

Depressed People Need Not Apply: Mental Health Stigma Decreases Perceptions of Employability of Applicants with Depression

Arunima Kapoor
University of Toronto

ABSTRACT. The purpose of the current research was to examine whether individuals with depression are perceived as less desirable for employment and, if so, whether this decreased employability is related to potentially legitimate job-related concerns or simply to the stigma associated with mental illness. In Study 1, we compared the effect of different labels of illness on employability and found that individuals with a label of depression are less likely to be recommended for hiring than individuals labelled as physically ill. In Study 2, we aimed to rule out the possibility that this differential employability results from concerns about decreased productivity by adding a label of hypothyroidism, a physical illness with symptoms similar to depression, and comparing how that affects employability. We found that depressed applicants were less likely to be hired than applicants with hypothyroidism, despite being evaluated similarly overall. This confirms that decreased employability is a result of the stigma associated with mental illness rather than concerns about decreased productivity and elucidates the need for interventions to reduce this stigma.

Introduction

In 1792, Philippe Pinel first proposed that individuals with mental illnesses should be not be view as “mad” and restrained, but should instead be treated with kindness and care (Weiner, 1992). While he personally helped to significantly decrease stigma against the mentally ill during the 18th century, many of the constraints associated with mental illness remain prevalent. Even today, an explicit stigma attached to individuals with mental illnesses persists, hindering these individuals’ personal and professional achievements. Indeed, being labelled as mentally ill is still often considered a “mark of disgrace” and is associated with marked discrimination (Brohan et al., 2012). Individuals with mental disorders often have to cope simultaneously with the sometimes debilitating symptoms associated with their disorder as well as the disapproval, rejection, and discrimination that result from the social stigmatization of mental illness (Ottati,

Bodenhausen, & Newman, 2005). Of course, these social consequences can further exacerbate the original illness, resulting in a vicious and sometimes inescapable cycle. Unfortunately, the stigma attached to mental illness is particularly widespread in the environment where most individuals spend the majority of their day: the workplace. In the United States, mental disorders make up the second-most commonly cited basis for charges of discrimination and workplace harassment (Scheid, 1999). While recognition of mental illnesses may have increased in the twentieth century, many individuals living with mental illness report that they still would not disclose their illness to their manager due to the fear of negative consequences (Dewa, 2014).

Given this reluctance, we sought to explore whether the stigma attached to a specific mental illness, depression, is associated with decreased perceptions of employability. Furthermore, we set out to

examine whether the beliefs underlying such perceptions are related to concerns that the symptoms of the illness will interfere with work performance, or alternatively, if they are the product of the stigma associated with mental illness itself. We hypothesized that depressed individuals will continue to face discrimination and be perceived as less employable, despite contemporary efforts to eradicate the stigma surrounding mental illness. We also anticipated that the reduced perceived employability of individuals with depression is attributable to the stigma associated with mental illnesses rather than simply due to reservations about reduced productivity or other potentially relevant jobs-related factors.

Mental Illness Stereotypes & Beliefs

The stigmatization of mental illness is rooted in negative stereotypes, which precipitate prejudice and result in discrimination. Research on the stereotypes associated with mental health has revealed that these stereotypes often construe individuals with mental illnesses as violent and dangerous, dependent and incompetent, and irresponsible (Ottati, et al., 2005; Rusch, Angermeyer & Corrigan, 2005). Such negative stereotypes are demeaning and isolating, and they significantly influence how individuals with mental illnesses are perceived by themselves and others. This is particularly true in workplace settings, where competence, independence, and conscientiousness are valued (Mendel, Kissling, Reichhart, Buhner & Hamann, 2015).

Mental Health in the Workplace

Employment discrimination against individuals with mental illnesses seems to be driven by two main factors: general stigma and specific fears about loss of productivity. Individuals with mental illnesses are often held accountable for their illness in that others often believe that mentally ill people have brought the illness on themselves, or that the illness is somehow simple to control. Such beliefs foster stigma and prejudice, which then drive discriminatory behaviours.

For example, one study has demonstrated that job applicants with a “hidden disability” such as a mental illness may be treated worse than individuals with a self-evident disability such as paraplegia (Bordieri & Drehmer, 1986). In this same study, when an applicant’s disability was attributed to an internal cause, they were evaluated more poorly because they were seen as being responsible for their disability.

Consequently, applicants with a physical disability are seven times more likely to be recommended for hiring than applicants with a mental illness (Koser, Matsuyama, & Kopelman, 1999). An individual with a mental illness may in fact be able to perform tasks more proficiently than an individual with a physical disability, yet stigmatization appears to put those with such disabilities at a disadvantage regardless of performance.

In addition to the stigma surrounding mental illness, loss of productivity is a common concern for employers (Diksa & Rogers, 1996) and may explain why individuals with mental illnesses are less likely to be hired. While it is a valid concern and a realistic possibility that mental illness negatively influence productivity, many individuals with mental illnesses are in remission and are able to successfully cope with their illness. Yet, even candidates who have learned to cope with their illnesses are at a disadvantage, as employment decisions are often made based on past episodes of mental illness or on the possibility of future episodes (Stier & Hinshaw, 2007). Indeed, most individuals with a mental illness are willing and able to work (Macias, DeCarlo, Wang, Frey, & Barreira, 2001), and even those with severe mental illnesses, such as schizophrenia, are able to live and work independently once treated (Harding, Brooks, Ashikaga, Strauss, & Breier, 1987). Unfortunately, despite this fact, false beliefs about lowered productivity were rampant and evident in the 20th century and resulted in reduced employability (Glozier, 1998).

Depression in the Workplace

In this paper we focus on depression, a mental illness that has been associated with job-related concerns including decreased work performance (Kessler et al., 2008) and absenteeism (Tsuchiya et al., 2012). Glozier (1998) conducted a survey of human resource officers in UK companies in order to determine whether negative attitudes about mental illness affected employment opportunities for those with depression. He found that, when employers were given a choice between two identical applicants whose only difference was either having depression or diabetes, the chances of employment significantly decreased for those with depression. This discrimination stemmed from perceptions that depression increases the potential for poor work performance and was more pronounced for jobs at the executive level. The present research project aims to update and extend these findings by examining whether lower employability ratings for applicants with depression is rooted in (potentially legitimate) concerns about productivity and absenteeism, or whether these concerns are more related to the stigmatization of depression.

Recognition of mental health issues has increased in the twentieth century (Stuart, 2004). This paper provides an update on the present state of stigmas related to mental health in North American workplaces, and examines whether employment discrimination against employees with mental illnesses still persists. Furthermore, we explore whether the apparent discrimination is related to concerns about productivity loss or to the stigma associated with the mental illness itself.

Overview of Studies

The current investigation consists of two studies. The first aimed to replicate the Glozier's study (1998) and investigate whether the label of depression still reduces employability in the contemporary employment context. In this study, we asked

participants to evaluate job applications that indicated if the candidate had taken time off to deal with depression or diabetes. There was also a third, control condition, which did not provide an explanation for the gap in employment. We compared the impact of the disease labels (depression vs. diabetes vs. none) on perceptions of employability and employers' overall evaluations of the applications. The study by Glozier (1998) employed a UK sample, did not include a control condition, and was conducted over 15 years ago. The current study updates and elucidates the present state of stigmas associated with mental health in North America, employs a much larger sample, and adds a control condition to the original study design in order to more comprehensively understand the study results.

As with Glozier (1998), we expected that reductions in employability would be most pronounced among those with depression, and that the label of depression would result in a worse evaluation on all assessment measures. While the study by Glozier (1998) found that reduced employability occurred only for jobs at the executive level, we predicted that this effect would occur for jobs on multiple levels (manual, administrative, and executive), given that our study was fully powered and employed a larger sample size.

The second study extended upon the findings of the first and explored the potential underlying reasons for the reduction in perceived employability. With the intention of determining whether decreased employability in the depression condition was related to concerns about decreased work performance or simply due to the stigma attached to it, we introduced another illness with symptoms that are extremely similar to those of depression itself—hyperthyroidism. We proposed that if the label of depression resulted in lower employability than the label of hypothyroidism, this would lend support to our assertion that it is the stigma associated with mental health issues and not the

features of the illness itself that lower chances of employment.

We expected to find that the label of depression would result in a reduced chance of employment compared to the label of diabetes or hypothyroidism. While we explored general trends in employability, and thus predicted a widespread effect on all job types in Study 1, we were interested in the specific effect of symptomology on employability in Study 2, and thus held the specific job level constant at the executive level.

Study 1

Overview

This study was designed to examine whether employment discrimination against people with depression still persists in North America. In order to determine this, we compared the differences in the perceived employability and evaluation of the same individual when they were variously assigned the labels of depression, diabetes, or no illness.

Method

Participants. A total of 665 participants were recruited online through Amazon Mechanical Turk (40.2% women, 59.8% men). The average age of participants was 30.49 years ($SD=9.99$) with a range of 18 to 74 years. Participants were compensated \$1 for this ten-minute study. When asked about their employment title, the majority of participants described themselves as support staff (29.6%), with students (24.2%), middle and junior management (22.3%), and administrative staff (17.6%) rounding out the spectrum of responses. Additionally, a few participants indicated that they held upper management positions (5.9%). The ethnic composition of the sample was: European (72.0%), East and Southeast Asian (7.2%), African (5.4%), Latin, Central and South American (4.5%), South Asian (2.0%), and other (8.8%).

Materials. An overall evaluation scale to evaluate the employability of job applicants was designed based on a study by Heilman & Okimoto (2008). The scale

consisted of 17 items on which participants appraised the job application. The items on the questionnaire investigated anticipated job commitment (e.g. “The applicant would be willing to make sacrifices for the job”), anticipated competence (e.g. “The applicant would think independently”), and likelihood of work dependability (e.g. “The applicant would take a lot of sick/personal days”). Participants were asked to respond to the items on a scale from 1 (e.g. Extremely Unlikely) to 7 (e.g. Extremely Likely). Questions regarding likelihood of work dependability were reverse coded, so higher scores on this scale correspond to a more positive evaluation while lower scores implied a more negative evaluation. The aggregated score on the scale was calculated by determining the mean of all items for each participant. The overall evaluation scale had excellent internal consistency ($\alpha = 0.92$).

The second measure was the participant’s recommendation about whether the applicant should be hired (“I think this applicant should be hired for this position”). Finally, the last measure was the participant’s recommendation about whether the applicant should be eliminated from consideration for the job (“I think this applicant should be eliminated from further consideration”). Hiring and elimination recommendations were assessed on a 7-point Likert scale, with higher scores indicating superior evaluation and employability.

The study was designed and executed using Qualtrics, an online survey software program.

Procedure. Participants who provided informed consent were invited to participate in a study examining their employee selection preferences. Participants were randomly assigned to one of nine conditions in a 3 (job type: executive, manual, administrative) x 3 (illness: control, diabetes, depression) between-subjects design. Participants were told that they would be asked to (a) read a job description and evaluate applications for the position,

and to (b) complete a questionnaire assessing the employability of the applicants.

A job description for either an executive, manual, or administrative position was provided to participants, and each description outlined the responsibilities, roles, and prior experience required for the position in question. Participants in the executive job condition viewed a job posting for a marketing manager, while those in the administrative job condition were presented with a job posting for an administrative assistant, and those in the manual condition saw a job posting for a warehouse worker.

After the participants had read the job description, they were shown an applicant's cover letter and resume. The manipulation for this study was included in the cover letter, which was tailored to indicate whether the applicant had depression or diabetes, or was in the control condition. In the depression and diabetes condition, the following sentences were included in the cover letter: "As you will notice on my resume, I took some time off between my current full-time position and my previous position. I had just been diagnosed with depression/diabetes and had to take some time off for this medical reason. Since that time, I have learned to manage my illness and am back at work full time". In the control cover letter, no statement of illness was made. Resumes for all three conditions were otherwise identical in order to ensure the equivalent competence of all applicants, and each application was designed such that the applicant was presented as being very well-suited for the position.

Once the participant had reviewed the cover letter and resume, they were provided with a list of symptoms associated with the illness manipulation in order to help them in their evaluation. No symptoms were mentioned in the control condition, while the diabetes condition listed symptoms such as excessive thirst and appetite, increased urination, nausea, and dry mouth. Symptoms for the depression condition included fatigue, excessive sleepiness, decreased

concentration, and depressed mood.

Participants were then asked to evaluate the applicant using the dependent measures described above. Following these measures, participants were asked to provide some demographic information. Finally, participants were given the debriefing form and were thanked for their participation.

Results

The dependent measures of interest were the scores on the overall evaluation scale, likelihood of elimination from consideration, and likelihood of being hired. We conducted two-way analyses of variance (ANOVA) for each dependent variable with illness type (diabetes, depression, control) and job type (manual, executive, administrative) entered as between-subject variables. Data were analyzed using IBM SPSS Statistics Data Editor Version 22, and alpha was set at 0.05. As our hypotheses were directional in nature, one-tailed significance values were used for post-hoc analyses, which were conducted with Bonferroni corrections.

Overall Evaluation Scale. As anticipated, we observed a significant main effect of illness type on the overall evaluation scale, $F(2, 656) = 8.31, p < 0.01, \eta^2_p = .025$, but no main effect of job type ($F(2, 656) = 1.88, p = 0.15, \eta^2_p = .006$) or interaction was observed ($F(4, 656) = 0.91, p = 0.46, \eta^2_p = .006$). Post-hoc analyses revealed that the depression resume ($M = 5.33, SD = 0.74$) was evaluated less positively than the control ($M = 5.58, SD = 0.66; p < 0.01$) and diabetes ($M = 5.54, SD = 0.65; p < 0.01$) resumes. There was no significant difference between the control and diabetes resumes ($p > 0.05, ns$). The mean score (with 95% confidence intervals) and standard deviation for each illness type in Table 1 indicates that control applicants were evaluated most positively, followed by applicants with diabetes, and then by applicants with depression.

Elimination Recommendation. A significant difference among illness type was seen on the elimination measure ($F(2, 653) =$

4.47, $p = 0.01$, $\eta^2_p = .014$) no significant difference was seen among job type ($F(2, 653) = 1.57$, $p = 0.21$, $\eta^2_p = .005$) and no interaction was observed ($F(4, 653) = 1.50$, $p = 0.20$, $\eta^2_p = .009$). Post-hoc analyses indicated that applicants with depression ($M = 2.34$, $SD = 1.60$) were recommended for elimination significantly more than applicants in the control condition ($M = 1.92$, $SD = 1.31$), $p < 0.01$. No significant difference was observed between diabetes and depression or diabetes and control ($p > 0.05$).

Hiring Recommendation. A

significant main effect of illness type ($F(2, 656) = 3.60$, $p = 0.03$, $\eta^2_p = .011$) and job type ($F(2, 656) = 4.68$, $p = 0.01$, $\eta^2_p = .014$) was observed on the hiring recommendation measure, but no interaction was observed ($F(4, 656) = 0.50$, $p = 0.74$, $\eta^2_p = .003$). Post-hoc analyses of illness type revealed that applicants with depression ($M = 5.32$, $SD = 1.23$) were rated as significantly less hireable than the control applicants ($M = 5.58$, $SD = 1.11$), $p < 0.04$., and marginally less hireable than diabetes applicants ($M = 5.54$, $SD = 1.07$, $p = 0.06$). Applicants with diabetes and control applicants did not differ on this measure ($p > 0.05$, *ns*). Post-hoc analyses of job type indicated that applicants are significantly less hireable for executive positions ($M = 5.29$, $SD = 1.23$) than administrative ($M = 5.60$, $SD = 1.08$) or manual positions ($M = 5.55$, $SD = 1.11$), all $ps < 0.05$). No significant difference was observed between administrative and manual positions ($p > 0.05$).

Discussion

This study drew upon an American sample to explore how the stigma surrounding mental illness influences employability. Specifically, we examined whether the label of depression resulted in reduced employability compared to the label of diabetes or no labeled illness. In line with research showing reduced employability for applicants with depression (Glozier, 1998), we found that the label of depression

diminished employability more significantly than the label of diabetes or no illness at all.

When comparing applicants with depression to control applicants, we consistently found that applicants with depression were at a disadvantage. This suggests that if an employer knows that an applicant has suffered from mental illness, he or she may be less likely to choose that applicant over one with no previous illness. This effect occurred even though the individuals had identical resumes, which suggests that something beyond the competence of the individual was at play.

Moreover, it is essential to note that the manipulation for this study stated that the individual had recovered from their illness and was currently in good health. Accordingly, the observed reduced perceptions of employability could not rationally be founded on the notion that the individual would be unable to perform well at present. Since participants were aware that the applicant had recovered, the reduced employability of applicants with depression is suggestive of the stigma associated with mental illness that underpins the baseless fear that future episodes may occur (Stier & Hinshaw, 2007). Furthermore, not only were applicants with depression less hireable than control applicants, but they were also more likely to be eliminated from consideration for the position. This trend is a compelling signification of the intensity of the stigma associated with mental illnesses. Likewise, the overall evaluation—which, in principle, should be based on an objective evaluation of the applicant’s qualifications—was significantly worse for applicants with depression than for the control applicants.

In addition, a comparison of applicants with depression to those with diabetes further reinforces these findings. In keeping with Glozier’s findings (1998), applicants who indicated they had suffered from depression were less likely to obtain employment than those who indicated that they had diabetes. Applicants with depression were marginally less hireable and

received evaluations that were less positive overall. It is possible that there is no stigma associated with physical illnesses, which would explain why the label of a physical illness does not result in reduced employability. This notion has been validated by previous studies (e.g., Robinson et al., 1989) and could potentially explain our findings. Alternatively, it is possible that the symptoms of diabetes were not believed to be as debilitating as those of depression. That is, perhaps participants thought that applicants with diabetes would be able to manage their symptoms better than those with depression, and would consequently be able to perform the job at a higher level. In order to explore this possibility and rule out the alternative explanation that applicants with depression were less employable due to the symptoms associated with depression, we conducted Study 2 (see below). It is also noteworthy that applicants with depression were equally likely to be recommended for elimination as applicants with diabetes.

Thus, while applicants with depression are less hireable and evaluated less positively than applicants with diabetes, the difference between the two groups is not substantial enough to warrant significantly more recommendations for elimination for applicants with depression. Congruently, an interesting trend was observed on all assessment measures such that control applicants consistently had highest employability, followed by applicants with diabetes and applicants with depression, respectively.

As expected, no differences were found between the control applicants and the applicants with diabetes on any measure. This suggests that individuals with physical illnesses generally have the same chances of attaining employment as individuals with no illnesses. Additionally, we predicted that, unlike previous studies, our large sample size would allow us to illustrate that the stigma of mental illness is widespread and occurs across all job types. This prediction was supported, as no interactions were

observed. Unexpectedly, an effect of job type was observed when evaluating hireability. Specifically, all applicants were significantly less hireable for the executive positions compared to the manual and administrative positions. This may simply indicate that executive positions are more difficult to attain. Taken as a whole, the important findings of this study verify the existence of discrimination towards persons with mental illnesses in the North American workforce today.

Study 2

Overview

The purpose of this study was to examine whether the decreased employability of individuals with depression is related to the stigma associated with mental illness or to the concern that the symptoms of depression will interfere with work performance. In order to do this, we included a physical illness with symptoms similar to depression, namely hypothyroidism, and explored whether there would be a difference in employability between applicants who indicated that they had hypothyroidism and those who indicated that they had suffered from depression in the past.

Method

Participants. A total of 682 people recruited online through Amazon Mechanical Turk participated in this study (47.1% women, 52.9% men). The average age of participants was 32.55 years ($SD=11.31$) and they ranged from 18 to 72 years. Participants were compensated \$1 for completing this ten-minute study. When asked to describe their job title, most of the participants reported that they were support staff (29.3%), with students (20.8%), junior management (16.9%), administrative staff (15.4%), and middle management (11.7%) comprising the remainder of the responses. Notably, few respondents held upper management positions (5.6%). As with Study 1, the ethnic composition of the sample was diverse: 73.3% were European, 5.7% were East and Southeast Asian, 5.4%

were African, 4.5% were Latin, Central, or South American, 1.9% South Asian, and 9.2% identified as “other”.

Materials. The same measures as Study 1 were employed, only in this study a hypothyroidism manipulation was added in which the applicant mentioned taking time off of work to adjust to living with hypothyroidism.

Procedure. Similar to Study 1, participants who provided informed consent were invited to participate in a study examining their employee selection preferences. A between-subjects design was employed and participants were randomly assigned to one of four conditions: control, diabetes, depression, or hypothyroidism. Participants were told that they would be asked to (a) read a job description and evaluate applications for the position, and (b) complete a questionnaire assessing the employability of the applicants.

Participants were first provided with a detailed job description outlining the responsibilities, roles, job specifications, and prior experience required for the executive position of marketing manager. This job description was identical to the one used in Study 1. After the participants had read the job description, they were shown an application for the position which included a cover letter and a resume. As in Study 1, the cover letter was used to introduce one of the following manipulations: control, diabetes, depression, or hypothyroidism. Similar to the diabetes and depression manipulation, the following sentence was included in the cover letter for the hypothyroidism condition: “As you will notice on my resume, I took some time off between my current full-time position and my previous position. I had just been diagnosed with hypothyroidism and had to take some time off for this medical reason. Since that time, I have learned to manage my illness and am back at work full time”. As in Study 1, participants were provided with a list of symptoms associated with the physical illness—in this case hypothyroidism—which included identical

symptoms to the depression condition, such as fatigue, excessive sleepiness, decreased concentration, and depressed mood. Next, participants were asked to evaluate the applicant, complete the assessment measures, and to provide some demographic information.

Results

A one-way analyses of variance (ANOVA) for each dependent variable with illness type (diabetes, depression, hypothyroidism, control) was conducted. Alpha was set at 0.05.

Overall Evaluation Scale. A significant effect of illness type was evident on the positive evaluation scale ($F(3, 678) = 9.39, p < 0.01, \eta^2_p = .040$). Depression resumes ($M = 5.40, SD = 0.69$) and hypothyroidism resumes ($M = 5.40, SD = 0.69$) were evaluated less positively than control resumes ($M = 5.69, SD = 0.61$) and diabetes resumes ($M = 5.65, SD = 0.70$), all $ps < 0.01$. There was no significant difference between the control and diabetes or depression and hypothyroidism ($ps > 0.05$). The mean score for each illness type is displayed in Table 2.

Elimination Recommendation. A significant difference among illness types was seen on the elimination measure ($F(3, 678) = 3.58, p = 0.01, \eta^2_p = .016$). Post-hoc analyses indicated that applicants with depression ($M = 2.47, SD = 1.60$) were recommended for elimination significantly more than control applicants ($M = 2.03, SD = 1.41$) and applicants with diabetes ($M = 2.05, SD = 1.38$), $ps < 0.05$. No significant difference was observed between other comparisons, including the depression and hypothyroidism conditions ($M = 2.32, SD = 1.50$), all $ps > 0.05$. Although not all comparisons were significant, the mean in Table 2 indicate that applicants with depression were most likely to be recommended for elimination, followed by applicants with hypothyroidism, diabetes, and the control applicants, respectively.

Hiring Recommendation. The anticipated significant effect of illness type

was observed on the hiring recommendation measure ($F(3, 678) = 5.17, p < 0.01, \eta^2_p = .022$). Post-hoc analyses of illness type revealed that applicants with depression ($M = 5.06, SD = 1.29$) were significantly less hireable than applicants with hypothyroidism ($M = 5.85, SD = 3.16$), $p < 0.01$. No significant difference was observed between other comparisons, all $p > 0.05$. The mean score on the hiring recommendation measure for the diabetes resumes was 5.46 ($SD = 1.13$), while for the control resumes it was 5.46 ($SD = 1.01$).

Discussion

This study explored whether the decreased employability of individuals with mental illnesses is attributable to concerns about symptoms interfering with work or the stigma associated with mental illnesses. Specifically, we examined whether a label of depression had a more negative impact on employability than a label of hypothyroidism, diabetes, or no label. Since the symptoms of hypothyroidism are extremely similar to the symptoms of depression, the disparity in employability of applicants with depression and those with hypothyroidism suggests that the perception of persons with depression as being less employable is more related to stigma than to concerns about the associated symptoms. As with Study 1, we established that employability is influenced by illness labels across all assessment measures. In particular, we found that the label of depression resulted in a lower level of hireability than the label of hypothyroidism. However, there was no observable difference between the two groups on the overall evaluation scale or the elimination recommendation measure.

When examining the overall evaluation of applicants, we observed that depression and hypothyroidism resumes were evaluated less positively than the control and diabetes resumes. Contrary to our prediction, this illustrates that, in general, the symptoms of the illness influenced the overall evaluation of the application. That is, symptoms associated

with hypothyroidism and depression may have influenced the overall evaluation of the applicant; thus, applicants with depression and hypothyroidism received worse evaluations than the diabetes or control applicants. Applicants with hypothyroidism and depression did not differ from each other in regards to overall evaluation. Therefore, it is possible that the poorer overall evaluation of the applicant with depression illness could be at least in part attributed to their symptoms, and not only to stigma surrounding mental illness.

An interesting finding emerged when examining the scores on the elimination recommendation measure. Similar to Study 1, applicants with depression were recommended for elimination significantly more often than the control applications; however, unlike Study 1, applicants with depression were also recommended for elimination significantly more often than applicants with diabetes. The significant difference between depression and diabetes on this measure may have emerged in this study, but not Study 1 simply due to Study 2's larger sample size and thus increased statistical power. More importantly, applicants with hypothyroidism were equally likely to be recommended for elimination compared to all other conditions, including depression. Despite this finding, it is interesting to note that while applicants with depression differed significantly from the control applicants and the applicants with diabetes, the applicants with hypothyroidism did not exhibit significant differences compared to these groups. Although some comparisons did not reveal significant differences, the means for each condition reveal a general trend: the depression resumes were most often recommended for elimination, followed by the hypothyroidism condition, the diabetes condition, and then the control condition, respectively. This illustrates that, while there may exist a difference in elimination recommendations between applicants with hypothyroidism and

depression, it appears to be a fairly subtle one.

The strongest support for our predictions came from the hiring recommendation measure. Applicants with hypothyroidism were viewed as being significantly more hireable than applicants with depression. Taken together, these findings suggest that applicants with depression and hypothyroidism were evaluated similarly overall and were equally likely to be recommended for elimination; however, applicants with depression were less likely to be hired than applicants with hypothyroidism. This suggests that factors apart from concerns about symptomology are responsible for the decreased employability of individuals with depression, towards an applicant with hypothyroidism while others were not. Given that hypothyroidism is a physical illness with debilitating symptoms, some people may be more compassionate towards such individuals than those with a mental illness.

Indeed, while individuals with depression may be denied sympathy due to being perceived as being culpable for their illness, it may be the opposite for persons with hypothyroidism: given its status as a physiological illness and its debilitating symptoms, prospective employers may be more inclined to be sympathetic to the plight of applicants living with this condition. This may have resulted in the higher likelihood of employment observed for applicants with hypothyroidism.

General Discussion

The studies presented in this paper establish that the stigma associated with mental illness continues to exist in North America. Study 1 demonstrated that individuals with depression are less likely to be hired than someone with no illnesses. When the effects of a physical illness (i.e. diabetes) were compared to those of a mental illness (i.e. depression), it was observed that applicants with depression received lower overall evaluations and reduced employability. Upon adding

and that their decreased employability is attributable to the stigma associated with mental illness. Moreover, since overall evaluation and elimination recommendations did not differ between the hypothyroidism and depression applications, it is possible that stigma against mental illness only comes into play at the critical point when a decision regarding employability has to be made. Applicants may be evaluated equally in many respects, but, when it comes to actually choosing an employee, applicants with a mental illness are at a disadvantage.

Additionally, there was a large degree of variability in the hiring recommendation measure scores for hypothyroidism resumes. It is possible that some people were compassionate towards hypothyroidism, we found that applicants with depression and hypothyroidism were evaluated similarly and were equally likely to be recommended for elimination. Despite this, applicants with depression were less likely to be nominated for hiring than applicants with hypothyroidism, which suggests that decreased employability is attributable to the stigma associated with mental illness rather than concerns about symptomology. This study provides a better understanding of the stigma attached to mental illness in North America, and it illustrates how this stigma affects judgments about employees in the workplace.

A limitation of our study is that participants mainly held "support staff" positions and few held management positions. In reality, individuals in management positions are responsible for hiring decisions, limiting the generalizability of these findings. Therefore, it would be useful to replicate these studies on hiring managers who regularly evaluate resumes and make hiring decisions. Moreover, future research could explore the stigma of mental illness from the perspective of those who live with it on a daily basis, or examine various interventions intended to eliminate it. All things considered, this study elucidates the need for interventions such as

education in order to reduce the stigma associated with mental illness and to make the workplace a safe and convivial environment for all individuals.

References

- Bordieri, J. E., & Drehmer, D. E. (1986). Hiring decisions for disabled workers: Looking at the cause. *Journal of Applied Social Psychology, 16*(3), 197–208. doi: 10.1111/j.1559-1816.1986.tb01135.x
- Brohan, E., Henderson, C., Wheat, K., Malcolm, E., Clement, S., Barley, E., ... Thornicroft, G. (2012). Systematic review of beliefs, behaviours and influencing factors associated with disclosure of a mental health problem in the workplace. *BMC Psychiatry, 12*(1), 11. <http://doi.org/10.1186/1471-244X-12-11>
- Dewa, C. S. (2014). Worker attitudes towards mental health problems and disclosure. *The International Journal of Occupational and Environmental Medicine, 5*(4), 175–86. Retrieved from <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=med&NEWS=N&AN=25270007>
<http://www.ncbi.nlm.nih.gov/pubmed/25270007>
- Diksa, E., & Rogers, E. S. (1996). Employer concerns about hiring persons with psychiatric disability: Results of the Employer Attitude Questionnaire. *Rehabilitation Counseling Bulletin, 43*(4), 197–208. <http://doi.org/10.1017/CBO9781107415324.004>
- Glozier, N. (1998). Workplace effects of the stigmatization of depression. *Journal of Occupational and Environmental Medicine, 40*(9), 793-800.
- Harding, C. M., Brooks, G. W., Ashikaga, T., Strauss, J. S., & Breier, A. (1987). The Vermont longitudinal study of persons with severe mental illness, I. *American Journal of Psychiatry, 144*(6), 718-726.
- Koser, D. A., Matsuyama, M., & Kopelman, R. E. (1999). Comparison of a physical and a mental disability in employee selection: An experimental examination of direct and moderated effects. *North American Journal of Psychology, 1*(2), 213-222.
- Kessler, R. C., Heeringa, S., Lakoma, M. D., Petukhova, M., Rupp, A. E., Schoenbaum, M., ... & Zaslavsky, A. M. (2008). Individual and societal effects of mental disorders on earnings in the United States: results from the national comorbidity survey replication. *American Journal of Psychiatry, 165*(6), 703-711.
- Macias, C., DeCarlo, L. T., Wang, Q., Frey, J., & Barreira, P. (2001). Work interest as a predictor of competitive employment: Policy implications for psychiatric rehabilitation. *Administration and Policy in Mental Health and Mental Health Services Research, 28*(4), 279-297.
- Mendel, R., Kissling, W., Reichhart, T., Bühner, M., & Hamann, J. (2015). Managers' reactions towards employees' disclosure of psychiatric or somatic diagnoses. *Epidemiology and Psychiatric Sciences, 24*(2), 146–9. <http://doi.org/10.1017/S2045796013000711>
- Ottati, V., Bodenhausen, G.V., & Newman, L.S. (2005). Social psychological models of mental illness stigma. In P.W. Corrigan (Ed.), *On the stigma of mental illness: Practical strategies for research and social change* (pp. 99-128). Washington, DC: American Psychological Association.
- Rusch, N., Angermeyer, M. C., & Corrigan, P. W. (2005). Mental illness stigma: Concepts, consequences, and initiatives to reduce stigma. *European Psychiatry, 20*, 529-539. doi:10.1016/j.eurpsy.2005.04.004
- Scheid, T. L. (1999). Employment of individuals with mental disabilities: Business response to the ADA's challenge. *Behavioural Sciences & the Law, 17*(1), 73–91. doi: 10.1002/(SICI)1099-0798(199901/03)
- Stier, A., & Hinshaw, S. P. (2007). Explicit and implicit stigma against individuals with mental illness. *Australian Psychologists, 42*(2), 106-117. doi:10.1080/00050060701280599
- Stuart, H. (2004). Stigma and work. *Healthcare Papers, 5*(2), 100-111.
- Tsuchiya, M., Kawakami, N., Ono, Y., Nakane, Y., Nakamura, Y., Fukao, A., ... & Watanabe, M. (2012). Impact of mental disorders on work performance in a community sample of workers in Japan: The World Mental Health Japan Survey 2002–2005. *Psychiatry research, 198*(1), 140-145.
- Weiner, D. B. (1992). Philippe Pinel's "Memoir on Madness" of December 11, 1794: A fundamental text of modern psychiatry. *The American Journal of Psychiatry, 149*(6), 725-732