MATTERING, ANTI-MATTERING, AND SELF-STIGMA OF SEEKING HELP FOR MENTAL HEALTH CONCERNS IN HIGH SCHOOL STUDENTS

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A THESIS SUBMITTED TO THE FACULTY OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS

GRADUATE PROGRAM IN CLINICAL PSYCHOLOGY YORK UNIVERSITY, TORONTO, ONTARIO

AUGUST 2015

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Abstract

Despite the availability of effective means for dealing with mental health issues, the majority of high school youth do not seek needed treatment. Research has shown that one reason for this is the internalization of public stigma, or self-stigma (Corrigan, 2004), however the nature of this barrier to help-seeking is not well understood. This study examined two potentially related factors, which have not been studied to date, namely perceived mattering (others are interested in me) and anti-mattering (others do not care about me) to determine possible links to self-stigma. Self report measures of mattering, anti-mattering, and self-stigma of seeking help were administered to Grade 12 students at three public high schools in a large metropolitan Canadian city (n = 134). A significant negative correlation was found between levels of perceived mattering and the self-stigma of seeking help, but no significant correlation was found between levels of perceived anti-mattering and the self-stigma of seeking help. A key finding was that gender was determined to be a significant moderator between perceived mattering and anti-mattering and the self-stigma of seeking psychological help, with perceived mattering predicting self-stigma of seeking help for female students and perceived anti-mattering as a negative predictor of self-stigma of seeking help for male students. This is the first study to explore the relationships between perceived mattering and the self-stigma of seeking help, perceived anti-mattering and the self-stigma of seeking help, and the influence of gender on these relationships. This study highlights factors involved in high school students' experiences of self-stigma of seeking psychological help, and suggests that there may be differences in the way male and female youth process feelings of whether or not they matter, and the impacts these feelings on the likelihood of them seeking help should it be needed. Implications for stigma reduction interventions and mental health promotion in high schools are discussed.

Acknowledgements

I acknowledge financial support for this project from the Joseph-Armand Bombardier Canada Graduate Scholarship from the Social Sciences and Humanities Research Council.

I would like to thank Drs. Joel Goldberg and Gordon Flett for their guidance and support throughout this project. I would also like to thank Caroline Barnes for her assistance with the statistical analyses, and Richard Zeifman, Catjiana Macintosh, Rebecca Young, and Wendy Zhao for their assistance.

I would like to thank the administration and teachers at the Toronto District School Board for sharing our interest in and collaborating with us on this project. Finally, I would like to thank the students from the Toronto District School Board who dedicated their time to advancing our knowledge of this subject.

I would like to dedicate this work to my mom, who died unexpectedly while I was writing this thesis.

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Mattering, Anti-Mattering, and Self-Stigma of Seeking Help for Mental Health Concerns in High
School Students

Adolescence can be a stressful and overwhelming period with the transition from childhood to adulthood. This period is pivotal in the physical, cognitive, emotional, and social developmental domains, and significant changes take place that impact adult outcomes (Rickwood, Deane, Wilson, & Ciarrochi, 2005). Mental health problems during adolescence can alter cognitive, social, and emotional processes and have long-term effects. Research has indicated that the initial onset of most mental disorders occurs during childhood or adolescence (Kessler et al., 2007). In Canada, individuals between the ages of 15 and 24 have the highest levels of mood and substance use disorders (Pearson, Janz, & Ali, 2013). It is also during adolescence that severe mental illnesses such as psychotic disorders typically develop. Despite this early onset of mental disorders, individuals typically do not receive treatment until several years after symptoms develop (Kessler et al., 2007).

It is important to investigate the causes for the delay in treatment for mental health issues. This study explores factors that may be involved in high school youth failing to seek psychological help; specifically, the potential roles that gender, perceived mattering, and perceived anti-mattering play in the self-stigma of seeking help were examined. This introduction will discuss the prevalence of mental health disorders among high school youth and the treatment rates for these disorders. Stigma and self-stigma will be discussed as contributing factors to individuals not seeking psychological help, and research investigating factors involved in self-stigma and its ramifications will be reviewed. The constructs of perceived mattering and

perceived anti-mattering will then be defined and relevant research pertaining to them will be discussed. Finally, the aims of the present study will be provided.

Mental Health Disorder Prevalence in Youths

Mental illness has been claimed to be the leading health problem faced by Canadian children beyond infancy (Waddell, 2007). Approximately one in seven or 14% of Canadian children between four and 17 years old have mental health disorders severe enough to cause serious symptoms and impairment in various life domains, but less than 25% of these individuals receive treatment (Waddell, 2007). The authors of a large epidemiological study with a nationally representative sample of over 10,000 youth between 13 and 18 years old in the United States conducted using clinical assessments found that 49.5% of the sample experienced a mental health disorder at some point during their lifetime, while 27.6% experienced disorders causing severe distress or impairment (Merikangas et al., 2010). Female participants had slightly higher rates, with 51.0% having mental health disorders compared to 48.1% of male participants. Anxiety disorders (generalized anxiety disorder [GAD], social phobia, panic disorder [PD], posttraumatic stress disorder [PTSD], agoraphobia, specific phobia, and separation anxiety disorder) were most prevalent in the sample, with almost one in three adolescents (31.9%) meeting criteria. Female adolescents experienced higher rates of anxiety disorders (38.0%) than male adolescents (26.1%). Behaviour disorders (attention deficit hyperactivity disorder [ADHD], conduct disorder [CD], and oppositional defiant disorder [ODD]) were the second most prevalent, with 19.6% of adolescents being afflicted. Male adolescents were afflicted with behaviour disorders (23.6%) more often than female adolescents (15.5%). The third most prevalent class of disorder was mood disorders (major depressive disorder [MDD], dysthymia, bipolar I, and bipolar II), with 14.3% of adolescents meeting criteria. Similar to anxiety

disorders, female adolescents experienced a higher incidence of mood disorders (18.3%) than male adolescents (10.5%), with female adolescents being twice as likely to suffer from a unipolar disorder (MDD or dysthymia; 15.9%) than male adolescents (7.7%). Eleven percent (11.4%) of adolescents experienced a substance use disorder (alcohol abuse/dependence and drug abuse/dependence), with male adolescents having a higher proportion (12.5%) than female adolescents (10.2%). Finally, 2.7% of adolescents met criteria for eating disorders, with over twice as many female adolescents (3.8%) being afflicted than male adolescents (1.5%). Merikangas et al. (2010) state that severe mental health disorders are more prevalent than the most common major physical disorders experienced in adolescence, including diabetes and asthma. This, coupled with the observation that the prevalence rates of mental health disorders are comparable to the rates found using the same methodology in adults, led the authors to argue for the importance of a focus on prevention and early intervention of mental health disorders in adolescents. Male and female adolescents experience mental health disorders differently, both in terms of disorder prevalence and the treatment prevalence. The reasons for these gender differences need to be further investigated in order to combat the factors that prevent adolescents from receiving treatment.

Treatment Prevalence

Through additional analyses conducted on a subsample of over 6,000 adolescents to determine treatment rates, Merikangas et al. (2011) determined that only approximately one-third (36.2%) of adolescents with a mental health disorder received psychological treatment.

Adolescents afflicted with behaviour disorders (excluding ADHD) experienced the highest rates of treatment with 45.4% of these adolescents receiving treatment, and 59.8% of those with ADHD receiving treatment. The second highest treatment rate was for mood disorders (37.7%)

followed by anxiety disorders (17.8%), substance use disorders (15.4%), and eating disorders (12.8%). A dismal rate of less than one in five adolescents suffering from anxiety disorders, substance use disorders, and eating disorders are receiving psychological help. While there was little difference between treatment rates for male and female adolescents overall, there was a variance between treatment rates for adolescents for certain disorders. For instance, female adolescents with eating disorders were nine times more likely to receive treatment (17.0%) than were male adolescents (1.8%), and female adolescents were three times more likely to receive treatment for panic disorder (50.1%) than were male adolescents (14.3%). Female adolescents, however, were less likely to receive treatment for ADHD (44.6%) than were male adolescents (64.8%).

Adolescents experiencing behaviour disorders, or disorders that tend to have externalized symptoms, are more likely to receive treatment than their counterparts experiencing anxiety and mood disorders, which tend to have more internalized symptoms. These internalized disorders may need to be recognized by the adolescent or family members and may require that obstacles to seeking treatment be overcome. In contrast, adolescents afflicted with externalized or behavioural disorders often have their symptoms recognized in the school setting and attract the attention of adults able to assist in the treatment seeking process (Merikangas et al., 2011). Flett and Hewitt (2013) posit that the number of adolescents needing psychological treatment are greater than these figures suggest in part because many instances of internalized disorders remain unrecognized with the afflicted adolescents opting to "fly under the radar" by concealing their distress.

In addition to some variation in treatment rates between genders for some disorders, there were significant differences in treatment levels depending on the severity of the mental health

disorder experienced. Adolescents experiencing severe forms of disorders had significantly higher rates of treatment (47.4%) than did adolescents with less severe forms of the disorders (26.1%). While almost half of adolescents experiencing severe distress and impairment received psychological treatment, the other half did not receive treatment. In addition, two thirds of all adolescents meeting criteria for mental health disorders did not receive treatment. These treatment rates are comparable to those of adults, indicating that there are major flaws in the identification and treatment of disorders from an early age (Merikangas et al., 2011). The low treatment rates of adolescents with mental health disorders indicate that it is imperative to identify and break down the barriers preventing individuals from receiving treatment.

In addition to the financial cost and the distress caused by mental health disorders, there is a significant loss of life to suicide during adolescence. Suicide is the second most common cause of death of adolescents between the ages of 11 and 19 in Canada (Soor et al., 2012). In Ontario alone, there were 370 completed suicides of adolescents between 11 and 18 years old from 2000 to 2006 (Soor et al., 2012). Of the 370 adolescents who completed suicide only 66, or 17.9%, had received psychological treatment either in the present or the past. It is probable that a large proportion of the 82.1% of adolescents who had not received treatment and completed suicide did so without outward warning signs (Flett & Hewitt, 2013).

It is a serious problem that many adolescents with mental health disorders are not receiving treatment or are receiving delayed treatment. Delays between the onset of the disorder and treatment have substantial impacts on the long-term prognoses of adolescents (Penn et al., 2005). For instance, research has indicated that the length of untreated psychotic episodes is associated with poorer prognosis for individuals with schizophrenia (Lieberman et al., 2001; Norman & Malla, 2001; Perkins, Gu, Boteva, & Lieberman, 2005). With bipolar disorder,

individuals who experience more affective episodes prior to receiving pharmacological treatment have less positive prognoses then those treated earlier (Post, Leverich, Xing, & Weiss, 2001). These numbers show that large numbers of adolescents are suffering from mental health disorders without treatment. It is crucial to gain a better understanding of the reasons why adolescents are not receiving needed psychological treatment in order to inform the design and implementation of strategies to overcome barriers seeking help when it is needed.

Stigma

Despite the fact that there are empirically supported treatments such as pharmacotherapy and psychotherapy for mental health disorders, many individuals of all age ranges are not receiving the treatment that they require, with negative ramifications. There are various factors that are involved in individuals with mental health disorders not receiving treatment. Public stigma surrounding mental illness has been established as a major factor in adults (Barney, Griffiths, Jorm, & Christianson, 2006; Corrigan, 2004; Corrigan, Druss, & Perlick, 2014; Komiya, Good, & Sherrod, 2000; Schomerus & Angermeyer, 2008; Vogel, 2007) and high school youth (Bowers, Manion, Papadopoulos, & Gauvreau, 2013; Chandra & Minkovitz, 2007; Rickwood et al., 2005) not seeking psychological help. Additionally, studies have shown that individuals with stigmatizing attitudes toward mental health disorders were less likely to seek psychological help (Cooper, Corrigan, & Watson, 2003; Corrigan 2004; Sirey et al., 2001).

Stigma is described as a social-cognitive process involving cues, stereotypes, prejudice, and discrimination (Corrigan & Watson, 2002; Corrigan, 2004). Stigma occurs when individuals endorse negative stereotypes about a particular group of people and subsequently discriminate against the group (Corrigan, 2004). In general, people have a tendency to have negative opinions about individuals with mental health issues (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000).

Factors that contribute to the stigma of mental health disorders have been researched and include erroneous beliefs regarding the dangerousness of individuals with mental health disorders, the controllability of and personal responsibility for the disorders, and the rarity of mental health disorders (Corrigan et al., 2000; Feldman & Crandall, 2007). These stigmatizing beliefs about individuals with mental health disorders may make it difficult for some individuals to acknowledge that they are experiencing symptoms of a disorder. By avoiding the label, these individuals avoid the negative attributions and the resulting stigma of mental health disorders. Individuals with mental health disorders may not seek treatment out of concern about others discovering they are receiving psychological help (Corrigan, 2004; Rüsch, Angermeyer, & Corrigan, 2005).

Individuals with mental health disorders are aware of the stigma and its ramifications. Moses (2010) found that adolescents with diagnosed mental health disorders perceived stigma from their peers, family members, and school staff. Stigma from peers was experienced most frequently and resulted in lost and changed friendships. Elkington et al. (2012) conducted qualitative research with adolescents receiving outpatient care and discovered that adolescents are aware of public stigma toward their mental health disorders and they reported experiencing stigma from their friends, family, and school staff.

A study conducted by Ben-Porath (2002) using case vignettes found that not only was an individual with depression considered to be more emotionally unstable than an individual with a back injury, the individual who sought treatment for his depression was considered to be more emotionally unstable than the individual who did not seek treatment. These results indicate that individuals must deal with not only the stigma of having a mental health disorder, but also with the stigma attached to seeking treatment for the disorder. Public stigma not only prevents

individuals from seeking help, but it also contributes to individuals discontinuing treatment prematurely (Sirey et al., 2001a; Sirey et al., 2001b).

Self-Stigma

Self-stigma occurs when individuals internalize the negative attributions involved in public stigma (Corrigan, 2004; Corrigan & Watson, 2002). For self-stigma to occur in an individual, the individual must not only be aware of the negative attributions, but also agree with them and internalize them (Corrigan, Watson, & Barr, 2006). These internalized attributions act as a more potent deterrent to seeking psychological help than do public stigma (Moses, 2010; Vogel, Wade, & Hackler, 2007). Conner et al. (2010) found an association between self-stigma and negative attitudes toward seeking psychological help among adults with depression. In addition, individuals who endorse self-stigma have reduced psychosocial treatment adherence (Fung & Tsang, 2010; Wade, Post, Cornish, Vogel, & Tucker, 2011). Vogel, Wade, and Haake (2006) determined that self-stigma is a predictor of attitudes toward and willingness to seek psychological help. Using a non-clinical adult sample, Bathje and Pryor (2011) found that not only did awareness and endorsement of public stigma predict self-stigma, but that endorsement of public stigma and self-stigma are both independently associated with attitudes to seeking psychotherapy. Moreover, Vogel, Wade, & Hackler (2007) discovered that self-stigma mediated the relationship between perceived public stigma and inclination to seek psychotherapy. In addition, perceived public stigma was involved in the experience of self-stigma which then influenced help-seeking attitudes and likeliness to seek help. Despite these findings regarding the effects of self-stigma, there is a paucity of research examining self-stigma in high school students (Hartman et al., 2013), the effects of gender, as well as the contributing factors involved in self-stigma. In a non-clinical sample of high school students, Hartman et al. (2013) found that 12% of students held self-stigmatizing beliefs regarding seeking psychological help if it were needed.

As a deterrent to seeking help, self-stigma is considered to be associated with feelings of shame, embarrassment, fear, and alienation (Link, Yang, Phelan, & Collins, 2004). Adolescents with psychiatric diagnoses in the Elkington et al. (2012) study reported feeling shame, different from others, loss of self-worth, flawed, and considered their mental health disorders to be a source of vulnerability. Research has repeatedly shown in clinical samples that lowered levels of self-esteem are associated with self-stigma, above and beyond loss of self-esteem caused by the mental health disorder itself (Corrigan, 2004; Corrigan & Calabrese, 2005; Corrigan et al., 2006; Link & Phelan, 2001; Link et al., 2004; Watson, Corrigan, Larson, & Sells, 2007; Watson & River, 2005). The research is clear that the experience of self-stigma is detrimental in many ways to individuals experiencing it.

A number of studies investigating self-stigma have examined gender differences as a potential factor in the development or experience of self-stigma. Overall, gender differences have been demonstrated for some facets of self-stigma. Bathje and Pryor's (2011) study showed that gender was a moderator in the relationship between self-stigma and awareness of public stigma, but not in other relationships such as the relationship between self-stigma and endorsement of public stigma, and between self-stigma and attitudes toward seeking help. Not only did young men have higher levels of self-stigma toward seeking psychological help than young women in a sample of university students (Vogel et al., 2006), a different study with a similar sample indicated that while the relationship between self-stigma and perceived public stigma was significant for both genders, the association was stronger for men than it was for women (Vogel et al., 2007). However, in a sample of high school students, Zeifman, Atkey,

Young, Flett, Hewett, and Goldberg (2015) did not find significant gender differences in the self-stigma of seeking help. In terms of adolescents, gender differences in the source of shame were found by Elkington et al. (2012); male adolescents tended to feel shame and think less of themselves because of *personal* concerns about having a mental health disorder and receiving treatment, while female adolescents tended to think less of themselves because of concerns that *others* would think less of them for having a mental health disorder and were receiving treatment. It appears then, that there are gender differences in the experience of self-stigma, and potentially predisposing factors that make some adolescents more susceptible to internalizing public stigma. It is necessary to examine these factors in order to better understand the phenomenon of self-stigma and enhance efforts aimed at preventing it.

Mattering

Rosenberg and McCullough (1981) defined the construct of perceived mattering as a "person's sense that, as far as other people are concerned, he is an object of interest and importance, that he is wanted or serves as an ego-extension, or that others depend on him" (p. 179). Rosenberg and McCullough (1981) posit that the "conviction that one matters to another person is linked to the feeling that: (a) one is an object of his attention; (b) that one is important to him; and (c) that he is dependent on us" (p. 163). Attention is the most basic form of mattering and refers to the feeling that one is an object of interest and notice of another person (Rosenberg & McCullough, 1981). Perceived mattering is more strongly manifested in the impression that one is relevant to another person and a recipient of his or her concern. The feeling that another person is dependent on one's actions is an important aspect of perceived mattering and is a result of the social obligations that tie members of a society together at various levels (Rosenberg & McCullough, 1981).

Research on the concept of perceived mattering with high school students and adults has demonstrated that it is a crucial aspect of overall well-being (Flett, Galfi-Pechenkov, Molnar, Hewitt, & Goldstein, 2012). In an early study examining the construct of perceived mattering in youths, Rosenberg and McCullough (1981) discovered negative correlations between perceived mattering and delinquency, depression, and anxiety, while self-esteem was positively correlated with perceived mattering. Subsequent research has generally supported these early results. For instance, there were negative relationships between levels of perceived mattering and depressive symptomology in university students (Dixon & Robinson Kurpius, 2008; Flett et al., 2012), a community sample of adults (Taylor & Turner, youth aged 11 to 18 years of age (Elliott, Colangelo, & Gelles, 2005), and students in Grades 6 to 8 (Dixon, Scheidegger, & McWhirter, 2009). Levels of stress are negatively correlated with levels of perceived mattering (Dixon & Robinson Kurpius, 2008), and Marcus (1991; as cited in France & Finney, 2010) and Dixon et al. (2009) found higher degrees of perceived mattering were correlated with lower levels of anxiety. Attachment avoidance and attachment anxiety are associated with lower levels of perceived mattering (Raque-Bogdan, Ericson, Jackson, Martin, & Bryan, 2011). Individuals who believe that they matter are significantly less likely to experience suicidal ideation, although this relationship appears to be mediated by self-esteem and depression (Elliott et al., 2005). In addition, higher levels of perceived mattering are associated with general mental health (Raque-Bogdan et al., 2011), wellbeing (Dixon Rayle, 2005; Marshall, 2001), physical health, selfacceptance (Raque-Bogdan et al., 2011; Taniguchi, 2014), and self-esteem (Dixon & Robinson Kurpius, 2008; Elliott et al., 2005; Marshall, 2001).

Gender differences in perceived mattering and in the relationship between perceived mattering and other variables analyzed are commonly reported. Female participants generally

report higher levels of perceived mattering than male participants, as was found in adults (Schieman & Taylor, 2001; Taylor & Turner, 2001), university students (Flett et al., 2012; Marshall, 2001), and high school students (Dixon Rayle, 2005). There are a few isolated anomalies to this generally consistent pattern of gender differences. Specifically, Dixon and Robinson Kurpius (2008) found no significant gender differences in perceived mattering in their sample of university undergraduates, and Dixon et al. (2009) found similar results in their sample of students in Grades 6 to 8.

Gender differences appear to play an integral role in the association between perceived mattering and other indices of well-being. Taylor and Turner (2001) determined that perceived mattering is a significant predictor of depressive symptomology, however, perceived mattering predicted depressive symptomology for women only. Perceived mattering was not found to be a significant predictor of depressive symptomology in men. Although there were significant correlations between levels of perceived mattering and depressive symptomology for both men and women, perceived mattering seems to be a protective factor for women only (Taylor & Turner, 2001). While Dixon Rayle et al. (2009) did not find gender differences in perceived mattering in their sample of Grade 6 to 8 students, they did find that the interaction between gender and mattering was a better predictor of anxiety and depression than perceived mattering alone. Dixon and Robinson Kurpius (2008), however, found that there was not a significant interaction between gender and perceived mattering in predicting depression. Dixon Rayle (2005) discovered that perceived mattering was a predictor of wellness for female high school students, but not for male high school students. Additionally, perceived mattering accounted for very little of the variance in wellness for male students (Dixon Rayle, 2005).

Anti-Mattering

Anti-mattering, a construct developed by Flett (Flett & Nepon, 2015), refers to a feeling of not mattering to others. Anti-mattering is not simply the opposite of mattering; the concept is based on the idea that feelings of not mattering are not merely the other end of the mattering continuum from feelings of mattering to significant others. This is a result of the motivational and emotional processes that occur when an individual has negative automatic thoughts such as "I don't matter," "I'm not important," and "I'm invisible" (Flett & Nepon, 2015). The idea that anti-mattering is not merely the opposite of mattering is consistent with research demonstrating that hopelessness is not merely the opposite of hope and pessimism is not merely the opposite of optimism (Flett & Nepon, 2015). Moreover, this idea parallels the way that the negatively and positively phrased items were constructed in Rosenberg's Self-Esteem Scale (1965) and which generally load onto factors that are correlated but separate, as "the processes, experiences, and psychological states that accompany low self-esteem are qualitatively distinct in some key ways from the processes, experiences, and psychological states that accompany high self-esteem" (Flett & Nepon, 2015). It is hypothesized that an individual with severe levels of perceived antimattering may experience an overgeneralized feeling of not mattering at all. However, if an individual were to feel that he or she matters even to just one person, the overgeneralized feeling of not mattering would no longer be relevant for the individual and so should dissipate (Flett & Nepon, 2015). A social cognitive element is hypothesized to be involved in the anti-mattering construct that is demonstrated in negative outcome expectancies; if an individual currently perceives that he or she does not matter, the individual is likely to believe that he or she will not matter in the future (Flett & Nepon, 2015). At this point, to our knowledge, there is no published research on the concept of anti-mattering beyond an initial test construction validation study,

which indicated that perceived anti-mattering is positively correlated with self-reported depressive symptomology and negatively correlated with perceived mattering and the self-competence and self-liking aspects of self-esteem (Flett & Nepon, 2015).

Aims of the Present Study

Previous research has indicated that self-stigma and self-esteem are closely linked (Corrigan, 2004; Corrigan & Calabrese, 2005; Corrigan et al., 2006; Link & Phelan, 2001; Link et al., 2004; Watson, Corrigan, Larson, & Sells, 2007; Watson & River, 2005), and self-esteem and perceived mattering are similar but separate constructs (Rosenberg & McCullough, 1981). There is a paucity of research investigating the factors that contribute to the self-stigma of seeking help. To my knowledge, the connection between mattering and the self-stigma of seeking help has not yet been investigated, and anti-mattering is a new construct that has not appeared in published research. In a non-clinical sample, the self-stigma of seeking help measures an individual's attitudes toward help seeking should it be required, and as such it is not influenced by the self-stigma or public stigma of having a mental health disorder for many individuals. The purpose of this study is to probe perceived mattering, anti-mattering, and the influence of gender as factors involved in the self-stigma of seeking psychological help in a non-clinical sample of high school students. It was hypothesized that:

- (1) Perceived mattering would be negatively correlated with the self-stigma of seeking psychological help.
- (2) Perceived anti-mattering would be positively correlated with the self-stigma of seeking psychological help.

(3) Gender would moderate the relationships between perceived mattering and the self-stigma of seeking psychological help and perceived anti-mattering and the self-stigma of seeking psychological help.

Method

This study was approved by the Toronto District School Board's External Research Review Committee and York University's Human Participants Review Committee.

Participants

Participants consisted of Grade 12 students from three Toronto public high schools.

Participation was voluntary, and participants and their parents or guardians were informed that the students' grades would not be impacted by participation. School principals and teachers assisted in the recruitment of participants by sending information brochures and consent forms home with students. Those students who returned forms with parental or guardian permission granted participated in the study. Parental or guardian permission was not required for students 18 years of age and older. Demographic information was collected and a battery of self-report questionnaires was administered over the online Survey Monkey platform which measure self-stigma of seeking help, mattering, and anti-mattering. The measures were administered during class time in computer laboratories, with the researchers present to explain the instructions and provide a debriefing after the session. Teachers were also present during the administration to supervise the students.

Measures

Self-Stigma. The Self-Stigma of Seeking Help (SSOSH) scale was developed by Vogel, Wade, and Haake (2006) and was administered to measure the degree of self-stigma that would be related to obtaining psychological help. It is a 10-item scale utilizing a 5-point Likert scale

with *strongly disagree* and *strongly agree* as anchors. Examples of items are "I would feel inadequate if I went to a therapist for psychological help" and "Seeking psychological help would make me feel less intelligent." Higher scores on the SSOSH scale indicate the increased likelihood that the participant would experience self-stigma while seeking psychological help. The SSOSH scale is highly reliable with a Cronbach's alpha of .91 (Vogel et al., 2006). With the current sample a Cronbach's alpha of .82 was obtained.

Mattering. The Rosenberg Mattering Scale (RMS; Rosenberg & McCullough, 1981) was administered to measure levels of perceived mattering. The RMS was developed to determine how much an individual perceives he or she matters to others (Rosenberg & McCullough, 1981). It uses a 4-point Likert scale, with *not at all* and *a lot* as anchors. Sample items from the RMS are "How much do you feel other people pay attention to you?" and "How important do you feel you are to other people?" The RMS has been reported to be internally reliable with a Cronbach's α of .78 (Taylor & Turner, 2001). A Cronbach's α of .78 was found for the current sample as well. Higher scores on the RMS indicate higher degrees of perceived mattering.

Anti-Mattering. The Anti-Mattering Scale (AMS; Flett & Nepon, 2015) is a 5-item self-report measure designed to measure the degree to which an individual perceives he or she does not matter to others. *Not at all* and *a lot* are anchors on the 4-point Likert scale used in the AMS. Items in the AMS include "How often have you been treated in a way that makes you feel like you are insignificant?" and "How often have you been made to feel by someone that they don't care about what you think or what you have to say?" The AMS has high internal reliability with a Cronbach's α of .87 (Flett & Nepon, 2015). A Cronbach's α of .77 was found in the current sample. Higher scores on the AMS indicate greater levels of perceived anti-mattering.

Results

The sample consisted of 134 Grade 12 students from three high schools in the Toronto District School Board after the data from eight participants were removed due to incomplete responses. There were 72 female students and 62 male students in the final sample. Sample demographics and the means and standard deviations for perceived mattering, perceived antimattering, and the self-stigma of seeking help are presented in Table 1. Independent samples t-tests indicated that there were no significant differences between female students and male students for self-stigma of seeking help, t(132) = .13, p = .897, perceived mattering, t(132) = .90, p = .370, and perceived anti-mattering, t(132) = 1.68, p = .095, although the differences for perceived anti-mattering approached significance with female students reporting higher levels of perceived anti-mattering compared to male students.

Pearson correlation analyses were conducted to determine the relationships among the measures used in the present study. The results are presented in Table 2. As expected, there was a significant moderate negative correlation between perceived mattering and perceived antimattering, which is not surprising since these constructs are theoretically related. However, the finding replicates the initial anti-mattering validation study and extends the results to a high school youth sample.

Hypothesis 1: Perceived mattering would be negatively correlated with the self-stigma of seeking psychological help.

Analysis of the data supported Hypothesis 1, namely that there was a significant negative correlation between perceived mattering and the self-stigma of seeking help in the sample, as predicted.

Hypothesis 2: Perceived anti-mattering would be positively correlated with the self-stigma of seeking psychological help.

Hypothesis 2 was not supported by the data. The correlation between perceived antimattering and the self-stigma of seeking help was found to trend in the predicted positive direction, however, the relationship was not statistically significant.

Hypothesis 3: Gender would moderate the relationships between perceived mattering and the self-stigma of seeking psychological help and perceived anti-mattering and the self-stigma of seeking psychological help.

Multiple linear regression analysis was used to determine the relationship between gender, perceived mattering and the self-stigma of seeking help and perceived anti-mattering and the self-stigma of seeking help. Gender was entered into the model as a moderator variable, with interaction terms between gender and perceived mattering and between gender and perceived anti-mattering included. A dummy variable was created for gender, and perceived mattering and perceived anti-mattering were centered around the grand means.

Table 3 presents the multiple regression model for the regression of self-stigma of seeking help on gender, perceived mattering, perceived anti-mattering, the interaction of gender and perceived mattering, and the interaction of gender and perceived anti-mattering. The regression analysis indicated that gender is a significant moderator of the relationship between perceived mattering and self-stigma of seeking help (See Figure 1). Gender was also shown to be a significant moderator of the relationship between perceived anti-mattering and self-stigma of seeking help (See Figure 2). Tests of simple slopes indicated that perceived mattering is a significant predictor of self-stigma of seeking help for female students with average amounts anti-mattering, B = -0.52, t(132) = -3.40, p < 0.001. Perceived mattering, however, is not a

significant predictor of self-stigma of seeking help for male students with average levels of perceived anti-mattering, B = 0.02, t(132) = 0.13, p = 0.900. For female students with average levels of perceived mattering, perceived anti-mattering was not a significant predictor of self-stigma of seeking help, B = -0.12, t(132) = -0.94, p = 0.349. Perceived anti-mattering was a significant predictor of self-stigma of seeking help, however, for male students with average levels of perceived mattering, B = -0.31, t(132) = 2.02, p = 0.045. Perceived mattering was a significant predictor of self-stigma of seeking help, (t = -3.41, p < 0.001). Gender and perceived anti-mattering, however, were not significant predictors of self-stigma of seeking help. The five variables in the model account for 11.9% ($R^2 = 0.119$) of the variance in self-stigma of seeking help, which is a significant amount of variance, F(5,128) = 3.44, p = .006.

Regression diagnostics were performed to ensure that the model parameter estimates are accurate. The residuals were plotted against perceived mattering and perceived anti-mattering and it was determined that the partial relationships are approximately linear. A histogram of the Studentized residuals was generated to ensure a normal distribution of the errors, and the distribution of errors was found to be approximately normal. The errors were determined to have homoscedasticity which was demonstrated in a plot of Studentized residuals against predicted values. Multicollinearity was assessed by calculating the variance inflation factor (VIF) for each variable. VIF values were well below four, indicating that multicollinearity does not have an effect on the standard errors of the variables (Fox, 2008). A plot of Cook's distance was constructed and it was determined that there were no cases in the sample that were excessively influential.

Discussion

The current study was the first to my knowledge to explore perceived mattering, perceived anti-mattering, and the self-stigma of seeking psychological help. Specifically, the study examined the relationships among perceived mattering and the self-stigma of seeking help, perceived anti-mattering and the self-stigma of seeking help, and assessed whether gender moderates the relationship between the self-stigma of seeking help and perceived mattering and anti-mattering. Results supported the hypothesized relationship between perceived mattering and the self-stigma of seeking help, with higher levels of perceived mattering being associated with lower amounts of self-stigma of seeking help. The hypothesized relationship between perceived anti-mattering and self-stigma of seeking help showed the expected positive trend but the data in this somewhat limited sample were not statistically significant. However, the hypothesis that gender differences moderate the relationships between levels of perceived mattering and the self-stigma of seeking help and levels of perceived anti-mattering and the selfstigma of seeking help was supported. While perceived mattering is a significant predictor of self-stigma of seeking help for female students, perceived anti-mattering is a significant predictor of self-stigma of seeking help for male students. Moreover, gender, perceived mattering, perceived anti-mattering, and the interactions between gender and perceived mattering and antimattering accounted for a striking 12% of the variance in self-stigma of seeking psychological help.

Perceived Mattering and Self-Stigma

The current study's finding that there is a relationship between higher levels of perceived mattering and lower levels of self-stigma of seeking help is in keeping with the research regarding self-esteem and self-stigma. Given that perceived mattering and self-esteem are

related but distinct constructs (Dixon & Robinson Kurpius, 2008; Elliott et al., 2005; Marshall, 2001; Rosenberg & McCullough, 1981), it follows that there may be similarities in their associations with other aspects of mental wellness. Poor self-esteem has repeatedly been linked in the research to self-stigma of mental health disorders (Corrigan, 2004; Corrigan & Calabrese, 2005; Corrigan et al., 2006; Link & Phelan, 2001; Link et al., 2004; Watson, Corrigan, Larson, & Sells, 2007; Watson & River, 2005), usually as a consequence of self-stigma in individuals with mental health disorders. In fact, this relationship is often included in the definition of selfstigma. The definition of self-stigma given by Vogel et al. (2006) is "the reduction of an individual's self-esteem or self-worth caused by the individual self-labeling herself or himself as someone who is socially unacceptable" (p. 325). This study is unique in that not only is it the first to examine the relationship between perceived mattering and self-stigma of seeking help, but it is one of the few studies to explore self-stigma of seeking help with a non-clinical sample, allowing conclusions to be drawn that the association between the two constructs is not caused by either the mental health disorder or self-stigma that is a result of having a mental health disorder. Interestingly, one study using a non-clinical sample did not demonstrate a significant relationship between self-esteem and the self-stigma of seeking help (Vogel et al, 2006), which is surprising given that self-stigma inherently involves lower levels of self-esteem.

It is possible that those individuals who feel like they matter to other people are less likely to experience self-stigma of seeking help should they need psychological treatment. This may be because when an individual feels like he or she is important to other people and that others depend on him or her, he or she is more confident about seeking treatment. These individuals may have a sense that it is important to receive needed help in order to best be able to maintain their relationships with their significant others. It is likely that because they have a

sense of mattering to others, they receive self-esteem and self-worth from those relationships and their self-esteem is less likely to be affected by the prospect of seeking psychological help.

Perceived Anti-Mattering and Self-Stigma

The current study is the first to explore the anti-mattering construct other than an initial psychometric study aimed at validating the Anti-Mattering Scale (Flett & Nepon, 2015). While there was no prior research from which to extrapolate, due to the relationships between levels of perceived mattering and anti-mattering and levels of perceived anti-mattering and self-esteem (Flett & Nepon, 2015), it was hypothesized that higher levels of perceived anti-mattering would be associated with higher levels of self-stigma of seeking help. While this relationship was observed, it was not statistically significant. In a manner similar to that of perceived mattering, perceived anti-mattering may be related to the self-stigma of seeking help because feeling that one is not important to others may not instill the confidence needed to withstand the process of help seeking without feeling a loss of self-esteem. Individuals with high levels of perceived antimattering may experience higher levels of insecurity about themselves and their place within society, and seeking help for psychological issues may provide further injury to their already shaky self-concept. Additionally, these individuals may experience a feeling that they are not important enough or not deserving enough to receive help. Future studies with larger sample sizes may demonstrate that there is a significant relationship between the two constructs. Antimattering is an important aspect of psychological well-being that needs to be further investigated and understood.

Gender Differences, Perceived Mattering, Perceived Anti-Mattering, and Self-Stigma

The current study demonstrated that perceived mattering is a predictor of the self-stigma of seeking psychological help in high school students. Moreover, gender was a significant

moderator in the relationships between perceived mattering and self-stigma of seeking help and perceived anti-mattering and seeking help. Previous research has shown that male undergraduate students have higher levels of self-stigma toward seeking help than female undergraduate students (Vogel et al., 2006), although in a sample of high school students there were no gender differences (Zeifman et al., 2015). The current results are in line with Zeifman et al.'s (2015) results with no significant differences in self-stigma of seeking help found between male and female high school students. It is possible that gender differences in self-stigma of seeking help become more pronounced in an older population, with male undergraduate students finding their self-esteem more impacted by the prospect of seeking psychological help. Perhaps in becoming an adult, men develop more of a need to be self-sufficient and are more likely to see the need to seek help as a threat to their independence.

As noted in the literature review, previous research has found somewhat mixed evidence of gender differences in levels of perceived mattering. The pattern seems to be that female participants report higher levels of perceived mattering than male participants only in certain specific age groups (Dixon Rayle, 2005; Flett et al., 2012; Marshall, 2001; Schieman & Taylor, 2001; Taylor & Turner, 2001). Indeed, there are studies in which gender differences in perceived mattering were not found with undergraduate students (Dixon & Robinson Kurpius, 2008) or with Grade 6 to 8 students (Dixon et al., 2009). The results of the present study contribute an additional piece to the age range picture, with the finding of no significant gender differences in levels of perceived mattering in a sample of senior high school students. Taken together, it would appear as though there are generally no clear gender differences in amounts of perceived mattering. Additionally, the current study did not find gender differences in levels of perceived anti-mattering. Due to the mixed results in gender differences in perceived mattering,

it is important for future studies to examine gender differences in levels of perceived antimattering in order to gain an understanding of whether gender differences tend to exist, and in which populations.

The current finding that gender differences moderate the relationship between levels of perceived mattering and perceived anti-mattering and the self-stigma of seeking help is very interesting. Specifically, perceived mattering was found to be a significant predictor of self-stigma of seeking help for female students, but it is not for male students. The findings mirror a similar pattern of interaction effects found by Taylor and Turner (2001) with perceived mattering being a significant predictor of depressive symptomology for women, but not for men, while Dixon Rayle (2005) found that perceived mattering was a predictor of general wellness for female high school students, but not for male high school students. In fact, Dixon Rayle found that perceived mattering accounted for very little variance in wellness for male students. These results suggest that having a sense of mattering to others may be more important to women, and may have more of an impact on other psychosocial constructs and aspects of women's lives.

While perceived mattering was found to be a significant predictor of self-stigma of seeking help for female students only, perceived anti-mattering was a significant predictor of self-stigma of seeking help for male students only. This is an intriguing finding that corroborates previous research findings that perceived mattering holds more significance for women than men, but may also highlight a potential pattern of what is significant for men. These findings suggest that positive feelings of mattering to others have more of an impact on women while negative feelings of not mattering to others have more of an impact on men. This could perhaps be expanded to postulate that positive feelings affect women more than men, while negative feelings affect men more than women. Additional research is greatly needed to explore these

relationships further. Female high school students experience greater rates of the mental health disorders that tend to be less noticeable to others and less likely to be recognized in school settings, such as mood and anxiety disorders. As such, the process of seeking help for these disorders may need to be initiated by the student rather than a teacher or family member. A student who is experiencing self-stigma of seeking help is less inclined to seek needed treatment, which has serious ramifications for the prognosis of the disorder and the well-being of the student.

This study adds to the limited existing research regarding anti-mattering. Flett and Nepon (2015) found a significant but moderate negative correlation between perceived antimattering and perceived mattering with undergraduate students. The current study replicated Flett and Nepon's (2015) results with the finding of a significant but moderate negative correlation between the two constructs in a sample of high school students. The fact that the correlations between perceived anti-mattering and mattering are moderate, paired with the other findings from the current study, indicates that mattering and anti-mattering are related but distinct constructs. Differences were found between perceived mattering and perceived antimattering in their relationships to self-stigma of seeking help, with perceived mattering being a significant predictor of self-stigma and perceived anti-mattering not a significant predictor. The distinct differences in the ways in which perceived anti-mattering and mattering interact with gender demonstrate that anti-mattering is clearly distinct from mattering. It appears that perceived anti-mattering has a greater impact on male high school students, which perceived mattering has a greater impact on female high school students. Further examination of the antimattering construct and additional research on gender differences in perceived anti-mattering is warranted.

Limitations and Future Study Directions

Although this study provided needed information about perceived mattering, perceived anti-mattering, and the self-stigma of seeking help, there are limitations that should be considered in the interpretation of the results. As a result of the cross-sectional nature of the data, causation between the constructs cannot be determined. The sample was relatively small and future studies should use larger samples in order to ensure the findings are robust. Participants completed the measures in class surrounded by their peers, so results may be slightly less reliable than had the measures been administered in separate rooms, though close supervision makes this potential bias unlikely. The data were collected at three high schools in a large metropolitan city, and as a result the findings may not be generalizable to high school students across Canada, particularly to those in rural settings. Lastly, the data were collected through self-report measures. It may be prudent for future studies to involve ratings of significant others and qualitative inquiries which would also allow for deeper probing into the differential gender-based perspectives on mattering and anti-mattering concerns as related to the self-stigma of seeking psychological help.

This study highlighted some very interesting relationships among perceived mattering and anti-mattering and gender, and the differing effects these constructs have for male and female high school students. Furthermore, information was gleaned regarding the self-stigma of seeking help and factors that may make high school students vulnerable to experiencing self-stigma and avoiding treatment. Studying the self-stigma of seeking help in non-clinical samples is effective in determining which individuals would be more likely to experience self-stigma without the mental health disorder itself or self-stigma of mental illness acting as confounding factors. Knowledge of the factors that are involved in the self-stigma of seeking help can assist

in the design and implementation of programs to prevent and challenge it, in addition to identifying those high school students who may be susceptible to experiencing it.

Conclusions

To my knowledge, this is the first study to explore the relationships between perceived mattering and the self-stigma of seeking help, perceived anti-mattering and the self-stigma of seeking help, and the influence of gender on these relationships. Increased levels of perceived mattering were significantly associated with decreased amount of self-stigma, however, a significant relationship between perceived anti-mattering and the self-stigma of seeking help was not found. Gender was found to be a significant moderator between perceived mattering and anti-mattering and the self-stigma of seeking psychological help, with perceived mattering predicting self-stigma of seeking help for female students and perceived anti-mattering as a negative predictor of self-stigma of seeking help for male students. This study highlights factors involved in high school students' experiences of self-stigma of seeking psychological help, and suggests that there may be differences in the way male and female youth process feelings of whether or not they matter, and the impact these feelings have on the likelihood of them seeking help should it be needed. The results from this study contribute to the expanding field of research not only on the self-stigma of seeking help, but also the body of research regarding mattering. Moreover, it contributes to the early research on the construct of anti-mattering. The present study contributes important information to our understanding of self-stigma of seeking help and suggests that a focus on relationships to others may assist in lessening the impact of self-stigma in high school students.

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Table 1 $Sample\ Characteristics\ (N=134)$

Measure	n(%)	M(SD)	
Gender			
Male Students	62(46)		
Female Students	72(54)		
Age		17(0.72)	
Self-Stigma of Seeking Help (SSOSH)		2.48(0.68)	
Male Students		2.47(0.60)	
Female Students		2.49(0.75)	
Rosenberg Mattering Scale (RMS)		2.74(0.54)	
Male Students		2.69(0.54)	
Female Students		2.78(0.55)	
Anti-Mattering Scale (AMS)		2.32(0.65)	
Male Students		2.21(0.65)	
Female Students		2.40(0.65)	

Table 2 $Correlations\ Among\ all\ Measures\ (N=134)$

Measure	1	2	3	
1. SSOSH		p = .002	p = .075	
2. Perceived Mattering			p = < .01	
3. Perceived Anti-Mattering				

Table 3

Regression Analysis of Self-Stigma of Seeking Help Regressed on Gender, Perceived Mattering, and Perceived Anti-Mattering

	β	SE(β)	t	р
Gender	-0.01	0.12	-0.12	0.905
Perceived Mattering	-0.52	0.15	-3.41	< 0.001
Perceived Anti-Mattering	-0.12	0.13	-0.94	0.349
Interaction between Gender and Perceived Mattering	0.55	0.24	-2.28	0.024
Interaction between Gender and Perceived Anti-Mattering	0.43	0.20	2.16	0.033

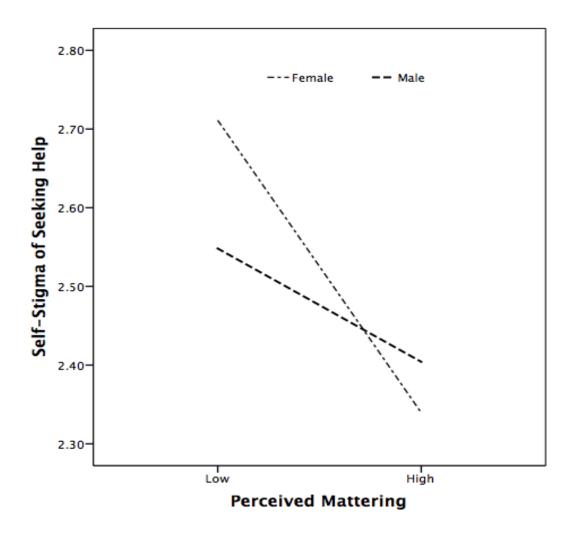


Figure 1. Interaction between gender and perceived mattering.

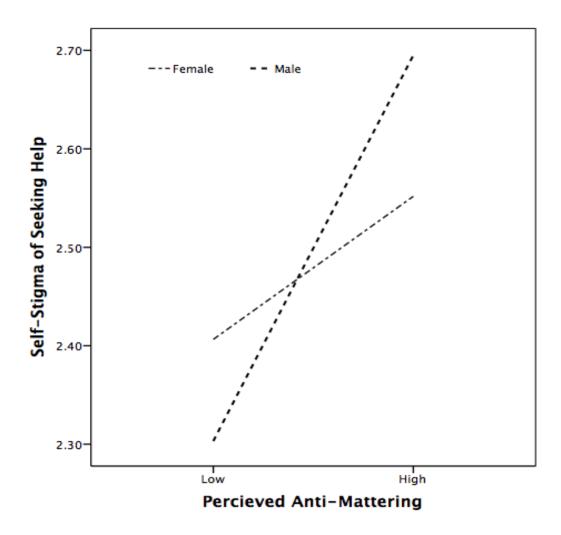


Figure 2. Interaction between gender and perceived anti-mattering.

Appendix A

Seeking Help Scale (Vogel, Wade, & Haake, 2006)

For each item below, please indicate whether you (1) *strongly disagree*, (2) *somewhat disagree*, (3) *agree and disagree equally*, (4) *somewhat agree*, or (5) *strongly agree*.

	Strongly Disagree	A	gree/Disagree Equally	e	Strongly Agree
1. I would feel inadequate if I went to a therapist for psychological help.	1	2	3	4	5
2. My self-confidence would NOT be threatened if I sought professional help.	1	2	3	4	5
3. Seeking psychological help would make me feel less intelligent.	1	2	3	4	5
4. My self-esteem would increase if I talked to a therapist.	1	2	3	4	5
5. My view of myself would not change just because I made the choice to see a therapist.	1	2	3	4	5
6. It would make me feel inferior to ask a therapist for help.	1	2	3	4	5
7. I would feel okay about myself if I made the choice to seek professional help	p. 1	2	3	4	5
8. If I went to a therapist, I would be less satisfied with myself.	1	2	3	4	5
9. My self-confidence would remain the same if I sought help for a problem I could not solve.	1	2	3	4	5
10. I would feel worse about myself if I could not solve my own problems.	1	2	3	4	5

Appendix B

Rosenberg's Mattering Scale (1981)

Please choose the rating you feel is best for you:

- 1 = Not a all
- 2 = A little
- 3 = Somewhat
- 4 = A lot

How much do other people depend on you?

How much do you feel other people pay attention to you?

How important do you feel you are to other people?

How much do you feel others would miss you if you went away?

How interested are people generally in what you have to say?

Appendix C

Anti-Mattering Scale (2015)

Please choose the rating you feel is best for you:

- 1 = Not a all
- 2 = A little
- 3 = Somewhat
- 4 = A lot

How much do you feel like you don't matter?

How much do you feel like you will never matter to certain people?

How often have you been made to feel by someone that they don't care about what you think or what you have to say?

How often have you been treated in a way that makes you feel like you are insignificant?

To what extent have you been made to feel like you are invisible?