model 4 for SPSS (Hayes, 2013) with 10000 bootstrapped samples. I found that perceived quality ($b = .09$, $SE = .03$, 95% CI [.04, .15]) mediated the relationship between the manipulation check and employee resource utilization. The manipulation itself did not lead to statistically significant results, however, the manipulation check produced statistically significant results, as detailed below. This suggests that the manipulation itself may not have adequately demonstrated endorsement, however, the extent to which participants perceived the conversation with the manager as endorsement had predictive power over utilization. Based on this finding, future research could run this study again with a different vignette. For example, making the manipulation more obvious through varied wording could yield statistically significant endorsement.

FIGURE II
Endorsement, Quality, and Employee Mental Health Resource
Utilization



The above figure details that the manipulation check predicted increased intent to use a resource through improved perception of quality. Stigma, accessibility, and measures of manager competence did not produce statistically significant results.¹ Given that stigma is tied to deep-rooted challenges such as prejudice and fear of repercussion (Brohan & Thornicroft, 2010), a single intervention was likely inadequate to drive significant change. A future study could investigate if regular interventions lessen ignorance, prejudiced attitudes, and fears of discriminatory behavior, in turn driving utilization. Additionally, an intervention with more thorough next steps could further investigate accessibility.

Additionally, the data does not show a statistically significant difference in participants' responses based on age or gender. Gender, however, when used as a moderator in PROCESS Model 1 for SPSS (Hayes, 2013) is trending towards significance ($b = .09, p = .16$). This relationship raises potential research questions surrounding the gender of the manager and whether there is an impact when manager and employee gender match. Additionally, in certain

¹When considered together, PROCESS model 4, with quality, stigma, and accessibility as mediators, was statistically significant ($R=.22, p = .0001$). However, when looking at the individual effects, quality was the only one driving the statistical significance.

contexts, minorities are less likely to self-disclose (Tardy & Smithson, 2018). Therefore, a study could consider how the race of the manager impacts reactions to self-disclosure.

A limitation of this study is that there was no condition in which no resources were offered. Based on interview takeaways, both managers and employees noted that being interviewed and prompted to think about mental health resources made them want to look into their company's resources more and discuss these resources with their employees. Additionally, ignorance has been found to be a key driver of underutilization and stigma (Dimoff & Kelloway, 2016; Brohan & Thornicroft, 2010). Therefore, an interesting direction would be to look at a condition in which the manager does not discuss mental health resources.

Another key limitation is that it is challenging to separate the effect of endorsement versus self-disclosure, as in the manipulated condition the manager both expressed that they have "used these resources" and "found them valuable." Therefore a future study could separate these two factors and consider them separately.

After testing the hypotheses and exploring the quantitative data, I performed an exploratory analysis of the open-ended employee responses. Similarly to the interviews, I employed open or substantive coding (Strauss & Corbin, 1990). In this part, I took the analysis one step further by using axial and selective coding, bucketing the quotes into themes and quantifying their prevalence. (Locke, 2001; Strauss & Corbin, 1990). The results are detailed below.

Table III: Responses to Open Ended Prompt, Positive Responses

Control		Endorsement	
Category of Response	Representative Quote	Category of Response	Representative Quote
Expression of Gratitude (84.97%)	<i>Thanks for letting me know about these options</i>	Expression of Gratitude (88.19%)	<i>I really appreciate you letting me know about these resources. I'm glad that they exist should I need them.</i>
Positive Impression of Manager (64.05%)	<i>They are helpful, supportive, think about the employees. I would find this situation inspiring and it would make me more likely to stick by my manager later on.</i>	Positive Impression of Manager (77.08%)	<i>positive, i feel proud and comfortable that he confided in me and said that he used them as well. so i shouldn't feel threatened or inferior if i decide to use them. my boss is pretty cool and honest.</i>
Consideration that their Manager Shows Personal Care (50.98%)	<i>My manager cares for my well-being and is interested in seeing me be well as an employee and as a person.</i>	Consideration that their Manager Shows Personal Care (65.28%)	<i>Very kind hearted and concerned about my well-being.</i>
Intent to Look Into It (47.71%)	<i>Oh awesome thanks! I'll be sure to check them out.</i>	Intent to Look Into It (60.42%)	<i>Thanks A.M., can you send me a link to those benefits?</i>

Mentioned appreciation of Manager Endorsement (20.83%)	<i>I thank you for the time for offering the resources that you have available and have personally used. I am more interested in using these services since someone like you has used them before</i>
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Table IV: Responses to Open Ended Prompt, Negative Responses

Control		Endorsement	
Category of Response	Representative Quote	Category of Response	Representative Quote
Concern about one's status (8.50%)	<i>I would be taken aback. I would question if my manager thought I had a mental issue and needed help.</i>	Concern about one's status (4.17%)	<i>Thank you. Are you just passing this on for general information, or have you seen something in my behavior that concerns you?</i>

Impression that this came from HR/Management Directives (7.8%)
She is doing what the company has told her to do, not saying that she had personal experience with any of them, but she does care that I know my options

Impression that this came from HR/Management Directives (2.08%)
I would assume that it was something being pushed down from corporate to do, though I don't think that he would do it insincerely.

Viewing the Manager as Disingenuous (9.15%)
Going through the motions

Viewing the Manager as Disingenuous (2.78%)
Seemed like they were talking off a script.

Concern the Manager was Overstepping (2.61%)
Why is this any of your business? Stick to issues related to work and stay out of my personal life.

Concern the Manager was Overstepping (0.69%)
She thinks she knows me well enough to think that I myself am in need of the mental health resources she is promoting that are in the pamphlet. She's trying to be helpful, but also kind of intrusive. I wonder if she is pushing me into using mental health resources.

The results from the open-ended follow up demonstrate patterns related to respondent reactions to different conditions. Overall, the reaction to a manager discussing mental health was

overwhelmingly positive across both conditions. Additionally, the potential drawbacks such as perceived inauthenticity, concern over an employee's performance, and the idea that a manager was overstepping was low across both conditions. Looking at the two conditions in comparison, the positive qualitative takeaways were intensified by the endorsement condition. On the other end, the negative repercussions were mitigated by the endorsement condition. The fewer negative responses could demonstrate, for example, that an employee is less likely to feel that their individual performance is being targeted if their manager self-discloses use of resources. This data shows that on its own, discussing mental health has primarily positive implications. Adding in endorsement can make this intervention even more effective from a qualitative employee perspective. Thus, future research could consider using validated scales to measure gratitude and impressions of managers as well as some of the concerns managers and employees may have such as fear of repercussion.

Another interesting qualitative finding is that while managers in the interview portion expressed concern about crossing boundaries, the percentage of employees that felt that way was quite minimal. The overall reaction was mainly positive, with a few employees expressing this concern. However, interviewees feared an extremely negative reaction to the conversation prompting legal action or other severe consequences. Thus, a future study could weigh the costs and benefits of self-disclosure, attempting to quantify from the manager's perspective versus the potential risks.

On the other end, another potential limitation is that I did not fully explore fear of repercussion from the employee perspective. In large part, I chose to not explore this measure because I was exploring manager self-disclosure rather than employee self-disclosure. However, qualitative findings in both the semi-structured interviews and survey respondents highlight the

prevalence of this concern. While our research does not point to employee self-disclosure, the reduction in fear of repercussion in the manipulated condition suggests that manager self-disclosure could decrease the fear of repercussion.

I chose to include a range of resources to reflect the breadth of resources that are considered mental health benefits. Therefore, a study could further delve into the different reactions associated with each resource. Within the qualitative data of Study II, I noticed that occasionally employees would reference the specific resources they were interested in using. I grouped the resources into two common groups discussed together: gym memberships and/or meditation apps versus online and/or in-person therapy. I found that in the control condition, 5.88% explicitly referenced their intent to look into the gym membership and/or meditation apps versus only 1.31% looking into a form of therapy. In the manipulated condition, 3.47% mentioned the gym or meditation explicitly versus 2.08% mentioning therapy and other resources. These results suggest that when managers endorse resources that may be traditionally stigmatized, such as therapy, employees feel more comfortable seeking out those resources. While the relationship between endorsement and stigma was not statistically significant in our study, perhaps consistently endorsing the more “stigmatized” resources could change employee attitudes around them. A future study could look into an intervention of more regular conversations around mental health in the workforce to consider how stigma changes over time.

A limitation of these qualitative findings is that they are not controlled by one’s existing relationship with their manager. Therefore, it is challenging to determine whether or not the positive perceptions of the manager are purely due to there being a conversation around mental health. Additionally, these findings are based on communicated responses to their manager and reflections on the interaction, so they have responded with a sentiment to their manager that is

different from their true perception of the conversation. These limitations suggest that a validated study could better explore the relationships found in the qualitative responses.

Conclusion

I investigated the relationship between managerial endorsement of a resource and its impact on utilization. I predicted that perceived quality of the resource, reduction of stigma, and perceived accessibility would act as mediators, and manager competence would be a moderator. Overall, I found a relationship between perception of endorsement and intended utilization mediated by quality. Additionally, I found in qualitative responses from the survey that the manipulation intensified positive reactions to managers discussing mental health and decreased some concerns around discussing mental health in the workplace. All together, while the results were not as hypothesized, this research offers numerous exploratory pathways for closing the utilization gap. Therefore, future extensions could consider defining the optimal wording to make endorsement clear or separating the effects of endorsement and self-disclosure. Additionally, further research could focus on issues such as self-disclosure across demographic groups, consistent interventions to reduce stigma, risks versus benefits from a manager perspective, fear of repercussion from an employee perspective, and other areas that warrant exploration based on the survey findings. Given that mental health is a growing concern with serious workplace implications, these extensions could assist managers in matching their employees with adequate support.

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Appendix I - Interview Guides

Mental Health Resources Semi-Structured Interview Guide - Managers

Questions: <i>Notes on what to say to the participant in italics.</i>	Notes on how the interview was designed in bold.
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<p><i>“Thank you so much for your time. I will be taking some notes during this conversation, so if you see me writing things down, that is why. I’ve written down some questions to ask you, which I will be referring to in this discussion. First, I’m going to ask you some questions about your organization and the work that you do”</i></p> <p>Section 1: Introduction</p> <ol style="list-style-type: none"> 1. Can you tell me about your role at (Organization Name)? 2. How long have you been at your company? How many people do you directly manage? 3. How would you describe the culture of your company? 4. How would you describe your relationship with your employees? 5. What mental health resources are you aware of your company offering? <p><i>Thank you so much for sharing. Next, I have a few questions about mental health resources and how they are shared and perceived.</i></p> <p>Section 2: State of Mental Health Resources + Conversations</p> <ol style="list-style-type: none"> 1. To what extent do you perceive your employees to utilize resources? Do you have any data on utilization? 2. In the last 3 months, did you talk to an employee about these resources? Can you walk me through these resources pretending I’m an employee? What was their reaction? 3. Have you used any of these resources yourself? If you had, would you be comfortable mentioning it to your employees? Have you mentioned it to your employees? 4. Has an employee shared with you their experience using a mental health resource? How did you handle it? 5. What best practices or methods stand out to you when discussing mental health in the workplace? <p>Section 3: Conclusion</p> <ol style="list-style-type: none"> 1. What else would you like to share with me? Has our conversation brought up any other thoughts for you? 2. When do you feel happiest at work? 	<p>Structure between questions is helpful.</p> <p>Rapport building.</p> <p>Start by gathering a baseline of their firm and relationship with employees</p> <p>After you establish a rapport, later in the interview, you can ask deeper questions.</p> <p>End with a question that makes the participant happy that they talked with you.</p>
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Mental Health Resources Semi-Structured Interview Guide - Employees

<p>Questions: <i>Notes on what to say to the participant in italics.</i></p>	<p>Notes on how the interview was designed in bold.</p>
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<p><i>“Thank you so much for your time. I will be taking some notes during this conversation, so if you see me writing things down, that is why. I’ve written down some questions to ask you, which I will be referring to in this discussion. First, I’m going to ask you some questions about your organization and the work that you do.”</i></p> <p>Section 1: Introduction</p> <ol style="list-style-type: none"> 1. How long have you been at your company? 2. How big is your team? 3. How would you describe the culture of your company? 4. What mental health resources are you aware of your company offering? <p><i>Thank you so much for sharing. Next, I have a few questions about mental health resources and how they are shared and perceived.</i></p> <p>Section 2: State of Mental Health Resources + Conversations</p> <ol style="list-style-type: none"> 1. How would you describe your relationship with your manager? 2. How does your manager speak about mental health resources? 3. In the last 3 months, did you talk to your manager about mental health resources? Can you walk me through the conversation? 4. How did the conversation make you feel? 5. Did it make you more or less likely to use the resource? Why/why not? 6. What influenced your thoughts about the resource? 7. Has a manager ever shared with you that they have used a resource? If so, how did they do so? 8. [If manager self-disclosed use of resource] Did that make you more or less likely to use the resource? Did it change your perception of your manager? <p>Section 3: Conclusion</p> <ol style="list-style-type: none"> 1. What else would you like to share with me? Has our conversation brought up any other thoughts for you? 2. When do you feel happiest at work? 	<p>Structure between questions is helpful.</p> <p>Rapport building.</p> <p>Start by gathering a baseline of their firm and relationship with employees</p> <p>After you establish a rapport, later in the interview, you can ask deeper questions.</p> <p>End with a question that makes the participant happy that they talked with you.</p>
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Appendix II - Survey

Mental Health in the Workplace

Survey Flow

EmbeddedData

workerIDValue will be set from Panel or URL.
assignmentIDValue will be set from Panel or URL.
hitIDValue will be set from Panel or URL.
participantIDValue will be set from Panel or URL.
projectIDValue will be set from Panel or URL.
PROLIFIC_PIDValue will be set from Panel or URL.
STUDY_IDValue will be set from Panel or URL.
SESSION_IDValue will be set from Panel or URL.

Block: Informed Consent (8 Questions)

Branch: New Branch

If

If Principal Investigator: Hunter Korn | kornh@wharton.upenn.edu What are some general things you... Yes Is Selected

BlockRandomizer: 1 -

Group: Condition 1

Block: Vignette-Low Endorse (2 Questions)

EmbeddedData

Endorsement = 0

Group: Condition 2

Block: Vignette 2-High Endorse (2 Questions)

EmbeddedData

Endorsement = 1

Standard: Scales (8 Questions)

Standard: Controls (2 Questions)

Standard: AttCheck3 (6 Questions)

Standard: Demo (17 Questions)

EndSurvey: Advanced

EndSurvey: Advanced

Page Break

Start of Block: Informed Consent

InformedConsent Principal Investigator: Hunter Korn | kornh@wharton.upenn.edu

What are some general things you should know about research studies?

You are being asked to take part in a research study. To join the study is voluntary. You may choose not to participate, or you may withdraw your consent to be in the study, for any reason, without penalty. Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies. Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study.

What is the purpose of this study?

The purpose of this research study is to examine situations at work when a manager discusses mental health resources with employees.

Why am I being asked to volunteer?

We aim to recruit adults above the age of 18 who are currently working and report to a manager. If you qualify based on these requirements and want to participate in this research, then please continue.

How many people will take part in this study?

There will be approximately 250 working individuals in this research study.

How long will your part in this study last?

You will be asked to complete one 7 minute survey.

Will I be paid for being in this study?

Yes. You will be paid at the specified rate. Note: Participants who fail to correctly respond to attention-checking questions within the survey will not receive payment. Also, any participant who exhibits suspicious behavior within their data file, including those surveys completed with the same IP address will be exempt from receipt of payment.

What will happen if you take part in the study?

You will be asked to read a scenario in which you should imagine yourself serving as an employee speaking with your manager. We will ask you a few survey questions about this situation.

What are the possible benefits from being in this study?

Research is designed to benefit society by gaining new knowledge. You will not benefit personally from being in this research study.

What are the possible risks or discomforts involved from being in this study?

There are no known major risks associated with participating in this study. There may be uncommon or previously unknown risks. You should report any problems to the researcher.

How will information about you be protected?

Data collected in this study will be stored in a secure file that only the small team of researchers involved in this study will have access to. Under no circumstances will the researchers ever use or share this information to determine individual responses to survey questions and any identifying information will be permanently discarded once the compensation process is complete. Please note that identifiers will be removed from the identifiable private information and that, after such removal, the data could be used for future research studies without additional informed consent from the subject or the legally authorized representative.

What if you want to stop before your part in the study is complete? There is no penalty for leaving this study. We will retain the information that you have provided unless you indicate otherwise.

Will you receive anything else for being in this study?

No.

What if you have questions about this study?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions about the study (including payments), complaints, concerns, or if a research-related injury occurs, you should contact the email address listed above.

Additionally, you may contact the Office of Regulatory Affairs with any questions, concerns or complaints at the University of Pennsylvania by calling (215) 898-2614.

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. By continuing, I consent to participation in this study and confirm that I am above the age of 18,

currently employed, and have a manager.

Do you consent to participate in this study?

☐ Yes (1)

☐ No (2)

Skip To: End of Survey If InformedConsent = 2

Manager Please confirm that you currently have a manager.

☐ Yes, I have a manager. (2)

☐ No, I do not currently have a manager. (3)

Skip To: End of Survey If Manager = 3

Page Break

Instructions In this survey, you will be asked to imagine yourself interacting with your manager. You will read a scenario where your manager will speak with you about your organization's mental health resources. We will then ask you questions based on the scenario.

Timing Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

AttCheck1 In your own words, please describe your task for this survey.

ManagerInitial Please enter your manager's initials.

DescribeManager Please describe your manager \${ManagerInitial/ChoiceTextEntryValue}.

Page Break

Instructions2 On the next page, you will be asked to imagine that you've just had a meeting with your manager \${ManagerInitial/ChoiceTextEntryValue}. At the end of the meeting, your manager shares about mental health resources available through the organization.

End of Block: Informed Consent

Start of Block: Vignette-Low Endorse

Vignette Your manager says, "I wanted to walk you through some of the resources we have related to mental health. Here's a pamphlet that outlines several resources, including discounted gym memberships, online therapy, in-person therapy, and meditation apps."

DelaySubmit5 Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

End of Block: Vignette-Low Endorse

Start of Block: Vignette 2-High Endorse

DisclosureManip Your manager says, "I wanted to walk you through some of the resources we have related to mental health. I've used these resources myself, and I've found them really valuable. Here's a pamphlet that outlines several resources, including discounted gym memberships, online therapy, in-person therapy, and meditation apps."

DelaySubmit Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

End of Block: Vignette 2-High Endorse

Start of Block: Scales

Q107 The following questions will now ask about your reaction to the scenario you just read.

Utilization Please indicate to what extent you are likely to use the following resources:

	Extremel y unlikely (1)	Moderatel y unlikely (2)	Slightl y unlikel y (3)	Neither likely nor unlikel y (4)	Slightl y likely (5)	Moderatel y likely (6)	Extremel y likely (7)
Online therapy (UTL1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In-person therapy (UTL2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meditation app (UTL3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discounted gym membership (UTL4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Quality Please indicate the quality you associate with the following resources:

	Extremel y bad (1)	Moderatel y bad (2)	Slightl y bad (3)	Neithe r good nor bad (4)	Slightl y good (5)	Moderatel y good (6)	Extremel y good (7)
Online therapy (QUA1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In-person therapy (QUA2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meditation app (QUA3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discounted gym membership (QUA4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Depression Stigma Sc Considering the scenario you read, to what extent do you agree with the following statements:

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Using mental health resources is a sign of personal weakness (ST11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mental health resources do not offer real medical benefits (ST12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Mental health resources are dangerous (STI3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I had used a mental health resource I would not tell anyone (STI4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would not employ someone if I knew they had used a mental health resource (STI5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ease/Accessibility Considering the scenario you read, to what extent do you agree with the following statements:

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
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It is easy to access mental health resources at my organization (ACC1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not experience difficulty accessing mental health resources at my organization (ACC2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The process of accessing mental health resources is straightforward (ACC3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization makes it easy to utilize mental health resources (ACC4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's simple to access mental health resources at my organization (ACC5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q108 We will now ask you a few questions about your manager,
 \${ManagerInitial/ChoiceTextEntryValue}.

Benevolence Please indicate your level of agreement with the following.

	Strongly disagree (1)	Disagree (2)	Somewha t disagree (3)	Neither agree nor disagree (4)	Somewha t agree (5)	Agree (6)	Strongly agree (7)
My manager is very concerned about my welfare (BEN1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My needs and desires are very important to my manager (BEN2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager would not knowingly do anything to hurt me (BEN3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

My
manager
really
looks out
for what is
important
to me
(BEN4)

☐ ☐ ☐ ☐ ☐ ☐ ☐

My
manager
will go out
of their
way to
help me
(BEN5)

☐ ☐ ☐ ☐ ☐ ☐ ☐

Ability Please indicate your level of agreement with the following.

	Strongly disagree (1)	Disagree (2)	Somewha t disagree (3)	Neither agree nor disagree (4)	Somewha t agree (5)	Agree (6)	Strongly agree (7)
I feel very confident about my manager's skills (ABL4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager is well-qualifi ed (ABL5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

My manager is very capable of performing their job (ABL1)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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My manager is known to be successful at the things they try to do (ABL2)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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My manager has much knowledge about the work that needs to be done (ABL3)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

End of Block: Scales

Start of Block: Controls

K6 These questions concern how you have been feeling over the past 30 days. Tick a box below each question that best represents how you have been.

	None (1)	A little (2)	Some (3)	Most (4)	All (5)
About how often during the last 30 days did you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

feel nervous?
(DEP1)

During the
past 30 days,
about how
often did you
feel
hopeless?
(DEP2)

During the
past 30 days,
about how
often did you
feel restless
or fidgety?
(DEP3)

How often did
you feel so
depressed
that nothing
could cheer
you up?
(DEP4)

During the
past 30 days,
about how
often did you
feel that
everything
was an effort?
(DEP5)

During the
past 30 days,
about how
often did you
feel
worthless?
(DEP6)

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

LMX Think about your manager \${ManagerInitial/ChoiceTextEntryValue}. To what extent do you agree with the following:

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I usually know where I stand with my boss (LMX1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that my boss understands my problems and needs (LMX2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that my boss recognizes my potential well (LMX3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My boss would be personally inclined to use their power to help me solve problems in my work (LMX4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I can count
on my boss
to "bail me
out" at their
expense
when I
really need
it (LMX5)

☐☐☐☐☐☐☐☐

I have
enough
confidence
in my boss
that I would
defend and
justify their
decisions if
they were
not present
to do so
(LMX6)

☐☐☐☐☐☐☐☐

I have an
extremely
effective
working
relationship
with my
boss
(LMX7)

☐☐☐☐☐☐☐☐

To show
you are
paying
attention,
please
select
Disagree
(AC1)

☐☐☐☐☐☐☐☐

End of Block: Controls

Start of Block: AttCheck3

MC Please rate the extent to which you agree with the following statements.

	Strongly disagree (1)	Disagree (2)	Somewha t disagree (3)	Neither agree nor disagree (4)	Somewha t agree (5)	Agree (6)	Strongly agree (7)
My manager shared information about mental health resources that they have found helpful. (EMC1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager discussed mental health resources that they have personally used. (EMC2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

My manager spoke to me about mental health resources they personally found beneficial. (EMC3)



Page Break

Instructions We will now show you the conversation you had with your manager again and ask you to answer a few additional questions.

Display This Question:

If Endorsement = 0

LowE Your manager says, "I wanted to walk you through some of the resources we have related to mental health. Here's a pamphlet that outlines them."

The pamphlet details several resources, including discounted gym memberships, online therapy, in-person therapy, and meditation apps.

Display This Question:

If Endorsement = 1

HighE Your manager says, "I wanted to walk you through some of the resources we have related to mental health. I've used these resources myself, and I've found them really valuable. Here's a pamphlet that outlines them."

The pamphlet details several resources, including discounted gym memberships, online therapy, in-person therapy, and meditation apps.

OEM Imagine you are responding to your manager. What would you say back?

OEIM Please describe your impression of your manager.

End of Block: AttCheck3

Start of Block: Demo

Demolnstruct Now we are going to ask you general questions about your work experience. If you have more than one job, for this survey please focus on your primary job (the one to which you devote most hours per week).

Please note that answers will only be used in the aggregate (e.g., 10% of participants were government employees).

DemoEmployment Please choose the best description:
I am...

- ☐ an employee of a company, business, or not-for-profit organization for wages, salary, or commissions (1)
 - ☐ a government employee (local, state, or federal) (2)
 - ☐ self-employed in own business, professional practice, farm, or other (3)
 - ☐ working without pay in family business or farm (4)
 - ☐ Other (please explain): (5)
-

DemoYearsWorked How many years have you worked for this organization?[Note: please use numbers - for example, "3.5"]

Page Break

DemoColleagues Do you work with other colleagues?

- ☐ Yes (1)
- ☐ No (2)

DemoColleaguesNumber How many colleagues would you say you work closely with on a day-to-day basis? These may be colleagues on your team and/or colleagues in other departments who you frequently speak to or collaborate with. Please enter a number below.

DemoManagePeople Do you directly manage a team of employee(s)?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Other (please explain) (3)

DemoJobType How would you best characterize your position?

- ☐ Staff (with no supervisory responsibilities) (1)
- ☐ First / low level supervisor (2)
- ☐ Middle management (3)
- ☐ Upper middle management (4)
- ☐ Executive (5)
- ☐ Top management (6)
- ☐ Not relevant/I do not currently have a job (7)

Page Break

DemoIndustry Which of the following categories best represents the industry you primarily work in (regardless of your actual position)?

- ☐ Arts, Entertainment, and Recreation (1)
- ☐ Advertising, Marketing, and Market Research (2)
- ☐ Government and Public Administration (3)
- ☐ Journalism and Media (4)
- ☐ Publishing (5)
- ☐ Healthcare and Social Assistance (e.g., doctor, nurse) (6)
- ☐ Other Healthcare Industry (e.g., pharmaceuticals) (7)
- ☐ Financial Services and Insurance (8)
- ☐ Consulting (9)
- ☐ Legal services (10)
- ☐ Computer and Electronics (11)
- ☐ Software (12)
- ☐ Information Services and Data Processing (13)

- ☐ Other Technology Industry (14)
- ☐ Telecommunications (15)
- ☐ Transportation and Warehousing (16)
- ☐ Manufacturing (17)
- ☐ Automotive (18)
- ☐ Agriculture, Forestry, Fishing, and Hunting (19)
- ☐ Mining (20)
- ☐ Utilities or Energy (21)
- ☐ Construction (22)
- ☐ Real estate, rental and leasing (23)
- ☐ Design services (e.g., interior design, graphic design) (24)
- ☐ Retail (25)
- ☐ Restaurant, Food Supply, and Food Services (26)
- ☐ Hospitality and Tourism (27)
- ☐ College, University, and Adult Education (28)
- ☐ Primary/Secondary (K-12) Education (29)

☐ Other Education Industry (30)

☐ Military (31)

☐ Religious (32)

☐ Other (33) _____

DemoHoursworked On average, approximately how many hours do you work per week? Please enter a number below.

DemoHoursRemote Approximately what percentage of your time (0-100%) do you **work remotely** (i.e., not in the office)? Please enter a number between 0 and 100 (please enter the number only, do not use a percent sign).

Page Break

DemoInstruct2 You're almost done!

Please respond to these last few questions about your demographics.
Answers will only be used in the aggregate (e.g., 30% of participants were male).

DemoGender What is your gender identity?

☐ Male (1)

☐ Female (2)

☐ Another identity not listed (3)

☐ Prefer not to say (4)

DemoAge What is your age in years?

DemoRace What is your race or ethnic background? If you are mixed race, please choose all that apply.

☐ White or Caucasian (1)

☐ Hispanic or Latino (2)

☐ Black or African American (3)

☐ Asian (4)

☐ American Indian, Alaska Native, Native Hawaiian, or other Pacific Islander (5)

☐ Other (6) _____

DemoEducation What is the highest level of education you have completed?

- ☐ Some high school (1)
- ☐ High school (including GED) (2)
- ☐ Some college, no degree (3)
- ☐ Associate's degree (4)
- ☐ Bachelor's degree (5)
- ☐ Master's degree (M.S., M.A., MBA, etc.) (6)
- ☐ Professional or doctorate degree (Ph.D., J.D., M.D., etc.) (7)
- ☐ Other (8) _____

DemoIncome Which of the following categories best represents your annual household income last year (before taxes)?

- ☐ Less than \$25,000 (1)
- ☐ \$25,000 - \$49,999 (2)
- ☐ \$50,000 - \$74,999 (3)
- ☐ \$75,000 - \$99,999 (4)
- ☐ \$100,000 - \$149,999 (5)

☐ \$150,000 - \$199,999 (6)

☐ \$200,000 or more (7)

DemoFeedback Optional: Please share any feedback with us based on your experience with this study.

End of Block: Demo