Trigger warnings: A quantitative study on the stigmatization of individuals with a mental illness and university students' help-seeking intentions

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Abstract

Requests for trigger warnings before distressing content in the university classroom have increased, especially to accommodate individuals with a history of trauma. However, no empirical evidence has been collected on the stigmatizing nature of trigger warnings. The trigger warning debate has received mainstream media attention and draws dichotomous lines between those who believe in the protective nature of trigger warnings, and those who believe they are coddling to students. The trigger warning literature is limited, however, and focuses mainly on how trigger warnings affect anticipated or experienced anxiety, emotional regulation, and post-traumatic stress. To date, the literature fails to investigate how trigger warnings influence stigma towards those who may benefit from them most, namely, individuals with a mental illness, and whether trigger warnings influence help-seeking intentions. In this study, participants were psychology students recruited from the University of Guelph. Design: 2 x 2 repeated measures split-plot design with two phases: 1) participants filled out an online survey to provide a baseline for phase two, and 2) participants were randomized into either a trigger warning or control condition and subsequently filled out the same online survey. Analysis: 2 x 2 analysis of variance for each dependent variable (stigma, help-seeking intentions). Results: In this sample, trigger warnings did not have an effect on students' stigmatization toward individuals with a mental illness or their help-seeking intentions. This paper is an abridged version of one that has been uploaded to the Open Science Foundation website and can be found under this project: (osf.io).

Keywords: trigger warnings, stigma, help-seeking intentions, mental health, mental illness, post-traumatic stress

Introduction

Do trigger warnings increase stigma toward individuals with mental illness? If so, do trigger warnings decrease one's intentions of seeking mental health treatment? These questions arise from the possibility that trigger warnings may create the perception that people with mental illness are inherently more vulnerable than the general population. Trigger warnings can be defined in several ways. Here, trigger warnings are verbal or written "cautions to students about upcoming course content that may cause them distress" (Sanson et al., 2019, p. 778). A trigger warning could come in the form of a verbal warning at the beginning of a class, a slide during a lecture that pre-empts potentially triggering material, or a written statement in the syllabus. Advocates argue trigger warnings are necessary for the wellbeing of students (Beverly et al., 2018), to help them prepare for distressing material

(Bentley, 2017), and to provide equal opportunity for in-depth conversations about sensitive topics (Lockhart, 2016). Critics believe trigger warnings may undermine aspects of one's emotional resilience (Bellet et al., 2018), increase adverse reactions to otherwise non-triggering material (Boysen et al., 2016), and are an affront to critical thinking in the classroom (American Association of University Professors, 2014).

It has been recommended that instructors issue trigger warnings before myriad topics including racism, colonialism, sexual assault, and suicide (Oberlin College 2013). However, there is a specific focus for professors to provide accommodations for individuals with a mental illness, especially those with post-traumatic stress disorder (PTSD), to reduce triggering responses in those individuals (Boysen, 2017). Triggering responses may include intrusion symptoms,

which are the foundation for *The Diagnostic and Statistical Manual of Mental Disorders (DSM)* diagnosis for PTSD and the justification for using trigger warnings (Boysen, 2017).

Trigger-based distress can be brought on by a number of internal stimuli (e.g., intrusive memories) and external stimuli (e.g., smells, sounds, or visuals). For example, internal/external stimuli may cause a student to remember a traumatic event(s) they endured, resulting in a stress-related triggered response. Involuntary intrusion symptoms can lead to more psychological distress in the afflicted, compared to voluntary intrusions (Berntsen & Rubin, 2008). Therefore, by showing distressing material without a trigger warning, professors may subject students to involuntary intrusions resembling prior traumatic event(s). As a result, involuntary intrusions may cause intrusion symptoms such as psychological distress. Thus, it is possible that trigger warnings may act as a form of protection for those with PTSD, helping students to prepare by making them aware of the distressing material.

Similar reactions have been found in those with a variety of other mental health issues. For example, Brewin et al. (2010) found involuntary images and memories can result in involuntary intrusions for individuals with anxiety disorders, depression, eating disorders, and psychosis. Parry and O'Kearney (2014) compared the intensity of intrusive memories between individuals with PTSD and those with depression and found diagnosed individuals are more apt to have intrusive thoughts compared to those without either diagnosis. Furthermore, Pfaltz et al. (2013) found individuals with panic disorders and PTSD report dissociation, as well as reliving thoughts and memories of their past traumas, resulting in greater psychological distress when compared to individuals without a mental health diagnosis. It is telling, then, that individuals with one or more of myriad mental health diagnosis may react similarly to involuntary intrusions, such as distressing material that comes without warning.

Regardless of one's beliefs about the efficacy of trigger warnings, there is a good reason for professors to consider issuing them. A recent study showed one-third of first-year college students are diagnosed with mental health disorders such as anxiety or mood disorders, resulting in a demand for on-campus mental health services (Auerbach et al., 2018). Moreover, it is well-documented that stigma is associated with mental illness (Corrigan, 2000; Hinshaw & Stier, 2008), which may decrease an individual's likelihood of seeking medical treatment (Vogel et al., 2007). Considering the large number of university students with a mental health diagnosis, it gives reason to provide trigger warnings to accommodate these individuals. However, it is crucial to weigh the accommodating benefits of trigger warnings with the possibility of stigmatizing the afflicted.

The Potentially Stigmatizing Nature of Trigger Warnings

One way stigma can manifest itself toward individuals with a mental illness is in discriminatory images in mainstream media (Wahl, 1997; as cited by Corrigan, 1997). In 2013, Oberlin College published *Support Resources for Faculty*, recommending instructors use trigger warnings in an attempt to reduce triggering responses in students. The recommendations created a widespread calling from students across America for use of trigger warnings in the classroom (Davis, 2014). Students at the University of California passed a resolution calling for trigger warnings in syllabi for any material that could elicit a stress reaction from students with PTSD (Byron, 2017). However, there was backlash from mainstream news sources like the New York Times (see Downes, 2016; Feldman-Barett, 2017; Manne, 2015, for more), and the Chronicle of Higher Education (see Essig, 2014; Leiter, 2016, for more), which argue trigger warnings coddle students. Furthermore, the American Association of University Professors (AAUP, 2014) responded by saying the recommendations are infantilizing to students and restrict academic freedom in the classroom.

The media and AAUP depict students as coddled and argue that adopting students' recommendations allows students an overbearing say in pedagogical policies. Backlash toward students who find trigger warnings protective may endorse a stereotype that people with a mental illness are more vulnerable than the general population. As a result, this stereotype may stigmatize individuals with a history of mental illness.

Another manifestation of stigma results from the belief that the afflicted are behaving outside of the 'norm.' The media portrayal of trigger warnings as coddling may imply students who require trigger warnings are abnormal. Social rejection of individuals with a mental illness is in part due to the non-normative behaviour related to the illness (Feldman & Crandall, 2007). Feldman and Crandall found that out of a list of 40 mental illnesses, university students would reject an afflicted individual based on over three-quarters of listed disorders. If students are likely to socially reject afflicted individuals on an array of mental illnesses, then it is logical that trigger warnings may induce feelings of stigma over myriad of topics towards those they intended to help. Consequently, social rejection due to stigma can lead to adverse effects regarding whether one seeks treatment for a mental health concern (Vogel et al., 2007).

Help-Seeking Intentions

As mental health stigma increases, help-seeking behaviour (seeking mental health treatment when necessary) decreases (Clement et al., 2015; Vogel et al., 2007). Kushner and Sher (1989) conceptualize help-seeking behaviour as a conflict between approach (e.g., experiencing distress) and avoidance tendencies (e.g., fear of treatment), and the resulting behaviour is a measure of how much motivation one

has to reduce their distress. The level of one's distress can motivate one to seek treatment; however, fear of being judged mentally unbalanced by one's peers can decrease this likelihood. If it is found that trigger warnings cause stigma towards individuals with mental illness, this fear may supersede their motivation to seek treatment.

It is important to understanding how trigger warnings influence stigma because it may help us understand the best way to incorporate trigger warnings without inducing avoidance of treatment. Considering the timeless nature of this issue, it is surprising that there is no mention of this in the trigger warning literature.

Experimental Literature on Trigger Warnings

There is a limited but growing body of empirical research on trigger warnings. The literature is mixed and generally focuses on emotional regulation, anticipated anxiety, experienced anxiety, and avoidance (for a full review see Bellet, et al., 2018; Bridgland, et al., 2019; Gainsburg & Earl, 2018; Sanson, et al., 2019). Only once did the literature mention that trigger warnings may be stigmatizing towards trauma survivors (Bellet et al., 2018). The mention was very brief and deserves further investigation, considering the negative outlook people hold toward them.

Bellet et al. (2018) suggest that trigger warnings may have unintended detrimental consequences for the afflicted individuals they are designed to protect. For example, trigger warnings can lead to anticipatory anxiety (Bridgland et al., 2019; Gainsburg & Earl, 2018), causing students to experience increased negative affect when they otherwise would not (Bellet et al., 2018). Further, Bellet et al. found trigger warnings led most participants to believe it is possible for themselves and others to suffer from a long-term debilitating illness, such as PTSD, after encountering a hypothetical traumatic event. The consequences are important to consider because repeated exposure to trigger warnings may deteriorate one's resilience (Bellet et al., 2018). In other words the more students are exposed to trigger warnings, the more potential for students to perceive individuals who have suffered trauma to be overly vulnerable.

More exposure to trigger warnings may contribute to negative stigma toward those who need them most. As Bellet et al.'s (2018) findings suggest, trigger warnings may increase awareness of the vulnerability of individuals with PTSD. The researchers did not test this claim, which is the gap that I intend to fill. By examining how trigger warnings relate to stigma and help-seeking behaviour, I will be contributing a novel investigation to the trigger warning literature.

The Current Study

As reviewed above, there is literature examining how trigger warnings affect aspects of mental illness (Bellet et al., 2018; Bridgland et al., 2019; Gainsburg & Earl, 2018; Sanson et al., 2019). However, it is small in scope. The literature is

lacking regarding whether (1) trigger warnings are stigmatizing toward individuals with mental illness, and (2) trigger warnings influence one's help-seeking intentions. I intend to contribute to the trigger warning literature by introducing a novel idea, namely the relationship between trigger warnings and (1) stigma toward individuals with a mental illness, and (2) help-seeking intentions (note: help-seeking behaviour has been altered to help-seeking intentions because measuring behaviour is out of the scope of this study).

Currently, no research exists on this topic; consequently, a hypothesis cannot be proposed. However, based on the aforementioned literature, it is possible that viewing a trigger warning could increase stigma toward individuals with a mental illness, consequently reducing help-seeking intentions. Accordingly, I created research questions that will investigate how (Q1) viewing a trigger warning influences university students' perception of stigma towards individuals with a mental illness, and (Q2) viewing a trigger warning influences university students' help-seeking intentions.

The results of this study can help inform future research that may advise pedagogical policies on how to best provide trigger warnings in the university classroom setting. For example, if trigger warnings increase stigma and decrease help-seeking intentions, this may suggest that they are more harmful than they are useful. If this is the case, further investigation into whether universities should exclude trigger warnings is warranted. On the other hand, if it is found that trigger warnings do not increase stigma and increase help-seeking intentions, then further research into the potential benefits of ensuring course content include trigger warnings is justified.

Methods

This study received Research Ethics Board approval (REB# 19-11-036). I uploaded my experiment, and the data, along with all supplementary files, and materials on the Open Science Foundation Website and can be found under this project: (osf.io).

Participants

The majority of the sample ($n = 87$) identified as female (85%), with the remainder identifying as male (14%), or genderqueer (1%). Participants were between the ages of 18 to 24 years (99%), and 25 to 35 years (1%). The majority of the sample identified as White European (84%), with representation from East Asian, Latin American, Black/African/Caribbean, Southeast Asian, Pacific Islander, Caribbean/White, Middle East/South Asian Indian, and Indian/White Canadian ethnic backgrounds. The sample consisted of university students in their first year (77%), second year (16%), third year (5%), fourth year (1%), and fifth year (1%) of study.

Materials

This study occurred in two phases at two different time periods. Phase one was completed in mass testing through the SONA Participant Pool. Phase two was completed online at a later date. In phase one, participants filled out the two surveys and the linking questions but did not see the trigger warning slide. In phase two, participants filled out the two surveys, demographic questions, and the linking questions, and only the participants in the trigger warning condition saw the trigger warning slide.

Trigger Warning Slide

Participants in the trigger warning condition received a trigger warning reading: "Trigger Warning: The following slides may contain materials that some may find upsetting."

Self-Stigma of Mental Illness Scale – Short Form (SSMIS-SF)

The SSMIS-SF (Corrigan et al., 2012) is a 10-item scale consisting of two five-item subscales assessing societal stigma and personal stigma towards individuals with a mental illness. Participants were asked to rate how much they agreed with each statement on a 9-point Likert scale, ranging from 0 (I strongly disagree) to 9 (I strongly agree). The mid-point of the scale was 5 (neither agree nor disagree). Higher scores indicate increased stigma attitudes. Examples of questions assessing societal stigma begin with the statement: "I think the public believes..." and end with statements such as, "most persons with mental illness are to blame for their problems," or "most persons with mental illness will not recover or get better." Questions assessing personal stigma towards individuals with a mental illness begin with the statement: "I think..." and end with statements such as, "most persons with mental illness are unpredictable," or "most persons with mental illness are unable to take care of themselves." Internal consistency for the SSMIS-SF typically ranges between acceptable ($\alpha = 0.72$) to good ($\alpha = 0.87$) (Corrigan et al., 2012). In this study, overall reliability during pretest was acceptable ($\alpha = 0.74$), and good ($\alpha = 0.84$) during posttest.

Care Seeking Questionnaire (CSQ)

The CSQ is a six-item subscale of the California Assessment Stigma Change (Corrigan et al., 2015). This scale assesses respondent's willingness to seek out mental health support on a 9-point Likert scale, ranging from 0 (I strongly disagree) to 9 (I strongly agree). The mid-point of the scale was 5 (neither agree nor disagree). Higher scores represent more willingness to seek mental health support. Sample questions include: "I would speak to a counsellor if I were significantly anxious or depressed," and "I would seek help from a peer support or self-help program if I were significantly anxious or depressed." Internal consistency of the CSQ usually ranges between acceptable ($\alpha = 0.70$) and good ($\alpha = 0.82$; Corrigan et al., 2015). Overall reliability of the CSQ in

this study during pretest was good ($\alpha = 0.82$) and good ($\alpha = 0.81$) during posttest.

Demographic Information

Participant's age, sexual orientation, ethnicity, and education was collected to describe my sample. Linking questions were asked in both phases to link the data. Examples of linking questions are: "What is the first letter of your birth month?" and "What is the last number in your phone number?" Linking questions were used to link participants' data from phase one to the same participants' data in phase two.

Design

This study is a split-plot design with one between-subjects factor (group) and one within-subjects factor (time) run in two phases. Specifically, the between-subjects factor consists of the experimental trigger warning group and the control group. In the experimental trigger warning group, participants will view a trigger warning before filling out the questionnaire, whereas the control group will not view a trigger warning at all. For Q1, the dependent variable stigma is being measured by scores on the SSMIS-SF. High scores on the SSMIS-SF indicate increased stigma. The stigma measures were chosen to address Q1 as it has been indicated that increased stigma toward individuals with a mental illness may decrease help-seeking intentions. And as reviewed above, there is a potential for trigger warnings to increase stigma toward afflicted individuals.

For Q2, the dependent variable help-seeking intentions is being measured by scores on the CSQ. High scores represent an increase in likelihood that an individual will seek help, when in need. The help-seeking intentions measure was chosen to address Q2 because as previously discussed, stigma can lead to a decrease in help-seeking behaviour. The CSQ will help indicate whether participants will intend to seek help when in need, regardless of the stigma results.

Procedure

Phase One

Phase one was conducted using the SONA Participant Pool Mass Testing system and served as a baseline for phase two. In phase one, participants filled out the SSMIS-SF, the CSQ, and the linking questions which were used to link the data from phase one to the data in phase two, as the survey was completely anonymous. Participants from mass testing were given the option to participate in phase two of the study, voluntarily.

Phase Two

Phase two took place online via Qualtrics Survey Software. A pre-requisite for partaking in phase two was participants must have taken part in mass testing (see Phase

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One). In phase two, after providing consent, participants were randomly placed into one of two conditions: the experimental group (trigger warning group) and the control group (no trigger warning group). Participants in the experimental group received a trigger warning which read: "Trigger Warning: The following slides may contain materials that some may find upsetting," before filling out the same surveys from mass testing (SSMIS-SF, CSQ, linking questions) along with the demographic questionnaire. The control group underwent the same procedure as the trigger warning group, except instead of viewing a trigger warning, they viewed a screen that said: "start survey now." After filling out the surveys, participants were debriefed.

The study had an element of deception; it was framed as one examining how people form impressions of those with mental illness. However, this is only partially true. The true purpose of this study is to further understand the function of trigger warnings in university classrooms. Specifically, I am interested in two outcomes. First, I am interested in the relationship between trigger warnings and stigma toward individuals with mental illness. Second, I am interested in the relationship between trigger warnings and one's intention to seek help. Deception was necessary because knowing the study was about trigger warnings might have impacted how participants responded to the surveys.

At this point, the deception was lifted and explained. Now that participants were aware of the deception, the debrief included a second consent form offering participants two options: (1) participants could provide consent, allowing permission to use their data, or (2) participants could decline consent and withdraw their data, which was automatically deleted by Qualtrics Survey Software. Once participants provided or declined consent, they were forwarded to a page with on-campus mental health resources, in case any participant was negatively affected by taking part in the study.

Analysis

Both analyses were conducted using R studio. The R script is uploaded to the Open Science Foundation website and can be found in this project: (osf.io). My analysis is a 2 x 2 split-plot design for each of my two dependent variables (stigma ratings, help-seeking intentions). My comparison of interest looks at the mean differences between condition (trigger warning, control) and time (pretest, posttest). Considering the literature is too scant to create a directional hypothesis, I investigated mean differences using a two-tailed *t*-test for each comparison. First, I tested for an interaction between time and condition, which would be followed by a post-hoc analysis to investigate where the mean differences are between time and condition, if, in fact, there is a difference. Null hypothesis significance testing was used to decide whether there is a standard significance, where $p < .05$ was the meaningful cut off. The *p*-value will be interpreted in relation to the width of the confidence interval and the effect sizes based on Cohen's (1988) standards. Furthermore, a

Bonferroni correction was used to decrease the prevalence of Type I error.

Outliers were not assessed in this study. Missing data, however, was handled by omitting rows using the `na.omit` function in R which deletes said participants.

Results

Analysis

A priori power analyses were conducted to determine the effect size for each research question. I used the effect sizes from the scales assessing the dependent variables of interest considering the stigma literature is more robust than the trigger warning literature.

I used the Self-Stigma of Mental Illness Scale – Short Form (SSMIS-SF; Corrigan et al., 2012) to assess my first research question: How does viewing a trigger warning influence university students' perception of stigma towards individuals with a mental illness (Q1). Corrigan et al. (2012) assessed the reliability and validity of the SSMIS-SF over three studies between 2006 and 2011. These studies reported effect sizes that ranged from ($d = .56$) to ($d = .79$) for the SSMIS-SF. In order to create a more conservative effect size estimate, I used the smaller ($d = .56$) effect size.

To determine the effect size, I used the safeguard approach and calculated a confidence interval around the *d*-value ($d = .56$, 95% CI [.26, .86]) and used the lower bound (i.e., weaker) interval. Using the effect size $d = .26$, I ran an independent samples *t*-test power analysis in R studio. According to my analysis, when power is set to .80, with a *d*-value of $d = .26$, this study required $n = 233$ participants per group for a total of $n = 466$. I subsequently ran a power analysis using the *d*-value $d = .56$, which required a total of $n = 51$ per group, for a total of $n = 102$. Considering the SONA Participant Pool is limited in how many participants can join any given study, I might not have been able to run my initial goal of 466 people. As a result, I ran a power analysis using $d = .56$, knowing that it was the most conservative estimate from Corrigan et al.'s (2012) study.

For my second research question: How does viewing a trigger warning influence university students' help-seeking intentions (Q2), I used the Care-Seeking Questionnaire (CSQ; Corrigan et al., 2015) to obtain my effect size estimate. Corrigan et al. (2015) examined four samples (two groups of high school students, a group of college students, and a group of desk clerks). I used the effect size ($d = .34$) for the college students seeing that it resembles my population of interest, namely university students.

To determine the effect size, I used the safeguard approach and calculated a confidence interval around the *d*-value ($d = .34$, 95% CI [.05, .63]) from Corrigan et al.'s (2015) study, and used the lower bound (i.e., weaker) interval. Using the effect size $d = .05$, I ran an independent samples *t*-test power analysis in R studio. According to my analysis, when power is set to .80, with a *d*-value of $d = .05$, this study

required $n = 6280$ participants per group for a total $n = 12,560$. Subsequently, I ran a power analysis using $d = .34$, knowing that Corrigan et al.'s (2015) effect size may be biased. With this increased effect size ($d = .34$), I required a total of $n = 136$ per group, for a total of $n = 272$. Considering a total sample size of $n = 12,560$ is not realistic given the temporality of this study (i.e., one year), this study used the latter sample size of a total of $n = 272$.

Of the 372 participants who filled out the mass testing survey, 335 voluntarily filled out the survey during phase two. Participants who finished the study in less than five minutes were excluded from the study out of fear that their responses were random. At this point, the data was linked from time one to time two. I was unable to link the majority of participants from time one to time two. My assumption is that there were keying errors when filling out the linking questions because after attrition a total of $n = 87$ participants remained in the final analysis. The data was then assessed for missing responses.

Prior to conducting the analysis, the data was examined for skewness and kurtosis based on Mallery and George's (2003) recommended threshold of $-/+2$. The average participant scored below the midpoint (i.e., 5 on a scale of 1-9) on the SSMIS-SF during pretest ($N = 87$, $M = 4.15$, $SD = 1$) with a skewness of -0.41 , and kurtosis of 0.26 . The average participant scored below the midpoint (i.e., 5 on a scale of 1-9) on the SSMIS-SF during posttest ($N = 87$, $M = 3.97$, $SD = 1.11$) with a skewness of -0.15 , and kurtosis of 0.28 . The average participant scored above the midpoint (i.e., 5 on a scale of 1-9) on the SSMIS-SF during pretest ($N = 87$, $M = 5.21$, $SD = 1.69$) with a skewness of -0.32 , and kurtosis of -0.37 . The average participant scored at the midpoint (i.e., 5 on a scale of 1-9) on the SSMIS-SF during posttest ($N = 87$, $M = 4.99$, $SD = 1.64$) with a skewness of -0.08 , and kurtosis of -0.15 . A visual assessment of the histograms confirmed normality.

Research Question One: Stigma

To answer my first research question, which investigates how viewing a trigger warning would influence university students' perception of stigma towards individuals with a mental illness, I explored the interaction between Condition (trigger warning, control) and Time (pretest, posttest) on Stigma ratings. Time was a repeated measures variable; therefore, I conducted a Split-Plot ANOVA because one IV was manipulated within-subjects (time) and one was manipulated between subjects (group). Descriptive statistics are presented in **Table 1** and a visualization of results are in **Figure 1**. There was no indication that the ANOVA homogeneity of variance was violated because the difference between variances for the trigger warning group and control group was non-significant for time during pretest, $F(1, 85) = 0.02$, $p = .735$, and posttest, $F(1, 85) = 0.03$, $p = .874$. There was no condition by time interaction, $F(1, 85) = 0.27$, $p = .602$, $\eta^2_{\text{generalized}} = .00$, and no main effect of condition, $F(1, 85) = 0.03$, $p = .872$, $\eta^2_{\text{generalized}} = .00$, and no main effect of time,

$F(1, 85) = 2.06$, $p = .155$, $\eta^2_{\text{generalized}} = .01$ (see **Table 2**), indicating that stigma ratings did not differ from pre-test to post-test. Consequently, I did not conduct a post-hoc analysis. These findings suggest that viewing the trigger warning slide here did not induce stigma toward individuals with a mental illness.

Research Question Two: Help-Seeking Intentions

To answer my second research question exploring how viewing a trigger warning influences university student's help-seeking intentions, I examined the impact of Condition (trigger warning, control) and Time (pretest, posttest) on Help-Seeking Intentions. Time was a repeated measures variable; therefore, I conducted a Split-Plot ANOVA because one IV was manipulated within-subjects (time) and one was manipulated between subjects (group). Descriptive statistics are presented in **Table 3** and a visualization of the findings is depicted in **Figure 2**. There was no indication that the ANOVA homogeneity of variance was violated because the difference between variances for the trigger warning group and control group was non-significant for time during pretest, $F(1, 85) = 0.12$, $p = .735$, or posttest, $F(1, 85) = 0.02$, $p = .874$. There was no condition by time interaction, $F(1, 85) = 0.27$, $p = .602$, $\eta^2_{\text{generalized}} = .00$, and no main effect of condition, $F(1, 85) = 0.03$, $p = .872$, $\eta^2_{\text{generalized}} = .00$, and no main effect of time, $F(1, 85) = 2.06$, $p = .155$, $\eta^2_{\text{generalized}} = .01$ (see **Table 4**), indicating that help-seeking intention ratings did not differ from pre-test to post-test. Thus, I did not conduct a post-hoc analysis. These findings suggest viewing a trigger warning slide here did not affect whether an individual intends to seek help when experiencing negative emotions, such as depression, anxiety, and post-traumatic stress.

Discussion

My trigger warning slide had no effect on the stigmatization of individuals with a mental illness, nor did it influence participants' intent to seek mental health treatment. The online survey revealed those who viewed a trigger warning, compared to those who did not, had similar perceptions of individuals with a mental illness, and had similar intentions to seek mental health treatment when in need. These findings contribute to the growing literature on trigger warnings by being the first to examine the effects of trigger warnings on both stigma and help-seeking intentions. I will now address each research question below, along with the limitations of this study, future research directions, and the implications of my findings.

Stigma Toward Individuals with a Mental Illness

Viewing a trigger warning slide did not influence university students' perception of stigma towards individuals with a mental illness (Q1). This outcome runs contrary to previous findings that negative stereotypes of mental illness in the media can cause stigma toward individuals with a mental

health condition (Wahl, 1997; as cited by Corrigan, 1997). This may be because while there is no shortage of media articles depicting trigger warnings as coddling (Downes, 2016; Essig, 2014; Feldman-Barett, 2017; Leiter, 2016; Manne, 2015), there have also been worldwide efforts to reduce mental health stigma. For example, the World Psychiatric Association created campaigns (for a full review see Crisp, 2000) that used media (i.e., movie trailers, campaign booklets, books), and national holidays (i.e., U.K.'s Mental Health Day) to address mental illness discrimination and try to reshape public opinions on mental health. So, while there are a number of negative portrayals of mental health in the media (see Wahl 1995, as cited by Hinshaw & Stier, 2008), there are several campaigns to combat negative stereotypes.

Another reason why my trigger warning slide had no effect on the stigmatization of individuals with mental illness may be because trigger warnings tend to evoke minimal reaction in people. My results are in line with previous research suggesting that trigger warnings are trivially helpful at reducing people's self-reported anxiety, and avoidance of material (Bellet et al., 2018; Bridgland et al., 2019; Gainsburg & Earl, 2018; Sanson et al., 2019). As experimental research on trigger warnings is relatively new, it is possible that individuals have become normalized to these warnings by the time research was conducted. A recent survey (Kamenetz, 2016) shows that over half of university professors now provide trigger warnings in their course. Another survey shows that professors who once did not provide trigger warnings now do out of fear of upsetting students as the demand for trigger warnings has increase (Hutchful, 2020). Trigger warnings were originally proposed as an accommodation to help those with a prior history of trauma (Boysen, 2017; Oberlin College, 2013). However, as a fourth-year university student, I can attest to being accustomed to seeing trigger warnings before myriad topics including, but not limited to, racism, sexual violence, and cultural violence. It is possible then, that students have become accustomed to seeing trigger warnings in the classroom setting as their presence increased, meaning that trigger warnings may no longer be associated with only mental illness and as a result, do not trigger mental illness stigma.

If trigger warnings are repeatedly shown to have no effect on people, then why should professors continue to use them at all? I would argue, since there was no indication of stigma, professors could continue to use them. No difference in stigma may result from participants' empathy towards those in need of trigger warnings, meaning that students may appreciate that individuals with a mental illness can gain valuable worth from trigger warning accommodations. In this study, the mean average of stigma ratings in both groups (trigger warning, Control), across both time periods (Pretest, Posttest), range from $M = 3.95$ to $M = 4.20$, which is below the mid-range score of $M = 5.00$ (scores closer to 9 represent stigma). Below mid-point stigma ratings may indicate empathy towards those with mental illness. After all, students

have increasingly pressured professors to provide trigger warnings to accommodate individuals with a mental illness since 2014 (AAAP, 2014; Davis, 2014).

Help-Seeking Intentions

Viewing a trigger warning slide did not influence university students' help-seeking intentions (Q2). These results are in accordance with prior research which states stigma is related to help-seeking avoidance (Clement et al., 2015; Vogel, et al, 2007). This may be because participants did not internalize trigger warnings as stigmatizing. Vogel et al. found internalized stigma was a mediating factor to avoid seeking professional health care treatment. In their meta-analysis, Clement et al. found that endorsed stigma and perceived stigma were moderately important barriers to seeking out treatment because they ranked four out of ten on a list of barriers. Considering the participants in my study did not find trigger warnings stigmatizing, it is understandable that their help-seeking intentions were not affected.

Another reason participants' help-seeking intentions were not affected may be because help-seeking is typically tested among individuals with one or more mental illnesses (Gulliver, et al., 2010). However, I did not ask participants if they had been previously diagnosed with a mental illness due to the sensitive nature of this question. I argue, however, that based on statistics alone, there is a good chance that at least a portion of my participant-base has at least one current mental illness or has had a previous mental health condition. As noted earlier, one-third of first-year college students are diagnosed with mental health disorders such as anxiety or mood disorders resulting in a demand for on-campus mental health services (Auerbach et al., 2018). Consequently, it is possible that one-third of my sample has had experience with the help-seeking phenomenon, whether cognizant of its effects or not. Furthermore, the CSQ is designed in such a way that it is not essential that you are, or have been, diagnosed with a mental illness to answer the questionnaire. The survey asks whether you would seek mental health help if you deemed it was necessary.

Limitations and Future Directions

Several limitations of this study must be addressed. First, my sample was too small. According to my power analysis, I required $N = 272$ participants, however, I had $N = 87$ participants making it difficult to find any meaningful difference. Additionally, I was unable to link the majority of my sample data from phase one to phase two. As a result, significant attrition occurred. Future research should recruit a larger sample.

Second, my sample consisted largely of White/European women. Ethnic minorities are significantly more likely to report stigma-related treatment barriers (Dockery et al., 2015). Thus, my findings may not generalize to university students

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beyond my sample. Future research should recruit a more diverse sample.

Finally, this study used an online survey which has its limitations. First, students may have chosen my study because it seemed easy. In fact, response rates of online surveys are less accurate than that of paper and pencil surveys (Nulty, 2008). To gain more accurate representations of participants' reactions to trigger warnings, future research should utilize a pencil and paper survey which could be administered in an in-lab setting.

It is also possible that the participants may not have noticed or paid any attention to the trigger warning. Prior research has shown that individuals are unable to use warnings to adjust their behaviour due to several processing difficulties (Gross, 2015). Therefore, future research should include a manipulation check to ensure participants processed the trigger warning.

Finally, a self-administered survey may not adequately mirror viewing a trigger warning in the classroom or syllabus. To increase ecological validity, future research could be conducted in a group scenario to better mimic an in-classroom setting.

Conclusion

Taken together, my findings provide a preliminary look at the effect of trigger warnings on the stigmatization of individuals with mental illness and help-seeking intentions as they apply to psychology students at the University of Guelph. This study is a step toward investigating whether trigger warnings affect stigma toward individuals with a mental illness, and whether they influence students' intentions to seek mental health treatment.

In this study, my trigger warning did not affect stigma toward the afflicted or peoples' intentions to seek mental health treatment. However, there is not enough evidence to make any generalizations to entire university population because this is the first study to investigate this topic, and my sample was too small. Further research on university students is necessary as this population will continue to be exposed to trigger warnings.

It is important to understand whether trigger warnings are helpful to students or whether they do unintended harm. On one hand, someone who has been diagnosed with a mental illness may use trigger warnings to regulate their emotions. On the other hand, if trigger warnings are stigmatizing, individuals may avoid seeking mental health treatment that could benefit their wellbeing; whether they are diagnosed with a mental illness or not.

My findings are too preliminary to inform pedagogical policies. However, this study contributes to a limited body of knowledge on trigger warnings by shifting the research focus from negative effects to incorporate the novel idea of investigating how trigger warnings affect stigma and help-seeking intentions. It is my hope that this study will inspire future research on this topic with the goal of informing

pedagogical policies surrounding mental health accommodations in the university classroom setting.

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Tables and Figures

Figure 1. Stigma Ratings of Individuals with a Mental illness as a Function of Time and Condition. This line graph depicts participant's ratings of stigma toward individuals with a mental illness at two different time periods (pretest, posttest), in two different conditions (trigger warning, control). Participants' stigma ratings in the trigger warning group did not differ from those in the control group at pretest or posttest. Note, TW indicates trigger warning group.

Figure 2. Help-Seeking Intentions as a function of Time and Condition. This line graph depicts participant's ratings of help-seeking intentions at two different time periods (pretest, posttest), in two different conditions (trigger warning, control). Participants' help-seeking intentions in the trigger warning did not differ from those in the control group during pretest or posttest. Note, TW indicates the trigger warning group.

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Table 1. Means and standard deviations for stigma as a function of a 2(Conditions) x 2(Time) design

Condition	Time					
	Pretest		Posttest		Marginal	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
TW	4.20	1.00	3.95	1.18	4.08	1.09
Control	4.10	1.01	3.99	1.03	4.05	1.02
Marginal	4.15	1.00	3.97	1.11		

Note. *M* and *SD* represent mean and standard deviation, respectively.

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Table 2. ANOVA results for stigma

Predictor	df_{Num}	df_{Den}	SS_{Num}	SS_{Den}	F	p	η^2_g
(Intercept)	1	85	2871.61	130.67	1868.02	.000	.94
Condition	1	85	0.04	130.67	0.03	.872	.00
Time	1	85	1.45	60.01	2.06	.155	.01
Condition x Time	1	85	0.19	60.01	0.27	.602	.00

Note. df_{Num} indicates degrees of freedom numerator. df_{Den} indicates degrees of freedom denominator. SS_{Num} indicates sum of squares numerator. SS_{Den} indicates sum of squares denominator. η^2_g indicates generalized eta-squared.

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Table 3. Means and standard deviations for help-seeking intentions as a function of a 2(Conditions) x 2(Time) design

Condition	Time				Marginal	
	Pretest		Posttest			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
TW	5.25	1.56	4.97	1.52	5.11	1.54
Control	5.16	1.83	5.01	1.78	5.08	1.80
Marginal	5.21	1.69	4.99	1.64		

Note. *M* and *SD* represent mean and standard deviation, respectively.

Table 4. ANOVA results for help-seeking intentions

Predictor	df_{Num}	df_{Den}	SS_{Num}	SS_{Den}	F	p	η^2_g
(Intercept)	1	85	4522.34	417.20	921.39	.000	.90
Condition	1	85	0.03	417.20	0.01	.936	.00
Time	1	85	2.07	57.71	3.06	.084	.00
Condition x Time	1	85	0.17	57.71	0.26	.613	.00

Note. df_{Num} indicates degrees of freedom numerator. df_{Den} indicates degrees of freedom denominator. SS_{Num} indicates sum of squares numerator. SS_{Den} indicates sum of squares denominator. η^2_g indicates generalized eta-squared.