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## Gender Differences in Mental Health Literacy of University Students

Kyleen Wong\*

This article aimed to describe gender differences in the mental health literacy of university students in western societies and to provide a brief overview of how gender socialization might contribute to these differences. A review of studies providing information on gender differences in university students' mental health literacy was carried out. The literature showed that the importance of mental health literacy lay in its positive association with better mental health status through the enabling of help-seeking behaviours. University students have some knowledge of mental health and a majority were able to recognize common disorders. However, the ability to recognize disorders did not guarantee adequate knowledge. Similar to adults, young people were more likely to correctly identify depressive symptoms than they were to correctly label schizophrenic symptoms. Males consistently demonstrated less awareness of disorders compared to females, but gender differences did not exist in all circumstances. In terms of help-seeking, young adults preferred informal help from friends and family over professional services, a trend that was especially pronounced in young men. This review suggested that gender does affect mental health literacy in post-secondary students. Although mechanisms to explain how gender mediates literacy can be proposed, gender is not a categorical predictor of differences in university students' mental health literacy. More comprehensive research in young people's knowledge of and attitudes toward mental health is needed.

The mental wellbeing of young people has gained widespread consideration in the last several decades. Addressing mental health in adolescents has become a global public health challenge (Patel, Flisher, Hetrick, & McGorry, 2007). Mental health accounts for five of the ten leading causes of disability-adjusted life years for young adults (Patel et al., 2007). The prevalence of psychological distress in university students is significantly higher than in the general population (Stallman, 2010), with approximately one in four to one in five young people suffering from at least one mental disorder in any given year (Patel et al., 2007). Many cases of mental illnesses begin during adolescence. Research has shown that three-quarters of all lifetime incidences of disorders emerge before 24 years of age, while later onset cases are typically due to comorbidities (Kessler et al., 2005). Youth typically have higher rates

of mood disorders and substance use disorders compared to all other age groups (Pearson, Janz, & Ali, 2013). During adolescence, alcohol and drug use and abuse increases until it peaks in early adulthood (de Girolamo, Dagani, Purcell, Cocchi, & McGorry, 2012). Generalized anxiety disorder and panic disorder also appear in early adulthood (Beesdo, Pine, Lieb, & Wittchen, 2010), as do onsets of bipolar disorder (de Girolamo et al., 2012). Another disorder that manifests in young adults is schizophrenia, which often surfaces in an individual's mid-twenties (Adachi et al., 2008). The mental disorders that appear early in life are associated with continued adult psychopathology (de Girolamo et al., 2012).

Mental wellbeing plays a significant role in the overall health and wellness of young adults as poor mental health is strongly correlated with developmental difficulties (Patel et al., 2007),

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disabilities, and lower academic achievement (Stallman, 2010). There is a multi-directional relationship between suffering from a mental health disorder and the cumulative stresses of young adulthood. Environmental stressors can trigger mental health and experiencing a disorder can exacerbate the general apprehensiveness that university students undergoing life changes encounter (Markoulakis & Kirsh, 2013). On campus, young adults with mental health may confront internal, external, and academic difficulties (Markoulakis & Kirsh, 2013). Internal difficulties include personal domains comprised of the physical, psychological, and social, while structural difficulties and an overarching sense of stigma towards students with mental health illnesses are external difficulties (Markoulakis & Kirsh, 2013). The stigma associated with mental health is widespread on university campuses (Wynaden et al., 2014). This is problematic as the pervasive atmosphere of silence influences help-seeking behaviours, how and what types of support are offered, and the recovery and wellbeing of those affected by mental health issues (Wynaden et al., 2014). The interplay between internal and external difficulties, academic outcomes, and the stigma that contributes to students' potentially negative experience of mental health (Markoulakis & Kirsh, 2013).

Young adulthood is a period of time when mental health issues most often emerge (de Girolamo et al., 2012). Yet this age segment reports the lowest levels of help-seeking (Biddle, Donovan, Sharp, & Gunnell, 2007). Enabling young people to achieve optimal wellbeing can be facilitated by increasing their mental health literacy levels so that they are equipped with the skills necessary to seek help for themselves and their peers, and by improving the quality of mental health care services by tailoring its design and delivery to reflect mental health literacy trends. Mental health literacy is a form of health literacy, which is the "capacity to make

sound health decisions in the context of everyday life" (Kickbusch & Maag, 2008, p. 206). As defined by Jorm and colleagues (1997, p. 182), mental health literacy is the "knowledge and beliefs about mental disorders which aid their recognition, management or prevention". The term incorporates: (a) being able to recognize specific mental health; (b) knowing how to find mental health information; (c) possessing knowledge of risk factors and causes, of self-treatments, and of professional help available; and (d) holding attitudes that promote recognition and appropriate help-seeking (Jorm et al., 1997).

Postsecondary students' mental health literacy levels vary due to a number of influences. Gender, which is learned through the process of socialization, is a key factor influencing an individual's knowledge and attitudes towards mental health (Holzinger, Floris, Schomerus, Carta, & Angermeyer, 2012). It has been well established that a high proportion of young adults suffer from mental health illnesses, but their mental health literacy and how it varies on the basis of socially constructed identities has not been extensively illustrated in the literature (Cotton, Wright, Harris, Jorm, & McGorry, 2006). The purpose of this critical review of the literature is to explore how mental health literacy levels of university students in western societies differ based on the socially constructed concept of gender. I began with an overview of the methodology and then presented mental health literacy trends in university students. An examination of gender differences is followed by a brief discussion of how gender socialization can contribute to gender disparities in mental health literacy. This review concludes with an outline of potential limitations and implications for future research.

### **Methodology**

Articles for this paper were retrieved from several online journals and were included based

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on certain criteria. In gathering articles for the literature review, the phrases “mental health literacy” and “university students” (and its variants, such as “college students”, “young adult”, “young people”, “university student”, and “postsecondary student”) were searched in a variety of databases. Articles were retained for the review based on the following eligibility criteria. Firstly, the articles had to focus on the mental health literacy of university students between 16 and 25 years of age. Secondly, studies not published in English and conducted in a western context were eliminated to diminish the confounding factor of culture. Thirdly, only primary research papers from peer-reviewed scholarly journals were included. Fourthly, only literature published within the last ten years were used. Mental health literacy is a relatively new topic within mental health and to ensure relevance and timeliness of findings, only recent research was included. The initial search resulted in approximately two hundred articles that were eliminated to seven studies based on the eligibility criteria (see Appendix A). Mental Health Literacy of University Students Research in the last few decades has identified a number of trends regarding mental health literacy in university students and the significance of identifying and responding to these trends. The importance of mental health literacy lies in its positive correlation to mental health status. A potential explanation for this finding is supported by the “theory of planned behaviour” (Lam, 2011). Lam (2011) postulates that when an individual who can correctly identify a mental health disorder has a positive attitude towards help-seeking, he or she would be more likely to seek appropriate help, leading to better mental health status. This increased mental health status is contingent on the individual having a good level of mental health literacy and therefore being able to accurately recognize the disorder (Lam, 2011).

Increased mental health literacy can not only help young people to self-identify early signs of disorders, but can also aid individuals to seek appropriate help for distressed peers (Kelly, Jorm, & Wright, 2007). Young people often do not seek professional help or only do so after a delay (Kelly et al., 2007), which could decrease the chances of better long-term outcomes compared to earlier treatment (Jorm, 1997). Enhancing mental health literacy could be used as an intervention to increase mental health status in young people through facilitating early recognition, help-seeking, and treatment of disorders (Kelly et al., 2007; Smith & Shochet, 2011).

### **Non-Gender-Related Trends**

Young Adults Preferred Seeking Informal Help. A recent cross-sectional study by Marcus and Westra (2012) set out to gather survey data that could be compared between Canadian young adults aged 18 to 24 and older adults aged 25 to 64. The researchers found that there were no significant differences between the two age groups in terms of recognition and general knowledge about mental health, including beliefs about causes of disorders. The behaviours of the two age segments diverged in terms of mental health illness management. Compared to older adults, younger adults believed less in the efficacy of medication and psychotherapy (Marcus & Westra, 2012). Possibly because of this belief, young adults preferred informal self-management of mental health issues over accessing professional help, a finding which is consistent with the literature (Eisenberg, Speer, & Hunt, 2012; Farrer, Leach, Griffiths, Christensen, & Jorm, 2008; Findlay & Sunderland, 2014). The researchers acknowledged that the cross-sectional self-report structure of the study posed limitations in terms of drawing causal relationships between variables.

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An Australian epidemiological survey study on age differences in mental health literacy similarly also found that in comparison to older adults younger adults also rated counselling more enthusiastically in relation to seeing a psychiatrist or psychologist (Farrer et al., 2008). A possible explanation for this finding is that this young age group understands the role of the counsellor more fully than that of a psychiatrist or psychologist (Farrer et al., 2008). It is noted that this study is cross-sectional in nature and that results may be subject to cohort effects. Depression is correctly identified more often than schizophrenia. Researchers in Switzerland found that though the vast majority of postsecondary students in an online survey study were able to correctly identify depressive symptoms, a comparable amount of knowledge about schizophrenic symptoms was not present (Lauber, Adjacic-Gross, Fritschi, Stulz, & Rössler, 2005). Participants did not attribute delusions of control and hallucinations of taste to schizophrenia (Lauber et al., 2005). The Canadian adults in Marcus and Westra's study performed similarly, consistently recognizing symptoms of depression more than symptoms of schizophrenia (2012). The Canadian population had similar levels of knowledge about and attitudes towards disorders as participants of previous studies that had been conducted in other countries (Marcus & Westra, 2012). Recognition of disorders does not translate into adequate understanding. The mental health literacy of young adults can also be studied in terms of disorder recognition, rather than disorder knowledge. A study conducted by Furnham, Cook, Martin, & Batey (2011) with a sample of Australian university students found that this relatively well-educated group identified having heard of about one-third of ninety-seven mental disorders from the DSM-IV-TR. The researchers found that the majority of participants (75%) claimed to have heard of common psychiatric disorders such as anorexia

nervosa, bulimia nervosa, anxiety disorder, autistic disorder, obsessive compulsive disorder, Parkinson's disease, post-traumatic stress disorder, schizophrenia, and sleepwalking disorder. Of these eight common disorders, anxiety, stress, depression, and eating disorders were thought to be most prevalent (Furnham et al., 2011). Less than 10% of participants believed they could list symptoms of a quarter of the less well-known disorders, suggesting that having heard of a disorder does not translate to understanding it (Furnham et al., 2011). This consideration must be taken into account when evaluating the actual mental health literacy of any group.

### **Gender-Related Trends**

Being female typically predicts a higher mental health literacy level. Many studies of mental health literacy on general populations have found that women tend to be more literate in recognizing mental health (Holzinger et al., 2011). This finding is consistent with reported gender effects on the mental health literacy of university-aged young adults; five of the seven papers eligible for this review concluded that women are generally more knowledgeable with regards to mental health (Cotton et al, 2006; Furnham et al., 2011; Lauber et al., 2005; Mond & Arrighi, 2010; Reavley et al., 2012). One study did not report gender differences (Marcus & Westra, 2012) and the other utilized an all-male participant pool to increase knowledge about men's behaviour and attitudes, and did not draw conclusions about gender differences (Ellis et al., 2013).

An Australian cross-sectional interview study examined the influence of gender on the mental health literacy of young adults aged 12 to 25 (Cotton et al., 2006). Specifically, Cotton and colleagues determined the adolescents' ability to identify either depression or psychosis in a vignette. They found that regardless of age, males had less knowledge about the symptoms

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of depression compared to their female counterparts. When describing symptoms of depression, males were more apt to use general terms such as “mental illness” or to externalize symptoms as results of peer pressure or family problems (Cotton et al., 2006). Male participants were also more likely to mistakenly believe that the prevalence of mental illness in young people was 1% of the population and to endorse potentially harmful coping mechanisms in face of depression (Cotton et al., 2006). For example, male participants rated using sleeping pills, tranquilizers, and alcohol as possible methods of dealing with depression (Cotton et al., 2006). The researchers also found that males were less likely to condone seeking professional help when presented with the psychosis vignette. In terms of recognition of mental health, female participants had better mental health literacy than their male counterparts. In Furnham, Cook, Martin, & Batey’s cross-sectional questionnaire study, more females than males believed that they could define problems that they recognized out of 97 DSM-IV-TR disorders (2011). Due to the design of the study, it could not be verified whether or not the female participants were actually able to describe the disorders that they claimed to be able to define (Furnham et al., 2011).

One study utilizing a cross-sectional online survey design looked at gender differences in young people’s perceptions of the severity and prevalence of the eating disorders anorexia nervosa and bulimia nervosa (Mond & Arrighi, 2010). The researchers found that a substantial minority of male participants had a negative and uninformed awareness of both disorders, an effect that was not found for females (Mond & Arrighi, 2010). These male respondents reported that they would be slightly or not at all sympathetic to someone with the presented problem, that the presented problem would be slightly or not at all difficult to treat, and that having the presented problem would be

moderately or slightly distressing (Mond & Arrighi, 2010). Men were also three times more likely than women (15.9% vs. 5.2%) to report that bulimia nervosa resulted from a “lack of willpower or self-control” (Mond & Arrighi, 2010, p. 46). The belief that bulimia nervosa is an issue of willpower suggests that the disorder is indicative of weakness in character, and is an attitude that is conducive to stigma and discrimination (Mond & Arrighi, 2010). Males preferred seeking informal help more than formal help. Formal help-seeking in younger adults is generally lower than their older adult counterparts (Marcus & Westra, 2012; Reavley et al., 2012). However, it has been established that young men seek help and utilize health services even less than their female counterparts, preferring self-help to using formal health services (Ellis et al., 2013). In light of this trend, Ellis and colleagues’ (2013) cross-sectional survey and focus group study sought to increase knowledge of young men’s attitudes and behaviour towards mental health and technology. They found that young men were biased against seeking help from mental health professional for themselves and for others, instead preferring to recommend informal help sources to their peers. Ellis and colleagues (2013) confirmed that young men rated using the Internet to find mental health information and support favourably, and that they were satisfied with the help that they received. This suggests that the Internet is a suitable medium to broach mental health discussion with young men as it supports their desire for anonymity and self-help (Ellis et al., 2013).

Gender differences are not always present. Not all studies on mental health literacy of the general population or of postsecondary students report definitive gender differences. Marcus and Westra’s (2012) study on the mental health literacy of young Canadian adults found no significant gender differences in recognition and knowledge of disorders, preferred management

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options, belief of efficacy of psychotherapy treatment.

In their study of young Australians, Cotton and colleagues (2006) found gender differences in recognition of depression symptoms, but reported that there were no significant gender differences in terms of general psychosis knowledge. Approximately one in four female and male participants (25.3%) correctly identified the disorder in the psychosis vignette (Cotton et al., 2006), a finding that is consistent with a previous study conducted by Jorm and colleagues (1997). Yet males were more likely to believe that antibiotics could be useful in treating psychosis, suggesting that male participants were significantly less aware of psychosis than their female counterparts (Cotton et al., 2006).

### **How Gender Socialization Contributes to Gender Differences in Mental Health Literacy**

At the individual level, mental well-being is directly influenced by biological, psychological, and social factors. A social factor that has profound effects on an individual's perception and experience of mental health is gender (Cotton et al., 2006), which is acquired by gender socialization. Socialization is a broad term that describes the process of acquiring a general sense of self through the learning of societal roles and the particular expectations of those roles (Stockard, 2006). Applied to gender, socialization theories examine how individuals come to recognize different sex groups and how they assign different roles and responsibilities, as well as rewards and values, to members of those groups (Stockard, 2006). In western cultural contexts, the acquirement of traditionally gendered characteristics (i.e., masculine men and feminine females) is generally valued over non-traditional presentations.

Up until the twentieth century or so, men and women were clearly divided on a biological basis and it was assumed that an individual's sex indicated that they possessed certain gendered psychological and behavioural characteristics (West & Zimmerman, 1987). The existence of oppressive structural arrangements and disparate societal roles for men and women can be seen bilaterally as reinforcing and resulting from the assumed gender differences that are perpetuated by gender socialization (West & Zimmerman, 1987). Much work on gender socialization emphasizes childhood experiences as the realization of gender identity and gender roles first emerges at a young age (Stockard, 2006). However, the perspective of "doing gender" enlarges the notion of gender socialization from being merely a developmental phase during youth. Taking the cultural environment into account, it views the socialization of gender as a dynamic and lifelong process that fluctuates according to contemporary norms (Deutsch, 2007) and according to individual differences (Addis & Mahalik, 2003). West and Zimmerman (1987) posit that gender results from gender displays through social interaction. Individuals unconsciously engender everyday activities, creating differences that are naturalized (West & Zimmerman, 1987). In this way, the hegemonic binary of male and female gender are continually reconstructed and reinforced. Gender socialization is especially pervasive because of its apparent unintentionality.

How women and men acquire typical feminine and masculine traits over their lifetimes can help conceptualize why there are gender differences in the mental health literacy of young adults (Holzinger et al., 2011). The characteristics that society deems as desirable in each gender are reinforced through social interaction (West & Zimmerman, 1987). Feminine characteristics, which are highly valued in women, include not using harsh language, loving children, and being

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affectionate, cheerful, childlike, compassionate, feminine, flatterable, eager to soothe feelings, gentle, loyal, sensitive, shy, soft-spoken, sympathetic, tender, understanding, warm, and yielding (Bem, 1974). Masculine characteristics, which are highly valued in men, include acting as a leader and possessing leadership qualities, defending one's own beliefs, having a strong personality, being willing to take a stand and to take risks, and being aggressive, ambitious, analytical, assertive, athletic, competitive, dominant, forceful, independent, individualistic, decisive, masculine, and self-reliant (Bem, 1974). Though the Bem Sex-Role Inventory (BSRI) was developed in the 1970s, recent research has shown that the majority of these traditional gender prescriptions have persisted (Auster & Ohm, 2000).

West and Zimmerman's theory of doing gender explains how gender is acquired through frequent socialization through social interactions (1987). The BSRI conceptualizes how different characteristics are valued in women and men. Combining the two theories, women are socialized to be diffident, docile, and emotional, while men are socialized to be assertive, tough, and critical (Bem, 1974; West and Zimmerman, 1987). These differences can explain how gender affects the mental health and mental health literacy of university students as gender-role-based experiences influence the development of the self and therefore any pathological disposition to mood disorders (Parker & Brotchie, 2010).

A common trend identified in the literature was that being female predicts a higher level of mental health literacy (Cotton et al., 2006; Furnham et al., 2011; Lauber et al., 2005; Mond & Arrighi, 2010; Reavley et al., 2012). A potential explanation for this phenomenon is that girls and women are socialized to be passive and less resilient than boys and men, and as a result may acquire a stronger predisposition to mood disorders (Parker & Brotchie, 2010). Women

may be more tolerant of mood and anxiety disorders because they themselves suffer more from mood disorders (Holzinger et al., 2011). For these reasons, women may be better informed about mental illness and also be more ready to recommend professional help (Holzinger et al., 2011), translating into a higher mental health literacy level.

Conversely, being male was associated with a lower mental health literacy level (Cotton et al., 2006; Furnham et al., 2011; Lauber et al., 2005; Mond & Arrighi, 2010; Reavley et al., 2012), less formal help-seeking (Ellis et al., 2013; Yorgason, Linville, & Zitzman, 2008), and endorsement of destructive coping strategies (Cotton et al., 2006). According to Bem (1974), the male gender role demands that men be aggressive, strong, and unemotional. Men who deviate from this expectation experience gender role conflict which results in intrapersonal and interpersonal strain that may cause psychological distress (Addis & Mahalik, 2003; Pederson & Vogel, 2007). Treatment to ameliorate such distress would include seeking counselling or psychotherapy (Pederson & Vogel, 2007). Yet males, especially young men, utilize professional health services the least (Ellis et al., 2013; Yorgason et al., 2008). A possible reason as to why men do not seek formal help is that doing so challenges men's sense of masculinity (Ellis et al., 2013) in a social context in which showing weakness and help-seeking are not desirable masculine characteristics (Bem, 1974). Seeking help causes gender role conflict and subsequently increases men's distress (Addis & Mahalik, 2003).

Although gender socialization can help conceptualize why differences in mental health literacy exist between females and males, drawing a sweeping conclusion that gender is definitively predictive of differences in mental health literacy levels would be sophistic. Gender is a continuously reconstructed trait because of its origin in social interaction (Addis & Mahalik,

2003; West & Zimmerman, 1987). There is enormous within-group and/or within-person variability that is difficult to account for in study design (Addis & Mahalik, 2003). In research, methodological limitations, such as self-report surveys, make it difficult to accurately measure the effect of gender on mental health literacy. Despite this constraint, the literature has consistently documented gender differences in knowledge of mental health (Holzinger et al., 2011), which may be a result of differential gender socialization.

### **Limitations**

There were several limitations to this review that need to be disclosed. Firstly, it is possible that papers that did not use the keywords listed were omitted, despite careful efforts to include all relevant articles. Secondly, the range of disorders assessed was limited, rendering generalizations to a wider range of disorders (besides depression and schizophrenia) impossible. This is consistent with the current focus of mental health literacy literature on the general population (Furnham, et al., 2011). Thirdly, the methodology used in the studies is not based on a best practices standard as there does not appear to be a recognized or accepted set of vignettes used by different researchers to study the same disorders (Furnham & Hamid, 2014). Without standardized vignettes, the data gathered by different researchers is subject to the variation of the different measures used. The fourth limitation of this review pertains to the explanation of how gender socialization causes gender effects in mental health literacy. Due to the scope of this paper, only a select number of theories were introduced to explain gender-related mental health literacy trends. There is a wealth of medico-sociological research on gender differences in mental health that can supplement this review (see Holzinger et al., 2011).

### **Implications for Future Research**

Further study on how other factors that may affect literacy levels and subsequent help-seeking is needed. Researchers declare that mental health literacy research needs to begin with the systematic establishment of base rate data (Furnham et al., 2011). Such research would examine what laypeople understand about specific mental illness terms and conditions. Specific indicators of knowledge include to what degree individuals can label and define illnesses, determine what causes them, believe they can be cured or treated, and think that they are common in the general population (Furnham et al., 2011). The vignette method of determining mental health literacy is subject to diverse interpretations by participants and experimenters, resulting in data that is highly variable (Sai & Furnham, 2013). More diverse literacy research featuring a wider range of disorders, longitudinal study designs, and standardized vignettes is needed to produce literature that is comprehensive and comparable. Once this base rate data has been compiled, research can then branch out into focussing on how specific determinants of health, including gender, affect mental health literacy of a variety of disorders.

Gender differences in mental health literacy have been largely established, but more research on how gender interacts with other social determinants of health is needed. Given that health concerns the wellbeing of the whole-person, it is not sufficient to consider only one element in determining mental health literacy outcomes. Mental health literacy research needs to incorporate a wider understanding of the social determinants of health because different variables can affect mental health literacy in unexpected ways. For example, studies have shown that socioeconomic disadvantage and low levels of educational attainment are not necessarily associated with lower mental health literacy (Leighton, 2010).

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Culture can also influence gender-related knowledge, attitudes, and practice towards mental illness (Bener & Ghuloum, 2010). In western contexts, it has been established that females typically have higher mental health literacy (Cotton et al., 2006; Furnham et al., 2011; Lauber et al., 2005; Mond & Arrighi, 2010; Reavley et al., 2012). However, this gender effect may be reversed in certain cultural contexts. A cross-sectional survey study conducted in Qatar found that men had better knowledge, beliefs, and attitudes towards mental health than women, suggesting that cultural forces could be at play (Bener & Ghuloum, 2010). Culture-specific research on the effects of gender on mental health literacy is needed to gain a comprehensive understanding of the global public health challenge posed by young people's mental health (Patel et al., 2007). Although there has been research showing that increased mental health literacy is associated with increased mental health status (Lam, 2014), this may not be the case. It is possible that help-seeking behaviour is determined by factors unrelated to mental health literacy, suggesting that increasing literacy levels would not be associated with increased mental health status (Eisenberg et al., 2012). A recent cross-sectional survey study by Eisenberg, Speer, and Hunt (2012) found that the majority of untreated students (65%) reported low stigma and positive beliefs about the effectiveness of treatment. The researchers suggest that students may have adequate levels of knowledge of mental health disorder treatments, but refrain from seeking help for other reasons. Students perceived treatment as acceptable and helpful, but did feel the urgency to use services because they did not perceive a need for professional help, felt that they lacked the time, or preferred to handle issues themselves (Czyz, Horwitz, Eisenberg, Kramer, & King, 2013; Eisenberg et al., 2012). The researchers note that the modest survey response rate, brevity of measures, and focus on

a small number of potential determinants of help-seeking were limitations of the study that render the evidence tentative rather than definitive (Eisenberg et al., 2012). It is important to recognize that facilitating help-seeking action in postsecondary students suffering from mental health can be more complicated than simply increasing mental health literacy.

An additional area for further research concerns evaluating mental health literacy intervention campaigns for young people. These interventions, which aim to increase mental health literacy levels, have not been systematically evaluated to determine efficacy (Kelly et al., 2007; Reavley & Jorm, 2010). There are few alcohol misuse, anxiety, and depression interventions for university students and evidence showing the effectiveness of these interventions is limited (Reavley & Jorm, 2010). Although mental health literacy is a relatively new research area, there is increasing interest in this field and many opportunities for further study.

### **Conclusion**

As a unique cohort, young people endure a disproportionate amount of mental health issues. Women and men suffer from illnesses differently due to the social construction of their gender, and hence possess divergent attitudes towards and knowledge of mental health. Being female typically predicts a higher mental health literacy level, though gender differences are not present in all circumstances. Further research on mental health literacy and gender (amongst other determinants of health) in university students is needed to better serve this vulnerable group. On the micro level, such knowledge would help university mental health care providers understand students' experiences of disorders to better serve them. On the macro level, literacy research can inform the design of educational and stigma-reducing interventions. These efforts would help foster a supportive university

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environment for students affected by mental health, enabling them to achieve their optimal wellbeing.

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