Electronic Theses and Dissertations

Theses, Dissertations, and Major Papers

5-8-2018

Online Help Seeking in Emerging Adults: The Role of Attachment Style, Emotion Regulation, and Distress Disclosure

Emily Romanson
University of Windsor

Follow this and additional works at: https://scholar.uwindsor.ca/etd

ONLINE HELP SEEKING IN EMERGING ADULTS: THE ROLE OF

ATTACHMENT STYLE, EMOTION REGULATION, AND DISTRESS DISCLOSURE

By

Emily E. J. Romanson

A Dissertation
Submitted to the Faculty of Graduate Studies
through the Department of Psychology
in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy
at the University of Windsor

Windsor, Ontario, Canada

2018

Online Help Seeking in Emerging Adults: The Role of Attachment Style, Emotion Regulation, and Distress Disclosure

by

Emily E. J. Romanson

APPROVED BY:

_____
Dr. H. Sears, External Examiner
University of New Brunswick

_____
Dr. G. Salinitri
Faculty of Education

_____
Dr. K. Lafreniere
Department of Psychology

_____
Dr. K. Babb
Department of Psychology

_____
Dr. R. Menna, Advisor
Department of Psychology

April 26, 2018

DECLARATION OF ORIGINALITY

I hereby certify that I am the sole author of this thesis and that no part of this thesis has been published or submitted for publication.

I certify that, to the best of my knowledge, my thesis does not infringe upon anyone's copyright nor violate any proprietary rights and that any ideas, techniques, quotations, or any other material from the work of other people included in my thesis, published or otherwise, are fully acknowledged in accordance with the standard referencing practices. Furthermore, to the extent that I have included copyrighted material that surpasses the bounds of fair dealing within the meaning of the Canada Copyright Act, I certify that I have obtained a written permission from the copyright owner(s) to include such material(s) in my thesis and have included copies of such copyright clearances to my appendix.

I declare that this is a true copy of my thesis, including any final revisions, as approved by my thesis committee and the Graduate Studies office, and that this thesis has not been submitted for a higher degree to any other University or Institution.

ABSTRACT

There is minimal research investigating the role of the Internet and computer-mediated technology in help seeking among emerging adults. The purpose of this study was to explore how and from whom emerging adults seek help online for their emotional and personal problems. In particular, the study examined the relations between attachment with intentions and behaviours of seeking help online, as well as from informal and formal sources of support. Three-hundred and fifty-four undergraduate university students (17 to 25 years of age) completed an online survey of questionnaires assessing their attachment style in close relationships, difficulties in emotion regulation, tendency to self-disclose distress to others, and help-seeking intentions and behaviours online and from informal (e.g., parents and friends) and formal sources of support (e.g., social workers and psychologists). Results showed that approximately 95% of the sample sought help for an emotional or personal problem by using online computer-mediated technology, in some capacity, over the past four weeks. Higher levels of attachment avoidance were significantly associated with lower intentions to seek help online by way of directly messaging close others (e.g., via text message), posting to large audiences (e.g., on social networking sites), and searching for and reading information relevant to the problem, as well as with engaging in fewer help-seeking behaviours of directly messaging close others. Similarly, greater attachment avoidance was significantly related to lower intentions to seek help from informal and formal sources of support, as well as to engaging in fewer help-seeking behaviours from informal and formal sources. Conversely, higher levels of attachment anxiety were significantly associated with greater intentions to seek help online by way of posting to anonymous sources of support and

iv

searching for and reading information, as well as with engaging in more online help-seeking behaviours of searching for and reading information pertaining to the problem. Greater attachment anxiety was significantly related to lower intentions to seek help from informal sources, but also to engaging in a greater number of help-seeking behaviours from professional sources. A series of significant mediation analyses revealed that higher levels of attachment avoidance predicted greater difficulties in emotional awareness, which in turn, predicted lower intentions (directly messaging close others and searching for/reading information) and fewer behaviours (directly messaging close others) of seeking help online. In contrast, higher levels of attachment anxiety predicted greater difficulties with access to effective emotion regulation strategies, which in turn, predicted a greater number of online help-seeking behaviours (searching for/reading information). Yet, higher levels of attachment anxiety predicted lower tendencies to disclose distress to others, which in turn, predicted lower intentions to seek help from informal sources. Similarly, higher levels of attachment avoidance predicted lower tendencies to disclose distress, which in turn, predicted fewer help-seeking behaviours from informal sources. However, higher levels of attachment avoidance predicted greater difficulties with access to effective emotion regulation strategies, which in turn, predicted a greater number of help-seeking behaviours from formal sources. Applied implications for engaging young people in the help-seeking process via online, computer-mediated technology are discussed – namely, that trusting relationships with close others and greater awareness of emotions continue to be crucial facilitators of seeking help in an online context.

ACKNOWLEDGEMENTS

Thank you to my research supervisor, Dr. Rosanne Menna, for her continued support, encouragement, and mentorship throughout the process of completing both my dissertation work and clinical training. I would also like to express my appreciation to my committee members, Dr. Kimberley Babb, Dr. Kathryn Lafreniere, and Dr. Geri Salinitri, as well as my external examiner, Dr. Heather Sears, for their valuable guidance and feedback in contributing to this research project.

A very special thank you goes out to my friends and family for all of their love and support throughout my graduate school journey. In particular, to my brother for his sense of humour and for whose dedicated pursuit of learning and education I have always admired. To my parents, who have always encouraged me to follow my dreams, persevere, and have instilled in me a love for helping others and a curiosity for learning. And lastly, thank you to my husband, Brady, for your unwavering support, encouragement, selflessness, and sense of adventure in taking this journey with me.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

CHAPTER I

Introduction

In recent years, mental health during emerging adulthood has been identified as a major and prevalent public health issue that needs greater priority in our health care system (Costello, Copeland, & Angold, 2011; Hunt & Eisenberg, 2010; Kessler et al., 2005; Rickwood, Mazzer, & Telford, 2015). Epidemiological research indicates that as many as 14 to 25% of young adults in Canada meet diagnostic criteria for a mental health disorder; yet, only 25% of these young Canadians seek help for their mental health problems and less than 20% of these individuals ultimately receive specialized services (Abidi, 2017; Bergeron, Poirier, Fournier, Roberge, & Barrette, 2005; Blanco et al., 2008; Nunes et al., 2014). Also of particular concern is that these estimates of prevalence and service utilization do not include the many other young people who are experiencing emotional or personally upsetting problems that are subthreshold to meeting diagnostic criteria, but nonetheless, are personally distressing or interfering with their emotional well-being (Wilson, Bushnell, & Caputi, 2011). Emotional problems that go unidentified or untreated also have potential long-term implications for individuals, families, and society at large, given that many longstanding psychological problems experienced in adulthood first emerge in childhood and adolescence (Costello et al., 2005). Emerging adulthood (approximately 18 to 25 years of age), in particular, is a developmental period in which there is a heightened risk for the onset of emotional, behavioural, and relational problems, with research showing significant increases in rates of depression, anxiety disorders, eating disorders, and substance use problems during the transition from adolescence to emerging adulthood (Costello et al., 2011; Rickwood et al., 2015).

Despite the prevalence and potentially stressful impact of emotional and personal problems in early adult populations, many of these individuals do not seek help for their psychological and emotionally upsetting problems (Bergeron et al., 2005; Hunt & Eisenberg, 2010; Rickwood et al., 2015; Rickwood, Deane, Wilson, & Ciarrochi, 2005). Help seeking is defined as looking for assistance from informal sources of support (e.g., family and friends) or from formal sources of support (e.g., doctors, social workers, or psychologists) with the intent to resolve problems (Rickwood et al., 2005). In an effort to understand the significant discrepancy between the number of young adults who experience emotional or personally distressing problems and the comparatively lower number of those individuals who actually seek help for these problems, researchers have focused on investigating various barriers that hinder people from seeking help. Such help-seeking barriers include negative attitudes about seeking help, beliefs that individuals should resolve problems on their own, stigma and feelings of embarrassment related to having or seeking help for psychological problems, and concerns about a lack of confidentiality in seeking support (Rickwood et al., 2005; Wilson, Rickwood, Bushnell, Caputi, & Thomas, 2011).

Researchers have also examined help-seeking facilitating factors, which encourage individuals to seek support for their distressing problems. Such facilitating factors include perceiving that social support from others is available and accessible, being able to identify and express feelings to other people, being willing to self-disclose personally distressing information, and having friendships or parent relationships characterized by a sense of trust, closeness, and emotional safety (Ciarrochi, Wilson, Deane, & Rickwood, 2003; Gulliver, Griffiths, & Christensen, 2010; Olenick, 2011;

Rickwood et al., 2005; Vogel & Wester, 2003). Interestingly, when young adults do seek help for their problems, the majority of these individuals are more likely to seek informal support from their parents, friends, and romantic partners than from formal sources of support (Rickwood et al., 2005, 2007, 2015; Wilson et al., 2011).

With emerging adults most commonly turning to their parents, friends, and romantic partners for support with their distressing problems, it is evident that their close relationships with parents and peers often play a central role in help seeking. With respect to these close relationships, attachment theory (Bowlby, 1969/1982) is a valuable framework from which to examine attachment relationships in relation to the help-seeking intentions and behaviours of emerging adults. In particular, researchers investigating the connection between attachment and help seeking are increasingly employing a two-dimensional attachment model, whereby *attachment avoidance* is conceptualized as a tendency to feel uncomfortable and avoid intimacy in relationships, whereas *attachment anxiety* is conceptualized as a tendency to worry about being alone, rejected, or abandoned in relationships (Brennan, Clark, & Shaver, 1998; Shaffer, Vogel, & Wei, 2006; Vogel & Wei, 2005). The empirical literature has shown that individuals who score high on the dimension of attachment anxiety are more likely to disclose their distress, be hypervigilant to their emotional distress, intensify their expression of negative emotions, and seek help for their distressing problems. In contrast, individuals who score high on the dimension of attachment avoidance are more likely to inhibit and suppress their negative emotions, and are less likely to acknowledge and disclose their emotional distress to others, and to seek help for their problems (Mikulincer & Shaver, 2007, 2008; Vogel & Wei, 2005).

Although researchers have investigated the associations between attachment and intentions to seek help from informal and formal sources of support (Cheng, McDermott, & Lopez, 2015; Shaffer, Vogel, & Wei, 2006; Vogel & Wei, 2005), as well as the links between attachment and actual help-seeking behaviours from informal and formal sources (Bumbacco, 2015; DeFronzo, Panzarella, & Butler, 2001) in samples of emerging adults, to the author's knowledge, no empirical studies have examined the connections between attachment and both help-seeking intentions and behaviours from informal and formal sources.

Considering the various factors that can either facilitate seeking help (e.g., trust and support in close relationships) or hinder that process (e.g., concerns about stigma, embarrassment, and confidentiality), the Internet represents an interesting medium in which to examine emerging adults' intentions to seek help and recent behaviours of seeking help for their distressing problems. Within North America, most emerging adults presently use the most up-to-date computer and smartphone technology to access the Internet and to communicate via popular online social networking sites on a daily basis (Duggan, 2015; Perrin & Duggan, 2015; Steeves, 2014). Emerging adults use the Internet to connect with others and preserve and strengthen offline relationships with friends, peers, and family members (Bazarova & Choi, 2014; Manago, Taylor, & Greenfield, 2012; Pempek et al., 2009; Subrahmanyam, Reich, Waechter, & Espinoza, 2008). Interestingly, online communication facilitates more intimate self-disclosure among individuals and is positively related to perceptions of greater closeness and of higher quality of existing friendships in young people (Valkenburg & Peter, 2007a, 2009, 2011). Emerging adults also use the Internet to search for and access information on and support

4

for various personal and sensitive topics, including medical and health issues, emotional problems, relationship difficulties, and mental health concerns (e.g., Gowen, 2013; Gowen, Deschaine, Gruttadara, & Markey, 2012; Horgan & Sweeney, 2010).

Despite the potential utility of the Internet in facilitating emerging adults to connect with others and seek help for their personal or emotional problems, there is a paucity of research investigating the role of the Internet in help seeking during this developmental period (Blight, Jagiello, & Ruppel, 2015; Gowen, 2013; Knapik, 2008). Although researchers and clinical practitioners are increasingly developing online services designed to encourage young people to seek help (e.g., Collin et al., 2011; Rickwood, Mazzer, & Telford, 2015), surprisingly minimal research has explored from *whom* emerging adults seek help online and *how* emerging adults use and navigate the Internet to seek help for their emotional and behavioural problems. In considering the regularity and frequency by which emerging adults use the Internet to communicate with other people, including friends and family members, as well as their tendency to prefer seeking help from friends, romantic partners, and parents, it is fitting that research be conducted to investigate whether emerging adults' attachment relationships are related to their intentions to seek help online, as well as their recent experiences of having actually sought help online, from different sources of support (e.g., close others, large social network audiences, and/or strangers) and via various online platforms/technologies (e.g., social networking sites, smartphone messaging, and/or anonymous message boards).

Taken together, the focus of this study was to explore whether attachment avoidance and attachment anxiety are associated with emerging adults' intentions to seek help *online* from various sources of support and via different online communication tools

for an emotional or personal problem. Another goal of the present research study was to explore whether attachment avoidance and attachment anxiety are associated with emerging adults' recent behaviours of having sought help *online* from various sources of support and via different online communication tools for an emotional or personal problem. Similarly, it was of interest to explore whether attachment avoidance and attachment anxiety are associated with emerging adults' intentions to seek help and actual help-seeking behaviours from both *informal* and *formal* sources of support (i.e., not specified as online help-seeking).

Studies have shown that young people who are more aware of their emotions, better able to identify and express their feelings to other people, and better able to manage and regulate their emotions in an effective manner tend to report greater intentions to seek help from their friends, parents, and mental health professionals for an emotional or personal problem (e.g., Ciarrochi et al., 2003; Komiya, Good, & Sherrod, 2000; Olenick, 2011). There is also a growing empirical base supporting the links of attachment avoidance and attachment anxiety with difficulties in emotion regulation, which are conceptualized as *lack of emotional awareness* (tendency to ignore or be inattentive to one's emotions); *lack of emotional clarity* (tendency to be unclear as to which emotions are being experienced); *impulse control difficulties* (difficulty remaining in control of one's behaviour when feeling distressed); *non-acceptance of negative emotional responses* (non-acceptance of one's negative emotions or distress); *difficulties engaging in goal-directed behaviour* (difficulty concentrating and accomplishing tasks when distressed); and *limited access to effective emotion regulation strategies* (belief that there is little that can be done to effectively regulate one's distress; Gratz & Roemer,

6

2004). In particular, researchers have documented that young adults who score high on the dimensions of attachment avoidance and attachment anxiety are more likely to report greater difficulties with emotional awareness, emotional clarity, impulse control, access to effective emotion regulation strategies, acceptance of emotional responses, and engaging in goal-directed behaviour when feeling upset (Han & Pistole, 2014; Lecce, 2008). Despite the documented connections among attachment, emotion regulation, and help seeking in emerging adults, researchers have neglected to explore whether emotion regulation plays a mediating role in the connection between attachment and help seeking. As a result, a goal of this present study was to investigate the potential mediating role of emotion regulation in the relations of emerging adults' attachment avoidance and attachment anxiety with their intentions and behaviours of seeking help *online* and from *informal* and *formal* sources of support for an emotional or personal problem.

In addition, research has demonstrated that a greater tendency to self-disclose (as opposed to conceal) emotionally distressing information to other people predicts greater intentions to seek help from counselling services in emerging adults (Vogel & Wester, 2003). Study findings have also revealed a connection between attachment and self-disclosure of distress and personal information (e.g., Garrison, Kahn, Miller, & Sauer, 2014; Garrison, Kahn, Sauer, & Florczak, 2012; Mikulincer & Nachshon, 1991). Although there is empirical literature supporting the links among attachment, disclosure of personal or distressing information, and help seeking, research has yet to be conducted that explores whether distress disclosure plays a mediating role in the link between attachment and help seeking. Accordingly, another objective of this study was to examine the potential mediating role of the tendency to self-disclose distress to others in the

relations of emerging adults' attachment avoidance and attachment anxiety with their

intentions and behaviours of seeking help *online* and from *informal* and *formal* sources of

support for an emotional or personal problem.

CHAPTER II

Literature Review

Help Seeking in Emerging Adulthood

Help seeking is understood as a process that involves individuals actively seeking out assistance from other people, such as informal sources of support (e.g., parents and friends) or formal, professional support services (e.g., psychologists, social workers, and doctors), in order to cope with and resolve emotional or behavioural problems. Help seeking is conceptualized as a type of coping that usually entails communicating with others so as to gain support in understanding, advice, information, or treatment for an emotional, behavioural, or relational problem (Rickwood et al., 2005).

Help seeking is especially important to consider in the developmental context of emerging adulthood. As delineated by Arnett (2010), emerging adulthood is a period of development (approximately 18 to 25 years of age), which occurs in industrialized countries and is characterized by exploratory activities and changes in identity, family/ social relationships, and work. Emerging adulthood can be described as an age of identity explorations, instability, self-focus, feeling "in-between" (adolescence and adulthood), and possibilities (e.g., optimistic about the future; Arnett, 2010). Emerging adulthood is also associated with a heightened risk for developing mental health, emotional, behavioural, and relational problems (Costello et al., 2011; Kessler et al., 2005). As many as 14 to 25% of young adults in Canada meet diagnostic criteria for a mental health disorder; yet, only 25% of these young Canadians seek help for their mental health problems and less than 20% of these individuals ultimately receive specialized services (Abidi, 2017; Bergeron et al., 2005). Notably, undergraduate university students

9

represent a group of individuals who are typically in emerging adulthood and often experience emotional and personal problems, given that university tends to be a stressful and challenging transition (Hunt & Eisenberg, 2010). Despite experiencing mental health, emotional, and personally distressing difficulties, less than 25% of university students with a diagnosable mental health disorder tend to seek professional help (Blanco et al., 2008; Nunes et al., 2014).

Models of Help Seeking

The knowledge base on help seeking represents a broad and complex area of study, which has been comprehensively documented across decades of empirical research (e.g., see a review by Gourash, 1978). Although there is no unifying theory or conceptual framework that is consistently used to examine the process of seeking help for emotional or personal problems (Rickwood et al., 2005), there are several help seeking models, which have been developed and are employed in the literature. For example, the Behavioral Model of Health Service Use (Andersen, 1995) is one framework that is widely used in the study of the determinants of service use among individuals who do or do not seek assistance from health care services. Originally developed to investigate the use of medical care services (Andersen, 1968), this model has since been revised and adopted in the study of the help seeking process and service use for mental health problems in adults, young adults, adolescents, and children (e.g., Aday & Andersen, 1974; Andersen & Newman, 1973; Bergeron et al., 2005; Goldsmith, Jackson, & Hough, 1988; Srebnik, Cauce, & Baydar, 1996).

As proposed by Andersen (1968, 1995; Behavioral Model of Health Service Use) and expanded upon by other researchers, including Goldsmith et al. (1988) and Srebnik et

al. (1996), the following determinants of service use influence which individuals seek and receive professional support through health care services: (1) predisposing characteristics, (2) enabling factors, and (3) perceived and evaluated needs. Predisposing characteristics exist prior to the onset of the problems and relate to individuals' tendency to seek and use health care services. Such predisposing factors include age, gender, ethnicity, education, occupation, coping strategies, beliefs and attitudes about health and seeking help, and previous help seeking practices (Andersen, 1995; Bergeron et al., 2005; Goldsmith et al., 1988; Srebnik et al., 1996). Enabling factors represent facilitators of or barriers to help seeking, and relate to the means by which people might access or utilize mental health services. Such enabling factors include knowledge about mental health and about where and from whom to seek help, stigma or fear of seeking or receiving help for mental health problems, size and degree of support in social networks, quality of relationships with potential sources of help, and geographic location of residence. Enabling resources, such as mental health personnel and facilities, must be present and available in order for individuals to use these services. Individuals must also have appropriate information and knowledge about how and where to access help and receive these services. Factors related to perceived and evaluated needs are also central features to seeking help. Perceived need factors involve individuals' subjective perceptions of their mental health, the severity of their problem or distress, and capacity to cope with daily demands. Evaluated need factors include the presence of suicidal thoughts or a mental health disorder (as assessed using the *Diagnostic and Statistical Manual of Mental Disorders*; Andersen, 1995; Bergeron et al., 2005; Goldsmith et al., 1988; Srebnik et al., 1996).

Researchers have also developed models focused on the stages of the help-seeking process. For example, Kessler, Brown, and Broman (1981) and Gross and McMullen (1983) identified three stages in the help-seeking process: (1) perception of a problem (individual recognizes that he/she is experiencing a problem); (2) decision to seek help (individual decides to seek assistance for the problem); and (3) actual help-seeking behaviour (individual seeks contact with and accesses support from help provider). Other researchers have since revised and formulated similar stage models of the help-seeking process for adults, adolescents, and children, with general agreement that there are three primary stages in the process: problem recognition, decision to seek help, and support and service utilization (e.g., Cauce et al., 2002; Goldsmith et al., 1988; Srebnik et al., 1996; Zwaanswijk, Van Der Ende, Verhaak, Bensing, & Verhulst, 2007).

The help-seeking process begins with the recognition that there is a problem or need for help, which can be conceptualized as either an epidemiologically defined need or a perceived, subjective need. An epidemiologically defined (evaluated) need is characteristically assessed using diagnostic criteria and disorder categories of the *DSM*, as well as functional impairment in daily life. On the other hand, a perceived need refers to the subjective perception of the individual or family that there is a mental health concern or a psychological problem of a distressing nature. The emphasis of the perceived need is not on the diagnosis or "disorder," but rather on the experience of the individual (Goldsmith et al., 1988; Srebnik et al., 1996).

The decision to seek help involves deciding whether or not to pursue support for the problem and entails a cost-benefit analysis in which the individual must decide whether the effort and cost of seeking assistance is reasonable in consideration of the

12

expected benefits of seeking help (Goldsmith et al., 1988; Gross & McMullen, 1983; Srebnik et al., 1996). Even after acknowledging the presence of a problem and identifying a need for help, many individuals remain deterred from engaging in help-seeking behaviours, as various social barriers commonly hinder the seeking out of assistance for emotional or personal problems. However, if individuals do decide to seek help for these concerns, they must determine from whom they will seek support (e.g., parents, friends, or formal mental health professionals). With most emerging adults tending to seek informal help from family and friends, it is not surprising that such a small proportion of those young people, who need specialized services, actually seek out and ultimately access and receive support from mental health treatment providers (Abidi, 2017; Bergeron et al., 2005; Blanco et al., 2008; Nunes et al., 2014).

Help-Seeking Intentions and Behaviours

Although there is some research that has investigated actual help-seeking behaviours (e.g., Bumbacco, 2015; Hoey, 2014), much of the existing empirical literature on help seeking has focused on intentions to seek help (Cheng et al., 2015; Nagai, 2015; Rickwood et al., 2005; Shaffer et al., 2006). Even though it is useful to examine help-seeking intentions, it is important to differentiate between intentions and behaviours and to also investigate actual help-seeking behaviours (Nagai, 2015). Furthermore, the study of online help seeking via the use of smartphones, social networking sites, and online support services is still in its infancy and continues to be especially exploratory in nature. Accordingly, the overall aim of the present study was to concurrently examine both intentions and behaviours of emerging adults in seeking help online.

Of relevance within the help seeking literature is the theory of planned behaviour (Ajzen, 1985, 1991), which posits a connection between intentions to seek help and help-seeking behaviours. More specifically, the theory of planned behaviour postulates that the intention to engage in a behaviour influences the likelihood that the behaviour will be performed, such that the greater an individual's intention to perform a particular behaviour, the more likely that the individual will execute that behaviour. As delineated by this theory, an individual's behavioural intention is preceded and influenced by the individual's attitude toward the behaviour, subjective norm, and perception of behavioural control. The attitude toward the behaviour signifies the extent to which an individual has a positive or negative appraisal of the particular behaviour (e.g., attitude toward seeking help for psychological problems). The subjective norm denotes the social pressure to engage or not engage in the behaviour and relates to the degree to which the individual is motivated to adhere to social norms. Perceived behavioural control represents the individual's view of the ease or difficulty in carrying out the specific behaviour and relates to the confidence the individual has in his/her ability to do the behaviour. In general, the fundamental principle of this theory is that an individual's behavioural intention, combined with the perceived behavioural control, influences an individual's performance of that behaviour (Ajzen, 1991).

Research has shown that there is a relationship between help-seeking intentions and help-seeking behaviours, but that the strength of the connection tends to vary across studies and to depend on the source of support (Nagai, 2015; Rickwood et al., 2005; Wilson, Deane, Ciarrochi, & Rickwood, 2005). For example, in a study on the relationship between help-seeking intentions and actual help-seeking behaviours in a

sample of Japanese university students (n = 370), Nagai (2015) revealed a significant

strong relationship between intentions and prospective behaviours (four weeks later) of

seeking help from friends (r = .53) for a relational or emotional problem. In comparison,

in a study on the relationship between help-seeking intentions and prospective help-

seeking behaviours (three weeks later) for a personal or emotional problem in a sample of

Australian adolescents (12 to 19 years of age), Wilson et al. (2005) found significant and

moderate relationships across various sources of help. Specifically, the magnitude of the

relationship varied, with informal sources of help showing relatively stronger connections

between help-seeking intentions and help-seeking behaviours for a personal or emotional

problem: intimate partner (r = .48), non-parent family member (r = .42), friend (r = .31),

parent (r = .23), youth worker (r = .26), and mental health professional (r = .17).

Factors that Influence Help Seeking

One of the most consistent findings in the help-seeking research literature is that

female individuals are more willing and likely than male individuals to seek help for their

problems (e.g., Bergeron et al., 2005; Biddle, Gunnell, Sharp, & Donovan, 2004; Deane,

Wilson, & Ciarrochi, 2001; Rickwood et al., 2015; Slade et al., 2009). As compared to

male emerging adults, female emerging adults tend to report greater intentions to seek

help in general, as well as to seek help from their friends, parents, family members, and

mental health professionals, for their emotional and personal problems (Ciarrochi &

Deane, 2001; Deane et al., 2001; Rickwood, Deane, Wilson, & Ciarrochi, 2005; Topkaya,

2014). With respect to actual help-seeking behaviours, female emerging adults are

similarly more likely than male emerging adults to seek help in general, as well as to seek

help from friends, parents, and professionals, for their emotional or personal problems

(Bergeron et al., 2005; Biddle et al., 2004; Rickwood & Braithwaite, 1994; Rickwood et al., 2015; Slade et al., 2009). In addition, research has found that females are more likely to report a need for professional help for their emotional problems, as well as to report fewer help-seeking barriers and more positive attitudes toward help seeking, as compared to males (Gonzalez, Alegria, & Prihoda, 2005; Olenick, 2011).

Several researchers have suggested that gender differences in emotional awareness and emotional expression may help to account for the observed gender differences in the help seeking literature (Komiya, Good, & Sherrod, 2000; Olenick, 2011). For example, research suggests that women are more likely than men to seek help for their psychological problems, given that women are more willing to decipher and translate nonspecific feelings of distress into a conscious recognition that they are experiencing emotional problems (Kessler, Brown, & Broman, 1981). Correspondingly, it has been argued that female youths' greater willingness to identify internal feeling states as indicators of psychological problems and a need for support may help to explain why they are more likely than male youth to seek help (Srebnik et al., 1996). In addition, some researchers have noted that social norms in the expression of emotions may play a role in the observed gender differences in help seeking during emerging adulthood. Specifically, female individuals are encouraged to express their emotions and disclose their problems to others, as opposed to male individuals, who are socialized to restrict and suppress their emotions and to avoid discussing their problems with others, which, taken together, may explain why female individuals are comparatively more willing and likely to seek help for their personal and emotional problems (Olenick, 2011; Rickwood & Braithwaite, 1994).

With respect to age differences in help-seeking intentions and behaviours across emerging adulthood, few research studies have focused on developmental age patterns of help seeking throughout this period of time. Although researchers have examined the help seeking of emerging adults relative to adolescents and older adults (e.g., Bergeron et al., 2005; Gonzalez et al., 2005; Slade et al., 2009; Wilson et al., 2011), minimal empirical literature has explored whether there are age differences or developmental changes in help seeking within and across emerging adulthood in as much depth as the research documenting age differences in help seeking across adolescence. Interestingly, in one study investigating intentions to seek help from formal sources of support in a sample of emerging adults ($n = 289$), Thomas, Caputi, and Wilson (2014) found that there was no significant age difference in the likelihood of seeking professional help between 18- to 19-year-old participants (60% of the sample) and 20- to 25-year-old participants (40% of the sample).

In another study on emerging adults' ($n = 641$; 17 to 25 years old) intentions to seek help from both informal and formal sources, Wilson et al. (2011) did not note any age differences; however, the following significant differences in emerging adults' preferences for help sources were documented: intentions to seek help from a romantic partner were greater than intentions to seek help from a friend, family member, and a mental health professional; intentions to seek help from a friend were higher than intentions to seek help from family and mental health services; and help-seeking intentions from family were greater than those for a mental health professional. Evidently, emerging adults similarly have a preference for seeking help from informal sources than from formal sources of support.

In the only study that could be located examining help-seeking behaviours across ages within the period of emerging adulthood, Rickwood et al. (2015) compared the reported main influence for young people who actually sought professional help in-person across various age groups (12- to 14-year-old youth; 15- to 17-year-old youth; 18- to 20-year-old young adults; and 21- to 25-year-old young adults). For example, as compared to 29% of 18- to 20-year-old women who reported themselves as their strongest influence to seek professional help in-person, 41% of 21- to 25-year-old women endorsed themselves as the main influence for having sought in-person formal help. There was also an increase with age of the percentage of male emerging adults who identified themselves as the strongest influence for seeking in-person professional help (26% and 32% for 18- to 20-year-old men and 21- to 25-year-old men, respectively). Results revealed that the percentage of young men who endorsed their intimate partner as the main influence for seeking professional help increased with age (8% and 13% for 18- to 20-year-old men and 21- to 25-year-old men, respectively), while the percentage of young women who identified their intimate partner as the strongest influence for seeking formal support remained fairly stable across emerging adulthood (7% and 8% for 18- to 20-year-old women and 21- to 25-year-old women, respectively). In contrast, there was a decrease with age of the percentage of both female (24% and 16% for 18- to 20-year-old women and 21- to 25-year-old women, respectively) and male emerging adults (33% and 22% for 18- to 20-year-old men and 21- to 25-year-old men, respectively) who identified family as their main influence for seeking professional help. Finally, the percentage of both female (approximately 10% for both 18- to 20-year-old and 21- to 25-year-old women) and male emerging adults (7% and 8% for 18- to 20-year-old men and 21- to 25-

year-old men, respectively) who reported their friends as the strongest influence for seeking professional help remained moderately consistent across age.

Individuals' capacities to be attuned to their emotions, to express their feelings, and to manage and cope with their emotions have also been identified as factors that relate to the likelihood of individuals recognizing a problem and seeking help for the problem. More specifically, individuals who are aware of their emotions, able to identify, describe, and express their feelings to other people, and able to manage and regulate their emotions in an effective manner are more likely to recognize the presence of an emotional or distressing problem, and in turn, are more likely to seek help and confide in others about their problem (e.g., Ciarrochi & Deane, 2001; Ciarrochi et al., 2003; Rickwood, Deane, & Wilson, 2007; Rickwood et al., 2005; Wilson, Bushnell, & Caputi, 2011). In addition, emerging adults who are more open to, and comfortable with, experiencing their emotions tend to endorse more positive attitudes toward seeking professional help for psychological problems, whereas young people who are fearful of, and experience discomfort with, their emotions tend to have more negative attitudes toward seeking professional help (Komiya et al., 2000; Olenick, 2011).

Researchers have also examined the association between emerging adults' emotional competence and their intentions to seek help for emotional problems. For example, Ciarrochi and Deane (2001) investigated the effects of emotional competence on intentions to seek help from informal and formal sources of support for emotional problems and suicidal ideation in an undergraduate sample of emerging adults ($n = 300$; $M_{age} = 20.58$ years old). Emotional competence was defined as the ability to perceive and manage emotions in oneself. Results revealed that individuals who reported being highly

emotionally competent in managing their feelings had greater intentions to seek help for their emotional problems and suicidal ideations. In contrast, emerging adults who were less skilled at managing one's emotions were significantly less willing to seek help from family, friends, and health professionals for emotional problems and thoughts of suicide.

Some researchers have also documented a relationship between self-disclosure and help-seeking intentions. Self-disclosure is the process by which an individual reveals personal or intimate information about the self to another individual. Such information might include one's feelings, thoughts, attitudes, or beliefs (Derlega, Metts, Petronio, & Margulis, 1993). In an investigation into various factors that might influence one's intentions to seek help for a problem in a sample of undergraduate students (M_{age} = 18 years old), Hinson and Swanson (1993) found that the interaction of one's intention to self-disclose to a counsellor and the perceived severity of the problem predicted the largest amount of variance in individuals' intentions to seek help for a problem. That is, individuals who reported greater intentions to self-disclose to a counsellor, and who also perceived their problem as severe, were more likely to report greater intentions to seek help for the problem.

In a subsequent study on the connection between self-disclosure and help seeking in two samples of undergraduate students (n = 209 and 268, respectively), Vogel and Wester (2003) examined the role of one's tendency to self-disclose emotionally distressing information, as well as one's degree of comfort in emotional self-disclosure to a counsellor, in predicting attitudes and intentions of seeking support through counselling. The Distress Disclosure Index (DDI; Kahn & Hessling, 2001) was used to assess the propensity to disclose versus conceal emotionally and personally distressing

information (conceptualized as being on opposite ends of one construct). Results revealed that a tendency to self-disclose distressing information to other people, and a perception of being comfortable with self-disclosing emotions to a counsellor, both predicted more positive attitudes and greater intentions to seek help from counselling services. Conversely, a propensity to conceal distressing information from others, as well as a perception of feeling less comfortable with sharing such information, both predicted less positive attitudes toward seeking help from a counsellor. As underscored by Vogel and Wester (2003), it is important to consider not only how an individual's willingness to self-disclose distress might facilitate seeking help, but also how one's desire to suppress or conceal emotional distress might hinder or deter an individual from seeking support.

Research has shown that beliefs about mental health and attitudes toward help seeking can influence the decision to seek help (Cauce et al., 2002; Li, Dorstyn, & Denson, 2014; Srebnik et al., 1996; Thomas et al., 2014). More specifically, emerging adults who have negative attitudes toward professional help seeking are less likely to seek help than emerging adults who have positive attitudes about seeking help (Cramer, 1999; Gonzalez et al., 2005; Leong & Zachar, 1999; Li et al., 2014; Rickwood et al., 2005; Shaffer, Vogel, & Wei, 2006; Thomas et al., 2014; VonDras & Madey, 2004). In addition, young people who believe that they should be able to deal with and resolve problems on their own are less likely to seek informal or formal help for their personal or emotional problems (Rickwood et al., 2007; Thomas et al., 2014).

Previous help-seeking experiences have also been found to influence individuals' future help-seeking intentions and subsequent help-seeking behaviours. For example, emerging adults who have had past negative experiences of professional help seeking

21

tend to report lower intentions to seek help in the future (Hoey, 2014; Rickwood et al., 2005; Rickwood et al., 2007). Prior negative experiences include emerging adults' perceptions that the help received was not actually effective and that their problems were not regarded as serious. Conversely, emerging adults who have had past positive experiences with professional mental health services, and have subsequently gained knowledge about help seeking and feel comfortable with the process, tend to report greater intentions to seek help in the future and are more likely to exhibit actual help-seeking behaviours by seeking out professional help for personal or emotional problems (Biddle et al., 2004; Hoey, 2014; Rickwood et al., 2005; Topkaya, 2014). With respect to help-seeking behaviours, Biddle et al. (2004) revealed that having previously sought help (from any source) for a psychological or emotional problem significantly increased the likelihood that emerging adults actually sought professional help for their mental health problems within the past four weeks in a large sample ($n = 3004$) of young people (16 to 24 years old).

Help seeking is complex and further complicated by that fact that various factors may prevent or hinder individuals from seeking help for their problems. Researchers have investigated various barriers and obstacles, which impede or discourage emerging adults from seeking help for their emotional or personal problems (Hunt & Eisenberg, 2010; Wilson et al., 2011). Barriers commonly recognized as deterring individuals from seeking help include having a lack of understanding about mental health problems, having a lack of knowledge about where and from whom one can seek help (i.e., unaware of available resources), having concerns about there being a lack of confidentiality in seeking help, feeling worried, embarrassed, or shameful about seeking help, being fearful that one will

be treated differently by peers, the stigma associated with having or seeking help for psychological problems, having a strong need for autonomy, and having the perception that professional help will not be useful (e.g., Hunt & Eisenberg, 2010; Rickwood et al., 2005; Rickwood et al., 2007; Wilson & Deane, 2001; Wilson et al., 2011).

In an effort to counteract and overcome these barriers to seeking help, researchers have also sought to identify and gain greater insight into the facilitating factors that assist and encourage emerging adults to seek help for their emotional or personal problems. For example, normalizing emotional and mental health problems can help young people to feel less 'isolated' and not 'alone,' leading to a greater likelihood of seeking help for their problems (Wilson & Deane, 2001). Research has shown that having a trusting and strong, open relationship is another crucial facilitator in encouraging individuals to seek help for their emotional or personal problems. Specifically, young people perceive that having strong, genuine, and emotionally open and safe relationships with the potential sources of support (e.g., peers or parents) are important conditions to facilitate help seeking and the disclosure of their problems to other people (Piper & MacDonald, 2008; Wilson & Deane, 2001). These findings on the importance of having trusting, emotionally safe and open relationships in helping individuals to seek support for their problems are especially relevant and interesting to note given the well documented finding that young people are most likely to seek help from their friends, parents, and romantic partners and are more inclined to seek help from these informal sources than from formal sources of support (e.g., Biddle et al., 2004; Piper & MacDonald, 2008; Rickwood et al., 2007, 2015; Ryan, Shochet, & Stallman, 2010; Wilson et al., 2011).

Research has shown that emerging adults' perceptions of the severity of their problem and the magnitude of their psychological distress impact the degree to which they are willing and likely to seek help for their problem (Biddle et al., 2004; Kim & Zane, 2016; Vogel & Wei, 2005). For example, in a sample of university students ($n = 101$), Hinson and Swanson (1993) found that the more severe the problem was perceived to be, the more willing individuals were to seek professional help for personal or emotional problems. Similarly, it has been repeatedly documented that young people who report high levels of current psychological distress tend to be more willing and likely to seek professional help for their emotionally distressing problems (e.g., Biddle et al., 2004; Hoey, 2014; Kim & Zane, 2016; Topkaya, 2014; Vogel & Wei, 2005).

Attachment

Evidently, emerging adults' close relationships play a pivotal role in the process by which young people seek help for their personal and emotional problems. The perceived quality of emerging adults' relationships with their family, friends, and romantic partners is especially important in influencing their decisions about whether and from whom to seek help. That is, young people whose relationships with their parents, friends, and romantic partners are characterized by a sense of trust and closeness, a perception that emotional support from others is available, and an openness to express personal information, tend to be more willing and likely to seek help for their problems (Rickwood et al., 2007, 2015; Wilson & Deane, 2001; Wilson et al., 2011). Attachment theory (Bowlby, 1969/1982), with its emphasis on attachment relationships, represents a valuable framework by which to investigate the influence of emerging adults'

relationships on emerging adults' intentions and behaviours of seeking help for their emotional or personal problems.

Attachment Theory

In formulating attachment theory, Bowlby (1969/1982) postulated that the attachment behaviour of an infant is inherently programmed and serves a biological function, promoting survival and protection from harm. Attachment behaviour is behaviour that serves to increase the proximity of the infant to the attachment figure (i.e., parent or primary caregiver), as it is usually displayed in stressful conditions when closeness to the attachment figure is critical. It is argued that these attachment behaviours are organized into an "attachment behavioural system" (Bowlby, 1969/1982), which is comprised of an assortment of behaviours that share similar meanings and accomplish comparable goals. Although attachment behaviours vary depending on the age and development of the child (Rice, 1990), the organizational patterns of the attachment behavioural system tend to remain stable across contexts and over time.

The organization of attachment behaviour can also be understood from a control system perspective (Bowlby, 1969/1982). Bowlby argued that the attachment behavioural system becomes activated under conditions in which the child experiences stress or discomfort or perceives threatening stimuli in the environment. When the child's attachment system becomes activated, the attachment figure's location and behavioural response to the child (e.g., the parent's attentive reassurance, or withdrawal or rejection) are important in that the child's attachment behaviour tends to stop once the desired degree of proximity to the attachment figure is attained. That is, once an appropriate state of physical or emotional proximity is achieved and maintained with an available or

attentive attachment figure, the attachment system becomes relatively less activated. On these occasions, it is argued that the child is using the attachment figure as a physical and emotional 'safe haven' to go to as a source of support and comfort during times of stress so as to alleviate distress (Cassidy, 2008).

Although most young children become attached to their attachment figure, not all attachments are considered to be secure in nature (Bowlby, 1956). Bowlby (1969/1982) postulated that children develop "internal working models," which are essentially cognitive schemas of the self and others, and are based on mental representations of previous lived experiences with the attachment figure. Internal working models influence children's anticipations of what to expect from other people in the future, including how others will view and behave toward them (Bretherton & Munholland, 2008). A young child forms a secure attachment from having repeatedly experienced the attachment figure as being emotionally available, attentive, and sensitive to the child's needs and, accordingly, comes to develop a mental representation of the attachment figure as being responsive and dependably accessible. A child who has a secure attachment tends to view the self as worthy and to perceive other people as good and trustworthy. In contrast, a young child establishes an insecure attachment from having experienced recurrent interactions wherein the attachment figure had been unavailable or unpredictably accessible to the child, or had critically or insensitively responded to the child's physical or emotional needs during times of stress. As a result, the child comes to acquire mental representations of the self as unworthy and the attachment figure (and subsequently other people) as being unreliable or inconsistent in availability and responsiveness when so needed (Cassidy, 2008; Weinfield, Sroufe, Egeland, & Carlson, 2008). Internal working

models of self and others are then perpetuated in later interpersonal experiences and future relationships throughout the lifespan (Bretherton & Munholland, 2008).

With respect to individual differences in attachment security, the work of Ainsworth (1973) was instrumental in conceptualizing and providing a method to empirically test Bowlby's (1969) attachment theory. Ainsworth and colleagues (1978) identified three patterns of attachment to describe differences in the quality of attachment relationships of infants toward their parents: (1) *secure* (secure infant attachment bond to parent; infant welcomes contact with attachment figure; uses parent as a secure base from which to explore the environment), (2) *avoidant* (insecure infant attachment bond to parent; characterized by little separation protest and a tendency of infant to avoid or ignore parent), and (3) *ambivalent* or *resistant* (insecure infant attachment bond to parent; characterized by strong separation protest and a tendency of infant to remain near but resist contact initiated by parent, particularly after separation). Main and Solomon (1990) later distinguished a fourth pattern of attachment labelled as (4) *disorganized/disoriented* (characterized by the infant's lack of a coherent pattern of attachment behaviours; the infant tends to display a mix of behaviours that may seem odd, aimless, or contradictory).

Attachment in Emerging Adulthood

Although attachments are formed during infancy and the attachment system is most crucial during this period, it is believed that attachment relationships continue to be important throughout the lifespan, including emerging adulthood. In addition to the various developmental changes in emerging adulthood (e.g., in identity exploration, cognition, education, and family, peer, and romantic relationships), there are also changes in the expression of the attachment behavioural system during this transitional period

27

(Ahmed & Brumbaugh, 2014; Arnett, 2010; Fraley & Davis, 1997). Attachment behaviours vary depending on the age and development of the individual, and in emerging adulthood, this change is especially evident in the manifestation of attachment behaviours in seeking proximity to the attachment figure (Rice, 1990). That is, a young toddler may display attachment behaviour by holding on to her parent when in a stressful situation. In contrast, this same individual, as a first-year student in university, may show attachment behaviour by telephoning home to her parents when feeling distressed. Despite the change in the expression of the attachment behaviour, it is argued that the attachment behaviours maintained a similar pattern of organization over time (Rice, 1990). However, with that being said, there is also a change in the goal of the attachment system later in development in that it becomes more centred on the accessibility of, rather than physical proximity to, the parent (Kerns, Tomich, Aspelmeier, & Contreras, 2000).

Emerging adulthood is also associated with changes in cognitive abilities, such as individuals having a greater awareness and integration of practical limitations to logical thinking (Arnett, 2010). For example, emerging adults increasingly recognize that factors specific to a given situation should be contemplated when considering life problems or scenarios; as opposed to depending on definite right and wrong answers, emerging adults tend to engage in postformal thinking in that they recognize that life problems are frequently complex and ambiguous (Arnett, 2010). Accordingly, at this phase of development, individuals have the ability to reflect on attachment relationships, in general, and on their own ways of thinking, which may involve modifying their internal working models of self and others (Allen, 2008).

A key feature of the attachment relationship during emerging adulthood is that it becomes progressively more goal-corrected, with young adults beginning to search for an enduring, goal-corrected partnership with a partner of a similar age (Marvin & Britner, 2008). Within emerging adulthood, there is significant change in the goal-corrected partnership, such that young people and parents alter their behaviours so as to achieve a balance between young people's attachment needs and their other needs, such as their desire for independence (Allen, 2008; Marvin & Britner, 2008). In particular, emerging adulthood is characterized by the need for autonomy and the exploration of various identities (e.g., in love, school, and work; Arnett, 2010). Even though attachment to parents continues to be important during this transitional period, emerging adults tend to show comparatively less reliance on their parents as attachment figures and concurrently, attempt to seek greater independence from their parents. For example, secure goal-corrected partnerships involve the opportunity for emerging adults to have greater independence and explore new situations and identities, while also continuing to view their parents as a secure base to which they can return for emotional support when needed (Ahmed & Brumbaugh, 2014; Allen, 2008; Fraley & Davis, 1997; Marvin & Britner, 2008). Moreover, despite their striving for greater autonomy, many emerging adults continue to use their parents as a "safe haven," seeking comfort, support, and help from them during times of personal or emotional distress (Ahmed & Brumbaugh, 2014; Allen, 2008; Fraley & Davis, 1997; Marvin & Britner, 2008).

The role of friends and romantic partners also changes during emerging adulthood, whereby close friendships and romantic relationships gradually come to assume the qualities and functions of attachment relationships and individuals in

emerging adulthood increasingly depend on their friends and romantic partners to accomplish their attachment needs (Ahmed & Brumbaugh, 2014; Arnett, 2010; Feeney, 2008; Fraley & Davis, 1997; Hazan & Shaver, 1994). Research has shown that most emerging adults continue to use their parents as primary attachment figures, but are in the process of transferring attachment-related functions from parents to close friends and romantic partners. For example, in a sample of emerging adults ($n = 237$), Fraley and Davis (1997) found that significantly more individuals relied on their peers (best friends and romantic partners) than their parents for the attachment functions of proximity seeking (seeking nearness/closeness during times of need) and safe haven (providing comfort and emotional support to relieve distress); however, more individuals continued to rely more on their parents for the attachment function of secure base (providing safe base from which to explore the environment).

Measurement of Attachment

By emerging adulthood, attachment can be assessed as a general, overarching attachment organization, which is stable and can influence young people's future behaviours (Hesse, 1999). With their advancements in cognitive development, emerging adults have formed a more integrated and generalized view of attachment from their various experiences with multiple attachment figures and caregivers (Allen, 2008; Hesse, 1999; Main, Kaplan, & Cassidy, 1985).

In conceptualizing and measuring individual differences in attachment patterns, researchers have been increasingly using dimensional measures with dimensional scores in attachment research (as opposed to categorical classifications and prototype continuous ratings; Fraley & Waller, 1998; Fraley, Heffernan, Vicary, & Brumbaugh, 2011;

Mikulincer & Shaver, 2007a). In assessing attachment relationships, many researchers currently use a two-dimensional model of attachment, which was originally developed in the context of adult romantic relationships (Brennan et al., 1998; Crowell, Fraley, & Shaver, 2008), but has since been modified and applied across multiple relationship contexts (Fraley et al., 2011) and in samples of emerging adults (Han & Pistole, 2014; Lecce, 2008; Vogel & Wei, 2005; Wei, Vogel, Ku, & Zakalik, 2005). The two dimensions in this model of attachment are *attachment avoidance* (discomfort with closeness in relationships) and *attachment anxiety* (preoccupation about relationships). A brief review of the development of self-report measures of attachment style will be valuable in helping to understand this current two-dimensional model of attachment.

Hazan and Shaver (1987) created the first categorical measure of romantic attachment styles based on Ainsworth et al.'s (1978) three-category typology of individual differences in the attachment of infants. Specifically, three attachment styles in romantic relationships were identified: *secure* (tend to feel comfortable in close relationships), *anxious* (tend to worry about the partner in close relationships), and *avoidant* (tend to feel uncomfortable in close relationships). As an extension to Hazan and Shaver's (1987) work, while also incorporating Bowlby's (1969/1982) concepts of internal working models of self and others, Bartholomew and Horowitz (1991; Relationship Questionnaire) used a two-dimensional space to conceptualize and define a four-category model of attachment prototypes: *secure* (tend to feel comfortable with intimacy and independence in close relationships), *preoccupied* (tend to worry about being alone or being rejected/abandoned by the relationship partner), *dismissing avoidant* (tend to avoid closeness with others and feel uncomfortable with intimacy in

31

relationships), and *fearful avoidant* (tend to want closeness in relationships, but are fearful of intimacy in relationships).

Brennan et al. (1998; Experiences in Close Relationships Scale [ECR]) conducted a factor analysis on the items from all the existing self-report attachment measures and found support for the existence of two major higher-order factors (attachment anxiety and attachment avoidance) across the majority of the measures. Accordingly, Brennan et al. created a two-dimensional model of romantic attachment relationships with two scales: *attachment anxiety* and *attachment avoidance*. Namely, individuals who score high on the dimensional scale of attachment anxiety tend to be preoccupied with relationships, whereas individuals who score high on the dimensional scale of attachment avoidance tend to be uncomfortable with closeness in relationships. In a later revision (Experiences in Close Relationships Scale – Revised [ECR-R]), Fraley, Waller, and Brennan (2000) modified the ECR by selecting different items from Brennan et al.'s (1998) large item pool and then substituted them for several original items so as to improve the capacity of the two scales to better discriminate at the secure ends of the dimensional scales.

In an effort to broaden the scope of the measure beyond the sole domain of romantic attachment, while maintaining the two-dimensional focus on avoidance and anxiety, Fraley et al. (2011) modified the ECR-R to develop the Experiences in Close Relationships – Relationship Structures questionnaire (ECR-RS), which is designed to assess attachment anxiety and attachment avoidance across several relationship contexts (i.e., mother, father, best friend, and romantic partner). In addition to yielding dimensional scores of both anxiety and avoidance for each relationship-specific attachment structure, the ECR-RS also provides a general, global attachment score for

both attachment anxiety and attachment avoidance so as to assess individuals' general

attachment in close relationships. The ECR-RS has been shown to have good structural

and construct validity for use with both emerging adults and adolescents (Donbaek &

Elklit, 2014; Fraley, Hudson, Heffernan, & Segal, 2015; Hudson, Fraley, Chopik, &

Heffernan, 2015; Symons, Adams, & Smith, 2016).

For the purpose of this present study, the two-dimensional model of attachment

style was adopted and the ECR-RS was used to assess emerging adults' general

attachment anxiety and general attachment avoidance. Fraley et al. (2015) recently

analyzed data on the ECR-RS from two different samples of adults ($n = 2,400$; $n = 2,300$)

to determine whether a categorical or dimensional approach is better suited to

conceptualize and measure individual differences in attachment style at a global

attachment level and within four specific relationship contexts (mother, father, best

friend, and romantic partner). Results revealed that dimensional models are a better fit

than categorical models for conceptualizing and measuring individual differences in

attachment style for both general attachment representations and specific relationship

domains. A key advantage of dimensional models is that they are stronger and more

precise at capturing individual differences in attachment style as compared to categorical

models (Fraley et al., 2015). These findings are consistent with other researchers (e.g.,

Mikulincer & Shaver, 2007a) who are similarly advocating for and increasingly using

dimensional models to conceptualize and measure attachment style.

Attachment and Help Seeking

Given that young people are most likely to seek help from their parents, friends,

romantic partners, and individuals with whom they have close and trusting relationships

(Ahmed & Brumbaugh, 2014; Fraley & Davis, 1997; Rickwood et al., 2015; Wilson et al., 2011), attachment theory represents a valuable perspective from which to examine help seeking in emerging adults. Indeed, there is a growing body of empirical literature investigating the link between attachment and help seeking, as well as the role of potential mediators in this relationship. For example, Vogel and Wei (2005) investigated the mediating roles of psychological distress and perceived social support in the relations of both attachment anxiety and attachment avoidance with intentions to seek professional help in a sample of undergraduate students ($n = 355$). The dimensions of attachment anxiety and attachment avoidance were conceptualized in the context of romantic relationships and measured using the Experiences in Close Relationships Scale (Brennan et al., 1998). Intentions to seek professional support were assessed using the Intentions to Seek Counseling Inventory (ISCI; Cash, Begley, McCown, & Weise, 1975; Cepeda-Benito & Short, 1998). Findings showed that individuals with higher levels of attachment anxiety were significantly more likely to recognize their personal distress and significantly more likely to seek professional help. In contrast, individuals with higher levels of attachment avoidance were significantly more likely to deny their psychological distress and were significantly less likely to seek counselling support.

As highlighted by Vogel and Wei (2005), these results are in line with attachment theory. That is, whereas individuals with attachment anxiety are usually hypervigilant to signals of distress, and tend to express, or even exaggerate, their distress in an effort to receive support from other people, individuals with attachment avoidance tend to avoid detecting their own emotional reactions, and are likely to supress or inhibit their acknowledgement or expression of emotional distress so as to downplay a need for help

34

from others (Mikulincer & Shaver, 2008). Interestingly, however, Vogel and Wei also showed that both individuals with attachment avoidance and individuals with attachment anxiety reported having significantly less perceived social support, which then contributed to their having greater feelings of distress, and that distress, in turn, increased the likelihood of seeking professional help. It is interesting to note that although individuals with attachment avoidance are reluctant to seek professional help, if these individuals do perceive a lack of social support, resulting in sufficiently heightened feelings of distress, then they are more likely to seek counselling support.

In a second study examining the link between the attachment and help-seeking intentions, Shaffer, Vogel, and Wei (2006) explored the mediating roles of anticipated risk, anticipated benefits, and attitudes toward seeking professional help in the relationship between attachment (anxiety and avoidance dimensions) and help-seeking intentions for professional support in a sample of undergraduate students ($n = 821$). Consistent with the results documented by Vogel and Wei (2005), Shaffer et al. (2006) found that individuals with higher levels of attachment anxiety had significantly greater intentions to seek professional help and that this link was mediated by higher anticipated benefits and more positive attitudes toward seeking help. In contrast, individuals with higher levels of attachment avoidance had significantly lower intentions to seek professional help and that this link was mediated by greater anticipated risks, lower anticipated benefits, and fewer positive attitudes toward seeking help.

Cheng, McDermott, and Lopez (2015) investigated the mediating roles of mental health difficulties in the connection between attachment (both anxiety and avoidance) and intentions to seek professional help from counselling services in an undergraduate sample

($n = 1,682$) of emerging adults (18 to 25 years old). The attachment dimensions of anxiety and avoidance were conceptualized in the context of romantic relationships and assessed using the 12-item Experiences in Close Relationships – Short Form (ECR-S; Wei, Russell, Mallinckrodt, & Vogel, 2007). Intentions to seek professional support were measured with the ISCI (Cash et al., 1975). Similar to the findings documented in the previously discussed studies, Cheng et al. (2015) revealed that emerging adults with higher levels of attachment anxiety reported significantly greater intentions to seek professional help. Furthermore, higher levels of attachment anxiety significantly predicted a greater number of anxiety and depression symptoms, which in turn, was significantly linked to having greater intentions to seek professional help. Surprisingly, however, Cheng et al. (2015) found that higher levels of attachment avoidance did not significantly negatively predict lower intentions to seek professional help.

Although researchers have increasingly investigated the connection between attachment and intentions to seek help, there is a paucity of research exploring a link between attachment and help-seeking behaviours. In one of the few located studies with such a focus, DeFronzo, Panzarella, and Butler (2001) explored the connection between attachment styles (secure and avoidant) and support-seeking behaviour in a sample of undergraduate students ($n = 224$). Participants' attachment styles were assessed with the categorical approach of the Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994); only participants classified as having a secure style or an avoidant style were included in the analyses. Help-seeking behaviour was conceptualized as social support-seeking behaviour (i.e., the number of people whom the participants had talked to about a personally stressful event) and was measured using the Stress and Social

Feedback Questionnaire (Panzarella & Alloy, 1997). Findings showed that individuals

with a secure attachment style engaged in significantly more social support-seeking

behaviour than individuals with an avoidant attachment style.

In a more recent study on attachment and help-seeking behaviours, Bumbacco

(2015) explored the mediating role of attitudes toward seeking help in the link between

attachment styles and help-seeking behaviours in a sample ($n = 311$) of first-year

undergraduate students (17 to 50 years of age; $M_{age} = 19.33$, $SD = 2.87$). Attachment

styles were assessed using the Trent Relationship Scales Questionnaire (T-RSQ; Scharfe,

2016), which is a 40-item continuous measure of attachment style measuring

Bartholomew's (1990) four-category model of attachment (secure, preoccupied,

dismissing, and fearful) for three attachment figures (mother, father, and close friends)

that includes 17 items from Bartholomew's RSQ (Griffin & Bartholomew, 1994) and an

additional 23 items created by Scharfe (2016). Help-seeking behaviours over the past

three months were assessed with a list of various self-help, informal, and formal sources

of support (e.g., sought help by using calm breathing/muscle relaxation techniques, going

to a friend, and going to a psychologist, respectively). Secure attachment with mother,

father, and close friends were significantly positively related to engaging in help-seeking

behaviours from informal sources of support. Preoccupied attachment (comparable to

attachment anxiety) with mother, father, and close friends were significantly positively

associated with engaging in both formal and informal help-seeking behaviour.

Dismissing attachment (comparable to attachment avoidance) with close friends was

significantly negatively related to informal help-seeking behaviour. Finally, Bumbacco

found that positive relationships of secure attachment and preoccupied attachment with

greater informal help-seeking behaviour were partially mediated by positive attitudes toward seeking non-professional help.

In review of the existing empirical literature on the relationship between attachment and help seeking, it is evident that much of the research has focused on help-seeking intentions from professional sources of support (Cheng et al., 2015; Schaffer et al., 2006; Vogel & Wei, 2005). With so few studies having been conducted on the connection between attachment and help-seeking behaviours in emerging adults (Bumbacco, 2015), additional research is needed to gain greater insight into how emerging adults' attachment relationships influence both their intentions and behaviours to seek help from various sources of help. Moreover, with emerging adults being more likely to seek help from friends, family, and romantic partners than from professional sources (Ahmed & Brumbaugh, 2014; Biddle et al., 2004; Fraley & Davis, 1997; Rickwood et al., 2015; Ryan et al., 2010; Wilson et al., 2011), it was important that these informal sources of help also be considered in this present study.

Attachment and Emotion Regulation

There is a large body of both theoretical and empirical work supporting the use of attachment theory as a framework from which to understand and explain emotion regulation and affect expression (Mikulincer, Shaver, & Pereg, 2003). Namely, attachment patterns impact patterns of emotion regulation and affect expression, whereby differences in attachment are evidently manifested in corresponding differences in the expression and regulation of emotions (Cassidy, 1994; Weinfield et al., 2008). Emotion regulation refers to the capacity to control and manage emotional reactions and to cope with emotional arousal so as to sustain an ideally motivating degree of emotion, as

opposed to experiencing an intolerable or overwhelming intensity of emotion (Cole, Martin, & Dennis, 2004).

The theoretical literature on the relation between patterns of attachment and emotion regulation (Cassidy, 1994; Sroufe, Egeland, Carlson, & Collins, 2005) indicates that infants who are in secure attachment relationships will become flexible in their emotional self-regulation strategies when experiencing negative emotions, as their primary caregivers tend to be accepting of various emotional expressions. In contrast, infants who are in insecure avoidant relationships (comparable to individuals who score high on the dimension of attachment avoidance later in development) will come to downplay or restrain expressions of distress and to develop poor emotion regulation skills when experiencing negative emotions, as their primary caregivers tend to be rejecting of such expressions. In comparison, infants who are in insecure ambivalent/resistant relationships (comparable to individuals who score high on the dimension of attachment anxiety later in development) will come to amplify or intensify their expressions of distress and to have difficulty managing their negative emotions, as their primary caregivers tend to unpredictably or inconsistently respond to their expressions of negative emotion (Laible & Panfile, 2009; Oppenheim & Koren-Karie, 2009).

Mikulincer and Shaver (2003, 2007b) developed a model of attachment system activation, which focuses on attachment-related strategies of emotion regulation. This model is comprised of three key components: the monitoring and appraisal of threatening events, the monitoring and appraisal of an attachment figure's availability and responsiveness, and the monitoring and appraisal of the feasibility and expected usefulness or helpfulness of seeking proximity to an attachment figure (either figures in

general or a particular figure). When a stressor is appraised as threatening or distressing and the attachment system is activated, individuals who are securely attached will use the primary attachment strategy of seeking proximity to an attachment figure either by seeking help through the physical presence of an attachment figure or by mentally recalling mental images or memories of previous interactions (i.e., mental representations) with attachment figures. However, individuals who are insecurely attached have come to learn through multiple repeated experiences with unavailable, unresponsive, or inconsistent attachment figures that proximity seeking commonly fails as an emotion regulation strategy. Consequently, these individuals have developed secondary strategies (i.e., deactivating strategies and hyperactivating strategies) as means in which to regulate their emotions, as opposed to seeking proximity and support from attachment figures (Mikulincer & Shaver, 2008).

Deactivating strategies involve inhibiting and supressing negative emotions, and supressing or denying feelings of distress or a need for help from an attachment figure. Individuals who develop a pattern of attachment avoidance in relationships tend to rely on deactivating strategies in order to regulate their emotions (Mikulincer & Shaver, 2007, 2008; Mikulincer, Shaver, & Pereg, 2003). On the other hand, hyperactivating strategies involve amplifying expressions of distress, fears, and needs, as well as lead to tendencies to be vigilant for potential threats, preoccupied about the availability and responsiveness of attachment figures, and to be often engaged in proximity seeking. Individuals who develop a pattern of attachment anxiety in relationships tend to rely on hyperactivating strategies (Mikulincer & Shaver, 2007, 2008; Mikulincer et al., 2003).

In a recent empirical study, Han and Pistole (2014) investigated the relations between attachment style and various emotion regulation difficulties in a university sample of undergraduate and graduate students ($n = 381$; 18 to 60 years old). The two dimensions of attachment avoidance and attachment anxiety were assessed using the 12-item Experiences in Close Relationship – Short Form (ECR-S; Wei, Russell, Mallinckrodt, & Vogel, 2007). Emotion regulation difficulties were measured using the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004), which is a 36-item questionnaire comprised of six subscales: lack of emotional awareness (tendency to ignore or be inattentive to one's emotions); lack of emotional clarity (tendency to be unclear as to which emotions are being experienced); non-acceptance of emotional responses (non-acceptance of one's negative emotions or distress); limited access to effective emotion regulation strategies (belief that there is little that can be done to effectively regulate one's distress); difficulties engaging in goal-directed behaviour (difficulty concentrating and accomplishing tasks when distressed); and impulse control difficulties (difficulty remaining in control of one's behaviour when feeling distressed). As reported by Han and Pistole, higher scores on attachment avoidance and attachment anxiety were both significantly positively related to greater difficulties with lack of emotional awareness ($r = .35$ and $.16$, $p < .01$, respectively), lack of emotional clarity ($r = .35$ and $.26$, $p < .01$, respectively), non-acceptance of emotional responses ($r = .28$ and $.34$, $p < .01$, respectively), limited access to effective emotion regulation strategies ($r = .28$ and $.45$, $p < .01$, respectively), engaging in goal-directed behaviour ($r = .20$ and $.33$, $p < .01$, respectively), and impulse control ($r = .23$ and $.38$, $p < .01$, respectively).

Lecce (2008) likewise examined the connection between attachment style and emotion regulation in a community sample ($n = 213$) of adults (18 to 73 years old). Attachment anxiety and attachment avoidance were measured using the 36-item Experiences in Close Relationships Scale – Revised (ECRS-R; Fraley, Waller, & Brennan, 2000). Difficulties in emotion regulation were assessed with the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004). Consistent with the findings outlined by Han and Pistole (2014), Lecce (2008) found that individuals who reported greater attachment anxiety endorsed significantly greater difficulties with lack of emotional clarity ($r = .36$, $p < .001$), non-acceptance of negative emotions ($r = .39$, $p < .001$), limited access to emotion regulation strategies ($r = .50$, $p < .001$), not engaging in goal-directed behaviour ($r = .34$, $p < .001$), and impulse control ($r = .30$, $p < .001$). Similarly, individuals who reported greater attachment avoidance endorsed significantly greater difficulties across five emotion regulation subscales (i.e., lack of emotional awareness, $r = .25$, $p < .001$; lack of emotional clarity, $r = .31$, $p < .001$; non-acceptance of negative emotions, $r = .30$, $p < .001$; limited access to emotion regulation strategies, $r = .36$, $p < .001$; and impulse control difficulties, $r = .22$, $p < .01$). Interestingly, when both attachment dimensions were tested simultaneously, attachment avoidance uniquely predicted lack of emotional awareness and lack of emotional clarity, whereas attachment anxiety uniquely predicted non-acceptance of negative emotional responses and limited access to emotion regulation strategies.

In another study with a sample of undergraduate students, Wei, Vogel, Ku, and Zakalik (2005) investigated the role of both emotional reactivity and emotional cutoff in the relations among attachment anxiety, attachment avoidance, negative mood, and

interpersonal problems in a sample of undergraduate students ($n = 229$). The two dimensions of attachment were measured using the Experiences in Close Relationships Scale (ECR; Brennan et al., 1998). Emotional reactivity (e.g., "At times I feel as if I'm riding an emotional rollercoaster") and emotional cutoff (e.g., "I would never consider turning to any of my family members for emotional support") were conceptualized as the emotion regulation strategies of hyperactivation and deactivation, respectively. Results demonstrated that emotional reactivity uniquely mediated the relationships between attachment anxiety and negative mood and interpersonal problems; that is, individuals with greater attachment anxiety reported experiencing more emotional reactivity ($r = .39$, $p < .001$), which in turn, predicted a more negative mood and greater interpersonal difficulties. In contrast, emotional cutoff uniquely mediated the relationships between attachment avoidance and negative mood and interpersonal problems; namely, individuals with greater attachment avoidance endorsed more emotional cutoff ($r = .33$, $p < .001$), which subsequently, lead to a more negative mood and greater interpersonal difficulties.

Interestingly, the findings reported by Wei et al. (2005) are consistent with the principles of the emotion regulation model of attachment (Mikulincer & Shaver, 2008; Mikulincer, Shaver, &, Pereg, 2003; Shaver & Mikulincer, 2002). Specifically, individuals with high levels of attachment anxiety have come to experience distance from attachment figures as dangerous and have developed a sense of helplessness in being able to effectively self-regulate distress on their own. Subsequently, these individuals are routinely hypervigilant in monitoring their environments so as to identify potential sources of threat and to assess the availability of their attachment figures. It is

understandable then that anxiously attached individuals tend to become overwhelmed by and dysregulated in managing their own emotions. On the other hand, individuals with high levels of attachment avoidance have come to associate punishment (e.g., inattention, anger, rejection) with seeking proximity to attachment figures and subsequently, they have developed a sense of self-reliance, as well as a tendency to inhibit the expression of their emotional needs. Accordingly, avoidantly attached individuals tend to deactivate and suppress their emotions in an effort to regulate them.

In contextualizing the findings from the reviewed studies (Han & Pistole, 2014; Lecce, 2008; Wei et al., 2005) within the larger body of literature, it is evident that there is ample theoretical and empirical support for the connection between attachment and emotion regulation (Mikulincer & Shaver, 2008; Mikulincer et al., 2003). Furthermore, as previously discussed, research has shown there to be relations between young people's emotional awareness and ability to express and manage their emotions with their help-seeking intentions and behaviours for emotional and distressing problems (Ciarrochi & Deane, 2001; Ciarrochi et al., 2002; Ciarrochi et al., 2003; Komiya et al., 2000; Rickwood et al., 2007; Wilson et al., 2011). However, despite these relations among attachment, emotion regulation, and help seeking, researchers have neglected to examine the potential mediating role of emotion regulation in the connection between attachment style and help-seeking intentions and behaviours (Vogel & Wei, 2005). Consequently, a goal of this present study was to explore the potential mediating role of emotion regulation difficulties in the links between attachment anxiety and attachment avoidance with help-seeking intentions and behaviours in emerging adults.

Attachment and Distress Disclosure

Researchers have also documented a relationship between attachment and self-disclosure of personal information. Self-disclosure is the process by which an individual reveals personal or intimate information about the self to another individual. Such information might include one's feelings, thoughts, attitudes, or beliefs (Derlega et al., 1993). In a series of studies on attachment and self-disclosure, Mikulincer and Nachshon (1991) investigated the connection between undergraduate students' categorical attachment styles (secure, avoidant, and ambivalent) and willingness to self-disclose in various social situations (e.g., varying degrees of intimacy in self-disclosures to mother, father, same-sex friend, opposite-sex friend, and romantic partner).

Analyses revealed that attachment styles were associated with patterns of self-disclosure, such that both individuals with secure and with ambivalent styles reported higher levels of overall self-disclosure than individuals with an avoidant style. In addition, individuals with secure and ambivalent attachment styles showed greater levels of self-disclosure to mothers and to same-sex friends than did individuals with an avoidant attachment style. Individuals with a secure style also demonstrated higher levels of self-disclosure to fathers and to romantic partners than did both individuals with ambivalent and avoidant styles. Finally, in face-to-face interactions in a laboratory setting, individuals with secure and ambivalent styles were found to self-disclose more information to an individual (confederate), who had just self-disclosed highly personal information, than to an individual (confederate) who did not self-disclose intimate information. The degree of intimacy of others' self-disclosures did not influence the self-disclosures of individuals with an avoidant style. It is evident that attachment style is not

only related to one's general willingness to self-disclose information, but also to the relationship type of the person (e.g., parent, friend, or romantic partner) with whom one is self-disclosing personal information. Arguably then, attachment style might also be related to the sources of support that one goes to for help.

The two dimensions of attachment anxiety and attachment avoidance have also been used in research on the connection between attachment and self-disclosure of emotional or personally distressing information. For example, Garrison, Kahn, Sauer, and Florczak (2012) investigated the link between attachment style and self-disclosure of distress in a sample of undergraduate university students ($n = 121$; $M_{age} = 19.76$ years old). Attachment avoidance and attachment anxiety were conceptualized in the context of romantic relationships and measured using the 36-item Experiences in Close Relationships Scale (ECRS; Brennan et al., 1998). The tendency to self-disclose distress was assessed with the Distress Disclosure Index (DDI; Kahn & Hessling, 2001), which is a 12-item self-report questionnaire that measures individuals' general propensity to disclose (versus conceal) personally distressing information about their thoughts, emotions, and personal problems to other people. Participants also completed a daily self-report diary for one week by reporting on their most unpleasant event of the day, the intensity of their emotional reaction to the unpleasant event, and the degree to which they shared information about the unpleasant event with another person on that day.

Consistent with the theoretical literature and Garrison et al.'s (2012) expectations, results demonstrated that individuals with higher levels of attachment avoidance exhibited significantly lower tendencies to self-disclose distress to other people ($r = -.50$, $p < .001$). Yet, contrary to theoretically informed predictions, individuals with higher

levels of attachment anxiety endorsed significantly lower tendencies to self-disclose distress ($r = -.24$, $p < .01$). However, when controlling for attachment avoidance and depressive symptoms, attachment anxiety was not related to generalized tendencies to self-disclose distress to others, implying that attachment anxiety does not have unique predictive effects on individuals' general tendencies to disclose distress to others. Interestingly though, there was a positive relation between the emotional intensity experienced in response to daily unpleasant events and the emotional disclosure of these events, which intensified as attachment anxiety increased. In other words, attachment anxiety and self-disclosure of more emotionally intense events were positively related, which is in line with the hyperactivating regulation strategies of individuals who report high levels of anxious attachment and tend to rely on other people in an effort to regulate their emotions. These findings suggest that individuals with greater attachment anxiety do engage in self-disclosure with other people about their emotional events, but that this disclosure tends to occur when unpleasant events are relatively high in emotional intensity (Garrison et al., 2012).

In another study on a different sample of undergraduate university students ($n = 116$; $M_{age} = 19.60$ years old), Garrison, Kahn, Miller, and Sauer (2014) reported mixed results on the relations among attachment avoidance, attachment anxiety, general tendencies to self-disclose distress, and emotional disclosure in response to specific and daily unpleasant events. Consistent with results documented by Garrison et al. (2012), Garrison et al. (2014) found that individuals with higher levels of attachment avoidance reported significantly lower tendencies to self-disclose distress ($r = -.38$, $p < .001$) and less emotional disclosure in response to specific unpleasant events ($r = -.21$, $p < .05$).

Diverging somewhat from the previously discussed findings (Garrison et al., 2012), Garrison et al. (2014) reported non-significant negative relations of attachment anxiety with both the tendency to self-disclose distress to others (r = -.17) and emotional disclosure about specific unpleasant events (r = -.01). As explained by Garrison et al. (2014), anxiously attached individuals have internal working models characterized by the belief that other people tend to be unreliable as attachment figures and accordingly, it may not be beneficial to disclose distress. These researchers also postulate that because anxiously attached individuals worry that other people may perceive them as unable to cope with life stressors and would abandon them if this were so, these individuals may subsequently choose to inhibit the disclosure of their distress. Additional empirical research is necessary to better understand when and why attachment anxiety is related to self-disclosure of distress, as well as how the connection may vary depending on the relationship target of the disclosure (Garrison et al., 2014).

Given the link between attachment style and self-disclosure of emotionally distressing or personal information (Garrison et al., 2012; Garrison et al., 2014; Mikulincer & Nachshon, 1991), as well as the relation between self-disclosure of emotional distress and seeking help (Hinson & Swanson, 1993; Vogel & Wester, 2003), it is surprising that research has yet to be conducted that explores self-disclosure of distress as a possible mediator in the connection between attachment style and help-seeking intentions and behaviours. Accordingly, a goal of the present study was to investigate the potential mediating role of the tendency to self-disclose distress to others in the links of attachment avoidance and attachment anxiety with help-seeking intentions and behaviours in emerging adults.

Online Help Seeking in Emerging Adulthood

Despite emerging adults' routine use of the Internet to communicate and interact with familiar others on a day-to-day basis, there is a paucity of research investigating how emerging adults use the Internet and computer-mediated technologies to seek help for their personal problems. Although there is an increasing number of studies focused on the use of online mental health resources for the purposes of promoting symptom recognition and help seeking among emerging adults (e.g., Collin et al., 2011; Kim, Coumar, Lober, & Kim, 2011; Rickwood et al., 2015; Ryan et al., 2010), there continues to be a lack of research examining *how* and *from whom* emerging adults seek help online for their problems. With research on online help seeking still in its infancy, only a few studies were located that explore the role of the Internet in emerging adults seeking help for personal or emotional problems (i.e., Blight, Jagiello, & Ruppel, 2015; Gowen, 2013; Gowen, Deschaine, Gruttadara, & Markey, 2012; Horgan & Sweeney, 2010; Piper & MacDonald, 2008). Evidently, online help seeking in emerging adulthood is a neglected, yet timely, area of study, which requires further investigation and has important practical implications for help seeking during this period of development.

Relationships and Communication: Role of Online Self-Disclosure

Research suggests that 99% of young adults (18 to 25 years of age) use the Internet, and that most young adults typically spend several hours online each day (Perrin & Duggan, 2015; PEW Research Center, 2017). Engaging in online communication is a common and ordinary activity for the majority of emerging adults, who routinely use a variety of electronic devices (e.g., desktop and laptop computers, tablets, smartphone, and cell phones) and communication tools and platforms (e.g., instant messaging, text

messaging, social networking sites, photo and video sharing sites, and blogging sites) to access the Internet and connect with others (Duggan, 2015; Perrin, 2015; PEW Research Center, 2017; Smith, 2015). These various means of communication can all be classified as computer-mediated communication, which is communication that occurs through computer technology (Walther, 2012).

The use of online social networking sites, such as Facebook, Twitter, Instagram, Pinterest, and Tumblr, is especially popular and represents an ordinary way for emerging adults to communicate with others. Social networking sites are interactive, member-based communities in which individuals create their own account profile and then publicly and/or privately communicate and share information with others (Bazarova & Choi, 2014; Pempek, Yermolayeva, & Calvert, 2009). Data from a large survey of emerging adults (18 to 25 years of age) in the United States showed that 90% of emerging adults reported using social media and social networking sites with the following percentages of young adult respondents indicating that they use the following sites: 88% use Facebook, 59% use Instagram, 36% use Twitter, 36% use Pinterest, and 20% use Tumblr (Duggan, 2015; Perrin, 2015; PEW Research Center, 2017). As many as 76%, 51%, and 42% of young adults who use Facebook, Instagram, and Twitter, respectively, visit these social media sites on a daily basis, and another 15%, 26%, and 24% of young adults who use Facebook, Instagram, and Twitter, respectively, do so on a weekly basis (Greenwood, Perrin, & Duggan, 2016; PEW Research Center, 2017). No comparable data could be located on the patterns of social networking site use by Canadian emerging adults (18 to 25 years old). However, in a large national survey of Canadian adolescents (grades 7 to 11), the use of social networking sites was reported to be remarkably common, with the

following percentages of adolescent respondents indicating that they have an account on the following sites: 82% on Facebook, 47% on Twitter, 42% on Instagram, and 27% on Tumblr (Steeves, 2014).

Research has shown that emerging adults mainly use social networking sites to stay in touch with friends whom they regularly see in person, to communicate with peers and family members from their offline social networks, to maintain already existing, offline relationships, and to express themselves through self-disclosure (Bazarova & Choi, 2014; Pempek et al., 2009; Subrahmanyam, Reich, Waechter, & Espinoza, 2008). Even though emerging adults primarily use social networking sites to stay connected with friends and peers (e.g., romantic partners), they also tend to incorporate their parents, siblings, and other relatives into their online social networks in order to communicate with and stay in touch with their family members (Blight et al., 2015; Madden et al., 2013; Manago, Taylor, & Greenfield, 2012; Subrahmanyam et al., 2008). In addition to being 'friends' with family members, close friends, and romantic partners, emerging adults also typically include acquaintances (e.g., friend of a friend), activity connections (e.g., co-worker, teammate, or club member), and strangers (i.e., do not know this person/never met in an offline context) in their online social networks (Manago et al., 2012). Evidently, although emerging adults commonly use social networking sites to stay in touch with offline friends, they also usually have a variety of other people integrated into their online social networks.

Cell phone and smartphone technologies have also become integral in helping emerging adults to communicate and stay connected in their relationships and daily social interactions. As part of a large American research study, 92% of emerging adults (18 to

51

25 years of age) reported owning a smartphone and another 8% of emerging adults described owning a cell phone (PEW Research Center, 2017). Canadian adolescents show a similar trend in the use of smartphones/cell phones, whereby 85% of adolescents in grade 11 reported owning their own cell phone (Steeves, 2014). Of importance to understanding the normality and everyday occurrence of online communication, emerging adults regularly use their smartphones/cell phones to not only make phone calls, but also to use the Internet and to send/receive text messages so as to communicate with other people. Recent data from a large survey in the United Stated revealed that 97% and 100% of emerging adults (18 to 25 years old) who own smartphones use their phones to access the Internet and to text message other people, respectively, on at least a weekly basis (Smith, 2015). Furthermore, the following percentages of emerging adults who own smartphones also use their phones for the following uses on at least a weekly basis: 93% to make phone calls, 91% to send and receive emails, 91% to use social networking sites, 75% to watch online videos, and 64% to listen to music (Smith, 2015).

Instant messaging apps and programs represent another mode of communication, which is commonly used by emerging adults to communicate with their friends, peers, and family. Instant messaging enables "real-time communication" between individuals, who simultaneously use a website, software program, or messaging app to have a private, synchronous written conversation with one or more users at the same time (Dolev-Cohen & Barak, 2013). Instant messaging tools include the once popular *ICQ* and *MSN Messenger* computer programs from the late 1990s, as well as iMessage, WhatsApp and SnapChat, which are more recent and widely used instant messaging apps for smartphones. Instant messaging tools have also been incorporated into some social

networking sites (e.g., Facebook Messenger). In a large survey of emerging adults (18 to 25 years old) conducted in the United States, 49% of the respondents who owned a smartphone reported using instant messaging apps (e.g., iMessage and WhatsApp) on a daily basis to communicate with people in their lives (Duggan, 2015).

Communication using online technology and various electronic devices has become an integral part of emerging adults' relationships and daily social interactions (Arnett, 2010; Duggan, 2015; Manago et al., 2012; Smith, 2015). Emerging adults primarily use these tools to communicate and be "co-present" with other individuals (despite not necessarily being together in person), which helps them to maintain offline relationships and stay connected with people in their lives (Bazarova & Choi, 2014; Manago et al., 2012; Pempek et al., 2009; Subrahmanyam et al., 2008).

Much of the research literature examining online communication and relationships has focused on the role of online self-disclosure (e.g., Bazarova & Choi, 2014; Davis, 2012; Manago et al., 2012; Schouten, Valkenburg, & Peter, 2007; Utz, 2015; Valkenburg & Peter, 2007a, 2007b). Self-disclosure involves the process of revealing personal and intimate information about the self, such as one's feelings, concerns, and vulnerabilities (Derlega et al., 1993; Valkenburg & Peter, 2009). Empirical research has consistently shown that online and computer-mediated communication facilitates more online self-disclosure of intimate information than face-to-face communication and that young people commonly perceive it to be easier and more effective to self-disclose intimate information through online communication than by way of in-person communication (Joinson, 2001; Piper & MacDonald, 2008; Schouten et al., 2007; Tidwell & Walther, 2002; Valkenburg & Peter, 2007a, 2009).

Consistent with research showing that offline, face-to-face self-disclosure is related to greater emotional intimacy and closeness in emerging adults' relationships (e.g., Radmacher & Azmitia, 2006; Tan, Overall, & Taylor, 2012), studies have also documented a relationship between emerging adults' online self-disclosure and perceived closeness to friends. In particular, there is growing empirical evidence supporting the stimulation hypothesis, which posits that online communication encourages more intimate online self-disclosure, and intimate self-disclosure predicts reciprocal caring and trust, which together in turn, enhance the quality of individuals' friendships (Collins & Miller, 1994; Valkenburg & Peter, 2007a, 2007b, 2009). For example, in a sample of undergraduate university students (M_{age} = 22 years old), Utz (2015) discovered that emerging adults who engaged in more intimate online self-disclosure on social network sites reported feeling closer and more connected with their friends. This association between more intimate online self-disclosure and a greater sense of connectedness was strongest in the context of sending and receiving private messages. Other studies have similarly shown a positive relationship between more intimate online communication and a stronger connection with friends in samples of both emerging adults and adolescents (e.g., Sheldon, Abad, & Hinsch, 2011; Valkenburg & Peter, 2007a, 2007b).

In a study on the goals of online self-disclosure and how these objectives impact the degree of intimacy in online communication, Bazarova and Choi (2014) investigated how individuals' goals of online self-disclosure relate to individuals' selection of audience and channel of communication using Facebook in a sample of undergraduate university students (M_{age} = 20 years; SD = 1.14). Findings revealed that the most common reasons for engaging in online self-disclosure were for relational development (i.e., to

maintain a relationship and connect with others), self-expression and relief of distress

(i.e., to express feelings and thoughts; to release supressed feelings), and social validation

(i.e., to validate one's self-concept; to seek approval and support from others).

Interestingly, when emerging adult participants chose to self-disclose to everyone in their

social network (i.e., a broad audience) via their public status update on Facebook, the two

primary motives were self-expression of feelings/relief of distress and social validation,

which collectively explained 70% of all self-disclosures using the status update tool.

Alternatively, when participants chose to self-disclose to a specific individual/target

audience via wall posts and private messaging on Facebook, the primary reason for such

self-disclosures was relational development/to connect with others, which accounted for

50% and 45% of all self-disclosures using wall posts and private messaging, respectively.

In addition, Bazarova and Choi (2014) found that in general, more intimate and personal

information was disclosed via private channels of communication (private messaging), as

opposed to through the use of public wall posts and status updates. Nevertheless, some

people chose to self-disclose intimate and personal information with the status update

tool, realizing that their information would be shared with a broad audience on Facebook.

Other research studies have examined the reasons for online self-disclosure and

how these motivations relate to the means by which individuals engage in online

communication. For example, in a sample of undergraduate university students, Utz

(2015) similarly found that more intimate information was self-disclosed via private

messages than through relatively more public status updates, as well as that relationship

maintenance was the main reason for choosing to communicate via private conversations.

Theoretical literature also supports the idea that online, computer-mediated communication stimulates online self-disclosure. For example, enhanced online self-disclosure can be explained by Walther's (1996) hyperpersonal communication theory, which posits that computer-mediated communication encourages "hyperpersonal" communication that is more intimate than face-to-face communication. According to this theory, computer-mediated communication usually involves diminished nonverbal cues (e.g., visual and auditory cues), leading people to become less worried about how others perceive them, which also in turn, results in people feeling fewer inhibitions in self-disclosing personal information. These processes underlying online self-disclosure are especially relevant to consider in relation to help seeking for emotional problems, given that many individuals tend to feel vulnerable or uncomfortable with sharing such personal information and are inhibited in self-disclosing in face-to-face settings, and may then, understandably, have a preference for online communication to share personal or intimate information with others.

Another assumption of the hyperpersonal communication theory is that as compared to communication in face-to-face interactions, online, computer-mediated communication is characterized by enhanced controllability of self-presentation and self-disclosure, which results in fewer inhibitions and more intimate self-disclosure (Schouten et al., 2007). As part of this enhanced controllability, online communication provides emerging adults with the opportunity to take their time to reflect on their responses and to edit their messages. This greater controllability over how and what they share about themselves subsequently produces a sense of security in individuals, enabling them to feel comparatively more open and disinhibited in their online interactions, which further

promotes online self-disclosure of intimate information (Piper & MacDonald, 2008; Schouten et al., 2007; Valkenburg & Peter, 2011).

Anonymity, asynchronicity, and accessibility are three attributes of online communication, which contribute to a greater sense of controllability in online self-disclosure. One type of anonymity is *source anonymity*, which occurs when a particular person's identity cannot be connected to the online message/communication (e.g., chat room or support network). Another type of anonymity is *audio-visual anonymity*, which involves an absence or decrease of nonverbal cues expressed through online communication (Valkenburg & Peter, 2011). When using such online communication tools as social networking sites and instant messaging applications, individuals cannot usually maintain source anonymity, although they can control the intensity of their verbal and/or nonverbal cues (e.g., visual and/or audio), which they choose to share with others. Anonymity in online communication may result in various outcomes, including being less concerned about how others perceive oneself, as well as reacting impulsively based on one's current feelings and level of distress, which in turn, may lead to more personal self-disclosure (Valkenburg & Peter, 2011).

The asynchronous feature of online communication also promotes greater controllability of self-disclosure. Much of the communication that occurs online is asynchronous in time, permitting individuals to take time to consider, reflect on, and modify the content and cues in their messages before sharing them, and further enhancing the controllability of online communication (Madell & Muncer, 2007; Piper & MacDonald, 2008; Schouten et al., 2007; Valkenburg & Peter, 2011). In a qualitative study employing grounded theory methodology, Madell and Muncer (2007) conducted

focus groups with university undergraduate students (18 to 20 years of age) to examine why individuals in emerging adulthood use the Internet and cell phones for communication. The most commonly reported reason as to why emerging adults like online communication was that it provides people with enhanced control over their interactions, such that they can choose to take their time to consider and reflect on how to respond or alternatively, they can choose to maintain a more synchronous flow in conversing with others. Interestingly, participants reported that computer-mediated communication was helpful in the management of emotional interactions, whereby individuals could take the time to reflect on how best to express their thoughts and feelings, particularly during emotionally charged exchanges.

Another component of enhanced controllability of online self-disclosure is that individuals can easily access a variety of individuals through their online social networks and can freely and quickly share information about themselves among many other people (Bazarova & Choi, 2014; Manago et al., 2012; Valkenburg & Peter, 2011). By doing so, individuals can manage their self-disclosure more readily and swiftly than in offline communication. With online and computer-mediated communication, emerging adults can also easily select their audience and channel of communication, whether that is sending a private message to a family member or friend, or posting a public message to everyone in their social network. As explained by Bazarova and Choi (2014), it is important to consider the audience of emerging adults' online messages, especially on social networking sites. The public posting of written messages, photos, and videos is meant to initiate a dialogue or conversation between people; that is, content is posted so that it might be viewed by an audience, and commonly, that audience reacts and replies to

the content shared online. Indeed, the majority of emerging adults receive feedback from others about the content they have disclosed online, such that the content becomes not just a matter of sharing it with other people, but also about engaging in the ensuing interaction and dialogue about it (Bazarova & Choi, 2014).

Concerning the audience of one's messages on social networking sites, Manago, Taylor, and Greenfield (2012) examined the audience and network size, network composition (e.g., family, best friend, boy/girlfriend, online friend only, stranger, etc.), and function of status updates on Facebook in a sample of undergraduate students. Most participants' networks were comprised of moderately superficial relations (acquaintances and activity-based friends comprised 27% and 24% of the networks, respectively), with close relations (e.g., family, friends, and boy/girlfriend) representing 21% of their network connections. Individuals who reported having large social networks perceived that they had large audiences available for them to share their status update messages, and were mindful that their social networks represented an audience for themselves. With respect to the function of status updates, the most common reason to use the status update tool was for young adults to express their emotional state. As highlighted by Manago et al. (2012), this result suggests that emotional self-disclosure, which is a crucial component of intimacy, has become a public practice in the age of online communication and social media. Regarding the channels of communication used to connect with others, the more personal mode of private messaging was more common among individuals whose networks were comprised of a greater proportion of close relations than of superficial relations. Interestingly, the public modes of communication (e.g., posting on others' walls) were not typically used as a way to connect with distant relations, but

rather, as a way to communicate with close relations. With the advent of Facebook and other social networking sites, interactions and intimate exchanges of emotional support between close relations are being increasingly played out within a public sphere.

Keeping in mind that individuals commonly receive feedback about the content they post online and that they tend to share content online as a way in which to start a conversation with others about that content (Bazarova & Choi, 2014), it is interesting to note that a popular function of the status update tool is to self-disclose one's personal and intimate feelings (Manago et al., 2012). By doing so, it can be suggested that individuals are not only broadcasting their feelings to a relatively large audience (i.e., all their 'friends' or 'followers' on that particular online social network), but they are also looking for feedback and inviting others to engage in a dialogue about their emotional state. Essentially, it may be that such individuals who self-disclose their personal feelings via public postings are seeking out help or emotional support for their emotional problems from others in their online social network.

With respect to the use of computer-mediated technologies in the disclosure and expression of feelings, Hoffner and Lee (2015) recently explored the role of smartphones in helping to regulate emotions in a sample of undergraduate university students (M_{age} = 19.7 years; SD = 2.04 years). Results showed that participants endorsed moderate use of their smartphones to regulate negative emotions and that the use of smartphones for seeking social support from others and for connecting with friends or family facilitated more effective regulation of emotions. Moreover, greater emotional well-being was positively associated with having used a smartphone to regulate negative emotions and with greater perceived effectiveness in regulating emotions.

Help Seeking: Role of Online, Computer-Mediated Communication

Most emerging adults regularly use the Internet, as well as various computer-based technologies, to connect with others from their offline social networks and to maintain and strengthen already existing relationships (Bazarova & Choi, 2014; Manago et al., 2012; Pempek et al., 2009; Subrahmanyam et al., 2008). In communicating with other people, many individuals perceive that it is easier and more effective to self-disclose intimate information through online communication than through face-to-face interactions (Valkenburg & Peter, 2007a). With fewer nonverbal cues and greater perceived control in online communication, individuals tend to become more disinhibited and subsequently, engage in more intimate self-disclosure through online communication (Schouten et al., 2007; Walther, 1996). In relation to online self-disclosure of personal information, emerging adults commonly use online and computer-mediated technologies to express their feelings and to share their emotional state with others (Bazarova & Choi, 2014; Hoffner & Lee, 2015; Manago et al., 2012). Moreover, emerging adults often share information online, mindful that they have an audience and hopeful that the content will initiate a dialogue with others (Bazarova & Choi, 2014; Manago et al., 2012). Online and computer-mediated technologies represent a relevant and timely medium in which to investigate how and from whom emerging adults seek help on the Internet for their personal and emotional problems.

Over the past decade, there has been a considerable increase in the number of resources and services available online for young people with personal, distressing, and emotional problems (Rickwood et al., 2015). With respect to the impact of using Internet-based health resources on the help seeking endeavours of emerging adults, Kauer,

61

Mangan, and Sanci (2014) recently completed a systematic review on the usefulness of online services in encouraging young people (14 to 25 years of age) to seek professional help for mental health problems. These researchers qualitatively analyzed 18 studies, which explored young people's use of online services, such as mental health literacy websites with information and resources, support groups and self-help programs, and self-directed online therapy, with the purpose of examining whether such online services do indeed promote subsequent help seeking among emerging adults. In discussing their findings, Kauer et al. (2014) indicated that many of the reviewed studies were of limited quality and did not provide sufficient support to suggest that using these online services encourages professional help-seeking in young people. However, most of the included studies did not emphasize help seeking as the primary focus of study; only four of the reviewed studies actually examined young people's intentions to seek professional help as a primary outcome. Evidently, although there is a growing body of research examining the use of online resources for young people with emotional or stressful problems, there are only a minimal number of studies that actually focus on *how* emerging adults use the Internet in the process of seeking help for their problems (e.g., Gowen, 2013; Gowen et al., 2012; Greidanus, 2010; Horgan & Sweeney, 2010).

Considering that Kauer et al. (2014) reviewed so few studies that explored help seeking as an outcome variable (i.e., only four studies were identified), it is unclear as to why their goal was to investigate whether the use of online mental health services promotes and *leads to* the seeking of help from professionals. It is also interesting to note that although these researchers do comment that online mental health services may be helpful at various parts throughout the help-seeking process, they neglect to elaborate on

how or *when* in the process the Internet might be of use. With this in mind, it could be suggested that emerging adults who engage in various types of online activities, such as searching online for information about their emotional problems, communicating online or via computer-mediated technology with friends or family about their personal problems, or participating in online self-help support groups, are actually engaging in help-seeking behaviours that constitute part of the help-seeking process. With the prevalent and commonplace use of the Internet in our present-day society, there is a blurring of the boundaries between the processes of searching for information online and using the Internet to seek help (Gowen, 2013; Horgan & Sweeney, 2010; Puustinen & Rouet, 2009). With that said, it has been suggested that seeking out information can be conceptualized as a form of seeking help (Puustinen & Rouet, 2009).

Although it remains limited in scope, most of the extant literature on the connection between help seeking and online support has been on seeking help from professional sources (e.g., Collin et al., 2011; Kauer et al., 2014; Kim et al., 2011; Rickwood et al., 2015; Ryan et al., 2010). However, it would also be beneficial for researchers to likewise investigate how and from whom emerging adults seek informal help online for their personal and emotional problems. Indeed, the Internet represents an interesting context in which to investigate help seeking, as it provides the unique capacity for individuals to access both informal and formal sources of help. Furthermore, given that emerging adults are more likely to seek help from their family, friends, and romantic partners than from formal sources of help (Biddle et al., 2004; Rickwood et al., 2015; Ryan et al., 2010; Wilson et al., 2011), as well as the fact that emerging adults typically engage in online communication with familiar others whom they already have pre-

existing, offline relationships (Pempek et al., 2009; Subrahmanyam et al., 2008), it is important that researchers have greater insight into how, where, and from whom emerging adults seek informal support online for their personal or distressing problems.

Albeit exploratory in nature, there is some research examining how emerging adults use the Internet to look for information on and support for various issues, such as health issues, emotional problems, relationship difficulties, and mental health concerns (e.g., Escoffery et al., 2005; Gowen, 2013; Horgan & Sweeney, 2010; Rickwood et al., 2015). For example, using an Irish sample of 922 undergraduate students (18 to 24 years of age), Horgan and Sweeney (2010) conducted a quantitative descriptive study on how emerging adults use the Internet to seek mental health information and support. Participants responded to questionnaire items assessing the types of mental health issues searched for online, their reasons for using the Internet for mental health information and support, and their perceptions about using the Internet versus face-to-face support. Findings revealed that of the 867 participants who responded to an item asking about whether they had ever used the Internet to seek information about mental health concerns, approximately 30% of these young people endorsed having previously used the Internet to seek information on mental health issues. A common reason for using the Internet was to search for mental health information about various topics, including depression, anxiety, eating disorders, suicide, stress, coping strategies, and support groups. Of the 872 participants who responded to an item asking whether they would use the Internet to seek help if they needed support for a mental health concern, 68% of these emerging adults reported that if they needed help for a mental health problem, they would use the Internet to seek support. Participants endorsed the following reasons for using the

Internet to seek mental health support: the anonymity, privacy, and confidentiality on the Internet; the easy accessibility of the Internet 24 hours per day; the large amount of information available; the fast, cheap, and convenient nature of the Internet; that the Internet makes it easy to communicate with other young people who are in a similar situation; and that it is less embarrassing to use the Internet than to talk with a professional, friend, or family member. Interestingly, nearly 20% of the participants reported that they would prefer to seek help online due to their perceptions that they would not be judged, that they would be more open, that it would be easier to express themselves, and that it would be less intimidating. Participants also indicated a preference for online help seeking due to the anonymity, privacy, confidentiality, accessibility, and speed of the Internet.

Despite these potentially appealing reasons to seek help online, Horgan and Sweeney (2010) found that nearly 80% of the respondents indicated that they would prefer face-to-face support, as opposed to online support, due to their perceptions that face-to-face support is more personal, reliable, comforting, safe, and direct, as well as that it facilitates greater trust, and easier engagement and communication with an individual (e.g., being able to observe and receive feedback through body language). In fact, approximately 30% of the participants stated that they would not use the Internet for mental health support for various reasons, including their preference for in-person interactions and perceptions that online support would lack privacy, be too impersonal, and not be reliable or trustworthy.

In an in-depth, qualitative study exploring the role of the Internet in help seeking, Greidanus (2010) found that anonymity was a key reason for individuals' use of the

Internet to seek help for their emotional or distressing problems. In examining the online help-seeking experiences of 10 individuals who ranged from 14 to 55 years of age, Greidanus discovered that all participants described anonymity as being essential in enabling them to initially seek help on the Internet. Some participants went so far as to say that they would not have posted online messages so as to seek help, if they had perceived that their identities would not be anonymous. Several participants reported that they anonymously sought help online because they felt safer doing so and because they had been fearful of the negative consequences, which they anticipated would occur if they had disclosed their problems to others in an offline context. It is evident that some individuals place considerable importance on anonymity in online help seeking, which is consistent with other research findings showing that anonymity can help to facilitate online self-disclosure and online information seeking about mental health concerns (e.g., Gowen, 2013; Horgan & Sweeney, 2010; Valkenburg & Peter, 2011).

Easy and convenient access to online help has been shown to be another common reason for using the Internet to seek help for emotional and distressing problems. Greidanus (2010) reported that easy accessibility to online support was the most frequently cited reason for preferring online help to offline help. This finding is consistent with results from another study (Gowen, 2013), which showed that easy access to online support and resources facilitates online help seeking.

Another common theme across studies about online help seeking is that individuals go online to seek help because they feel alone with their problems and as a result, use the Internet to search for a sense of community with other individuals who have experienced similar problems. In analyzing focus group discussions about how

young adults (18 to 30 years old) with mental health problems use the Internet to seek information, Gowen (2013) found that many participants described experiences of reading other people's personal stories online, connecting with individuals through blogs, discussion boards, and chat rooms, and subsequently, feeling less isolated and alone with their problems. Greidanus (2010) likewise found that individuals with personally distressing problems reported feeling alone and unheard, and had thus gone online to use message boards, chat rooms, and blogs so as to share their personal stories and connect with others. As highlighted by Greidanus, sharing one's personal experiences online can help to develop a sense of community, whereby other people may reply to such stories and thus contribute to the evolving narratives of individuals' experiences.

In a similar investigation about how and why emerging adults (18 to 24 years of age) with mental health concerns use social networking sites, Gowen, Deschaine, Gruttadara, and Markey (2012) found that emerging adults with self-reported mental health conditions were more likely to use social networking sites in order to make new friends online, as opposed to using these sites to reinforce already existing, offline social networks. Most of these participants also reported a perception that social networking sites helped to lessen their feelings of social isolation (Gowen et al., 2012). Making online connections with other people who have gone through similar experiences or challenges may be an important way for individuals, with emotional, distressing, or mental health problems, to feel supported and less socially isolated by their problems.

In the only research study that could be located, which focuses on emerging adults' use of a particular social networking tool to seek support for emotional problems, Blight et al. (2015) investigated the nature of the support received by emerging adults

who used Facebook status updates (i.e., to a broad audience on the social network) to seek emotional support in a sample of undergraduate university students (M_{age} = 21.2 years; SD = 3.21 years). Findings revealed that emotionally supportive comments were most likely made by close others (i.e., close friends, family members, or significant others/ partners), as opposed to acquaintances, in response to participants' support-seeking status updates. As highlighted by Blight et al. (2015), researchers should also explore how emerging adults use other social networking sites and social media platforms (i.e., in addition to Facebook) to seek support for their emotional or personal problems.

A research study conducted by Gould, Munfakh, Lubell, Kleinman, and Parker (2002) was the only other investigation that could be located, which focused on identifying the ways by which young people use the Internet to seek help for emotional problems. Specifically, Gould et al. (2002) examined which online communication tools adolescents (grades 9 to 12) used to seek help online for their personal and relational difficulties. Chat rooms were the most commonly cited resource used for seeking help on the Internet, such that 87% of the adolescents who sought help online reported using chat rooms to seek support for their emotional problems. Other websites (non-specified) and instant messaging programs were also endorsed as being used to seek help online.

In general, the existing empirical literature examining how and from whom emerging adults seek help online for emotional or personal problems is exploratory in nature (e.g., Blight et al., 2015; Gowen, 2013; Gowen et al., 2012; Horgan & Sweeney, 2010). This lack of research investigating how and from whom emerging adults seek help online is especially surprising, given that many young adults currently use the Internet and computer-mediated technology on a daily basis as a means to communicate and

connect with their friends, romantic partner, and parents, who are the sources of support from whom they are most likely to seek help. Accordingly, the focus of the current study was to explore emerging adults' intentions and behaviours of seeking help online with computer-mediated technology for an emotional or personal problem.

Purpose and Objectives of the Present Study

The overall purpose of this present study was to examine the relation of emerging adults' attachment avoidance and attachment anxiety with their intentions and behaviours of seeking help *online* for an emotional or personal problem. A secondary objective was to investigate the relation of young adults' attachment avoidance and attachment anxiety with their intentions and behaviours of seeking help from *informal* and *formal* sources of support. Another goal was to explore the potential mediating role of the tendency to disclose distress to others and difficulties in emotion regulation in the relations between emerging adults' attachment avoidance and attachment anxiety and their intentions and behaviours to seek help for an emotional or personal problem. Based on the literature reviewed above, gender, age, previous use of counselling services, and psychological symptom severity were examined as potential covariates within these relations.

The objectives of the study were: (1) to examine the relations between emerging adults' attachment avoidance and attachment anxiety and their tendencies to self-disclose distress to others; (2) to examine the relations between emerging adults' attachment avoidance and attachment anxiety and their difficulties in emotion regulation (i.e., lack of emotional awareness, lack of emotional clarity, impulse control difficulties, difficulties engaging in goal-directed behaviour, non-acceptance of emotional responses, and limited access to effective emotion regulation strategies); (3) to examine the relations between

emerging adults' attachment avoidance and attachment anxiety and their *intentions* and *behaviours* of seeking help *online* for an emotional or personal problem by seeking computer-mediated support from various individuals (e.g., friends, parents, boyfriend/ girlfriend, audience in social network, anonymous sources) and by using various online tools of communication (e.g., sending a personal message on a social networking site, sending a personal message on a smartphone messaging app, updating the profile status on a social networking site, posting an anonymous message on an online discussion board, or searching for information on how to cope with emotional problem); (4) to explore the potential mediating role of distress disclosure and difficulties in emotion regulation in the relations of emerging adults' attachment avoidance and attachment anxiety with their *intentions* and *behaviours* of seeking help *online* (see Figures 1 to 4); (5) to examine the relations between emerging adults' attachment avoidance and attachment anxiety and their *intentions* and *behaviours* of seeking help for an emotional or personal problem from *informal* and *formal* sources of support (e.g., parent, friend, mental health professional, or doctor); and (6) to explore the potential mediating role of distress disclosure and difficulties in emotion regulation in the relations of emerging adults' attachment avoidance and attachment anxiety with their *intentions* and *behaviours* of seeking help from *informal* and *formal* sources of support (see Figures 5 to 8).

Research Hypotheses

Based on both the empirical and theoretical bodies of literature reviewed above, the following hypotheses were proposed and were primarily exploratory in nature:

70

Objective 1: Examine the relation between attachment and distress disclosure

Hypothesis 1a. It was hypothesized that higher levels of attachment avoidance would be associated with lower tendencies to self-disclose personally distressing information to other people.

Hypothesis 1b. It was hypothesized that higher levels of attachment anxiety would be associated with greater tendencies to self-disclose personally distressing information to other people.

Objective 2: Examine the relation between attachment and difficulties in emotion regulation

Hypothesis 2a. It was hypothesized that higher levels of attachment avoidance would be associated with greater difficulties in emotion regulation (i.e., greater difficulties with emotional awareness, emotional clarity, impulse control, acceptance of emotional responses, access to effective emotion regulation strategies, and engaging in goal-directed behaviour).

Hypothesis 2b. It was hypothesized that higher levels of attachment anxiety would be associated with greater difficulties in emotion regulation (i.e., greater difficulties with emotional awareness, emotional clarity, impulse control, acceptance of emotional responses, access to effective emotion regulation strategies, and engaging in goal-directed behaviour).

Objective 3: Examine the relation between attachment and online help seeking

Hypothesis 3a. It was hypothesized that higher levels of attachment avoidance would be associated with lower *intentions* to seek help *online* for a personal or emotional problem.

Hypothesis 3b. It was hypothesized that higher levels of attachment anxiety would be associated with greater *intentions* to seek help *online* for a personal or emotional problem.

Hypothesis 3c. It was hypothesized that higher levels of attachment avoidance would be associated with fewer *behaviours* of actually seeking help *online* for a personal or emotional problem.

Hypothesis 3d. It was hypothesized that higher levels of attachment anxiety would be associated with more *behaviours* of actually seeking help *online* for a personal or emotional problem.

Objective 4: Explore the link between attachment and online help seeking by way of distress disclosure and difficulties in emotion regulation

Hypothesis 4a. It was hypothesized that the relation between attachment avoidance and *online* help-seeking *intentions* would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment avoidance would predict lower intentions to seek help online by way of lower tendencies to self-disclose distress and greater difficulties in emotion regulation (Figure 1).

Hypothesis 4b. It was hypothesized that the relation between attachment anxiety and *online* help-seeking *intentions* would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment anxiety would predict greater intentions to seek help online by way of greater tendencies to self-disclose distress and greater difficulties in emotion regulation (Figure 2).

Hypothesis 4c. It was hypothesized that the relation between attachment avoidance and *online* help-seeking *behaviours* would be mediated by distress disclosure

72

and difficulties in emotion regulation. Higher levels of attachment avoidance would predict fewer behaviours of actually seeking help online by way of lower tendencies to self-disclose distress and greater difficulties in emotion regulation (Figure 3).

Hypothesis 4d. It was hypothesized that the relation between attachment anxiety and *online* help-seeking *behaviours* would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment anxiety would predict more behaviours of actually seeking help online by way of greater tendencies to self-disclose distress and greater difficulties in emotion regulation (Figure 4).

Objective 5: Examine the relation between attachment and help seeking from informal and formal sources of support

Hypothesis 5a. It was hypothesized that higher levels of attachment avoidance would be associated with lower *intentions* to seek help from *informal* and *formal* sources of support for a personal or emotional problem.

Hypothesis 5b. It was hypothesized that higher levels of attachment anxiety would be associated with greater *intentions* to seek help from *informal* and *formal* sources of support for a personal or emotional problem.

Hypothesis 5c. It was hypothesized that higher levels of attachment avoidance would be associated with fewer *behaviours* of actually seeking help from *informal* and *formal* sources of support for a personal or emotional problem.

Hypothesis 5d. It was hypothesized that higher levels of attachment anxiety would be associated with more *behaviours* of actually seeking help from *informal* and *formal* sources of support for a personal or emotional problem.

Objective 6: Explore the link between attachment and help seeking from informal and formal sources by way of distress disclosure and difficulties in emotion regulation

Hypothesis 6a. It was hypothesized that the relation between attachment avoidance and *intentions* to seek help from *informal* and *formal* sources of support would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment avoidance would predict lower intentions to seek support from informal and formal sources of help by way of lower tendencies to self-disclose distress and greater difficulties in emotion regulation (Figure 5).

Hypothesis 6b. It was hypothesized that the relation between attachment anxiety and *intentions* to seek help from *informal* and *formal* sources of support would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment anxiety would predict greater intentions to seek support from informal and formal sources of help by way of greater tendencies to self-disclose distress and greater difficulties in emotion regulation (Figure 6).

Hypothesis 6c. It was hypothesized that the relation between attachment avoidance and *behaviours* of seeking help from *informal* and *formal* sources of support would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment avoidance would predict fewer behaviours of seeking support from informal and formal sources of help by way of lower tendencies to self-disclose distress and greater difficulties in emotion regulation (Figure 7).

Hypothesis 6d. It was hypothesized that the relation between attachment anxiety and *behaviours* of seeking help from *informal* and *formal* sources of support would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher

levels of attachment anxiety would predict more behaviours of seeking support from

informal and formal sources of help by way of greater tendencies to self-disclose distress

and greater difficulties in emotion regulation (Figure 8).
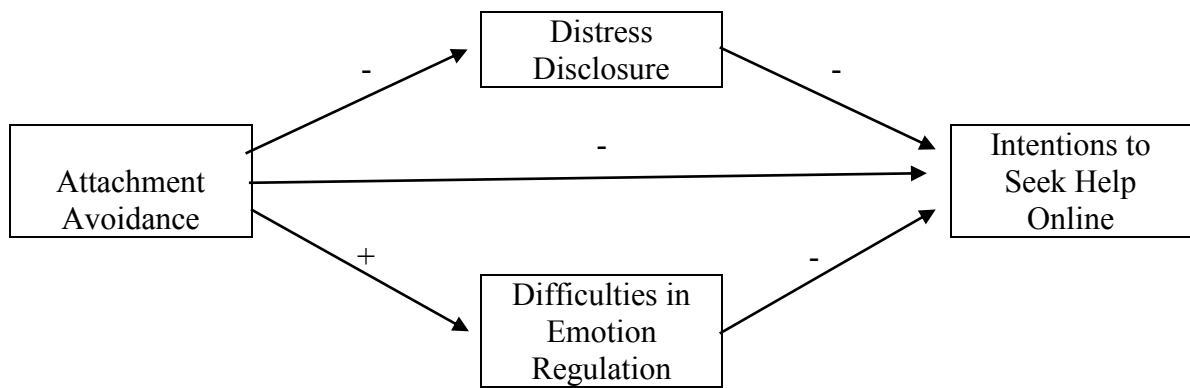
Figure 1. Hypothesis 4a. Hypothesized mediated model showing specific relations among

attachment avoidance, distress disclosure, difficulties in emotion regulation, and

intentions to seek help online.
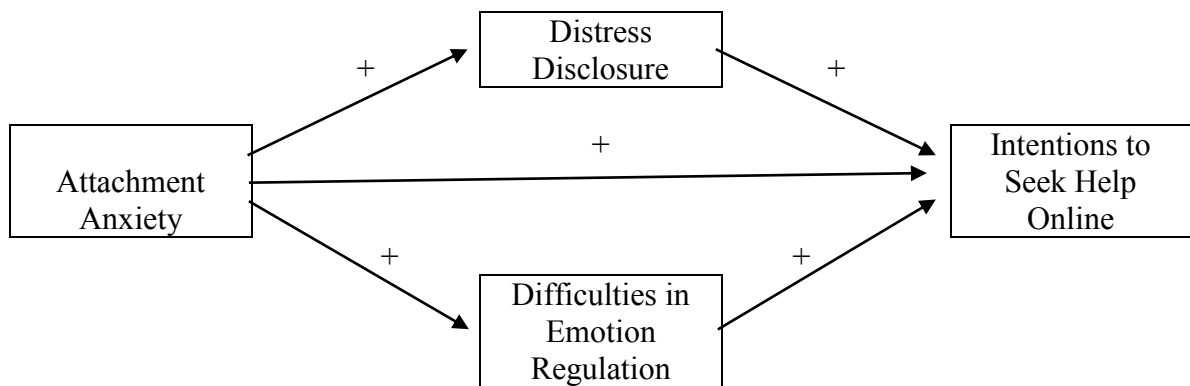
Figure 2. Hypothesis 4b. Hypothesized mediated model showing specific relations among attachment anxiety, distress disclosure, difficulties in emotion regulation, and intentions to seek help online.
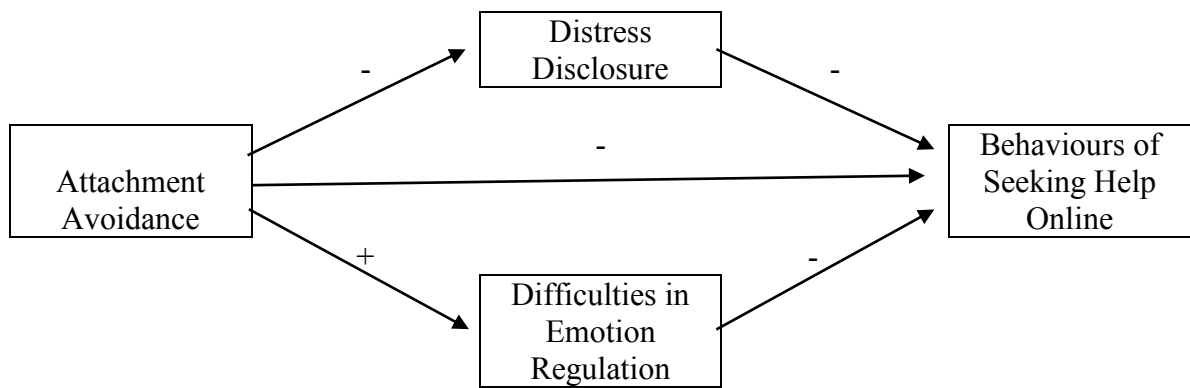
Figure 3. Hypothesis 4c. Hypothesized mediated model showing specific relations among

attachment avoidance, distress disclosure, difficulties in emotion regulation, and

behaviours of seeking help online.
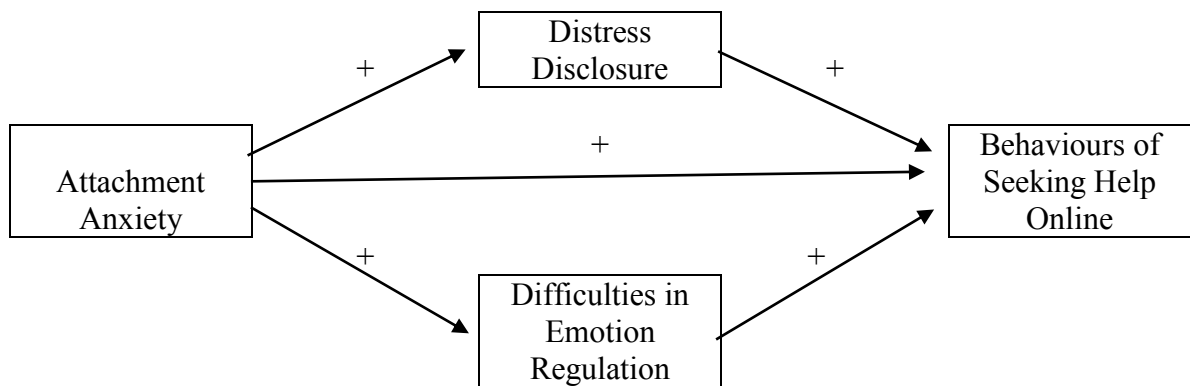
Figure 4. Hypothesis 4d. Hypothesized mediated model showing specific relations among attachment anxiety, distress disclosure, difficulties in emotion regulation, and behaviours of seeking help online.
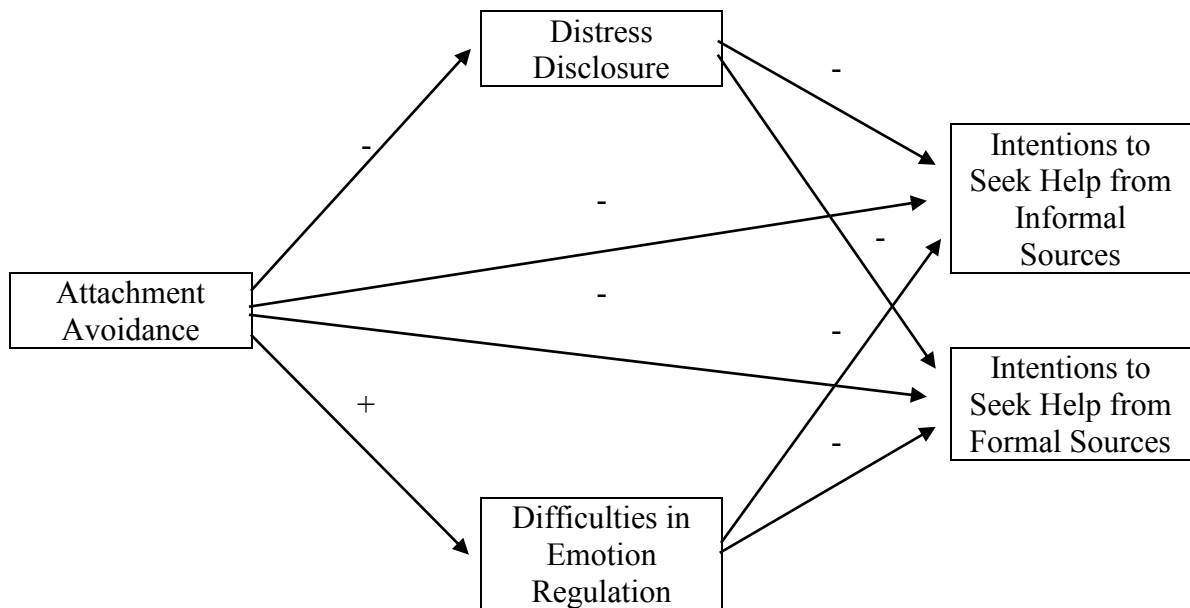
Figure 5. Hypothesis 6a. Hypothesized mediated model showing specific relations among

attachment avoidance, distress disclosure, difficulties in emotion regulation, and

intentions to seek help from informal sources and formal sources.

Distress Disclosure

Attachment Anxiety

Intentions to Seek Help from Informal Sources

Intentions to Seek Help from Formal Sources

Difficulties in Emotion Regulation

+ + + + + + + +
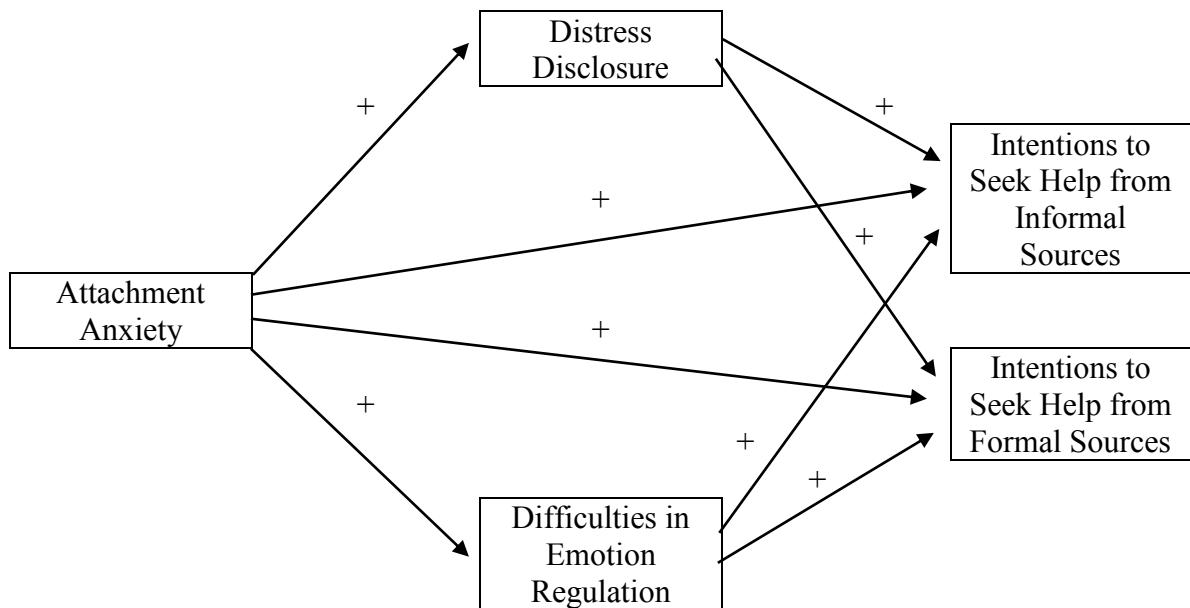
Figure 6. Hypothesis 6b. Hypothesized mediated model showing specific relations among attachment anxiety, distress disclosure, difficulties in emotion regulation, and intentions to seek help from informal sources and formal sources.
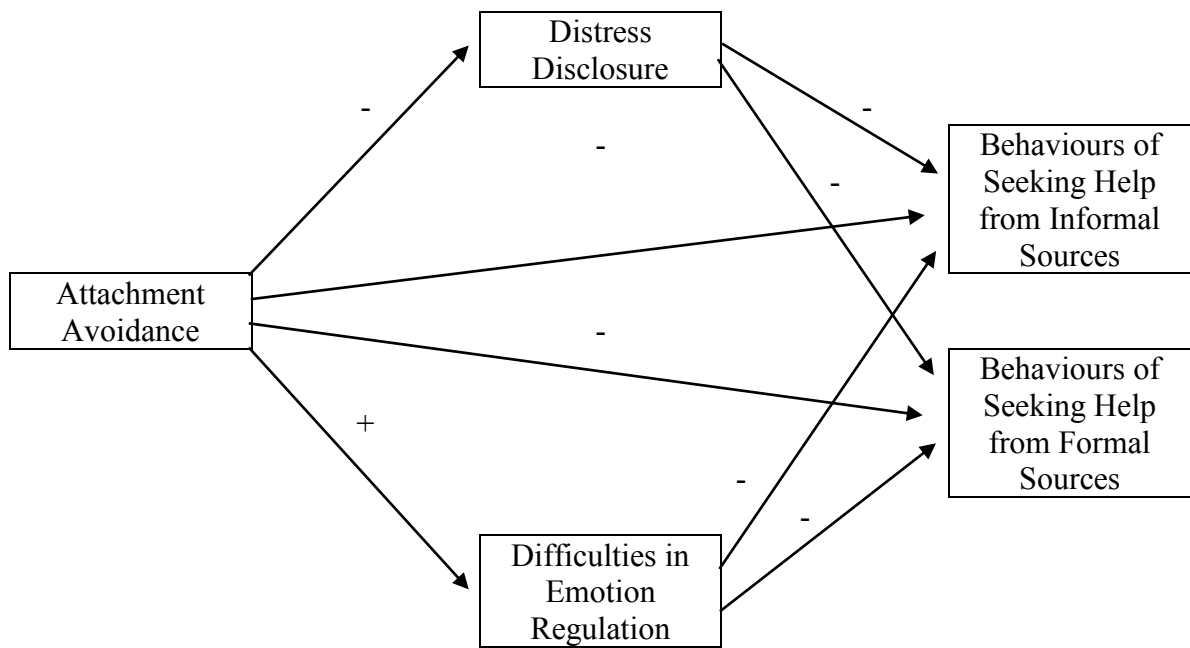
Figure 7. Hypothesis 6c. Hypothesized mediated model showing specific relations among attachment avoidance, distress disclosure, difficulties in emotion regulation, and behaviours of seeking help from informal sources and formal sources.
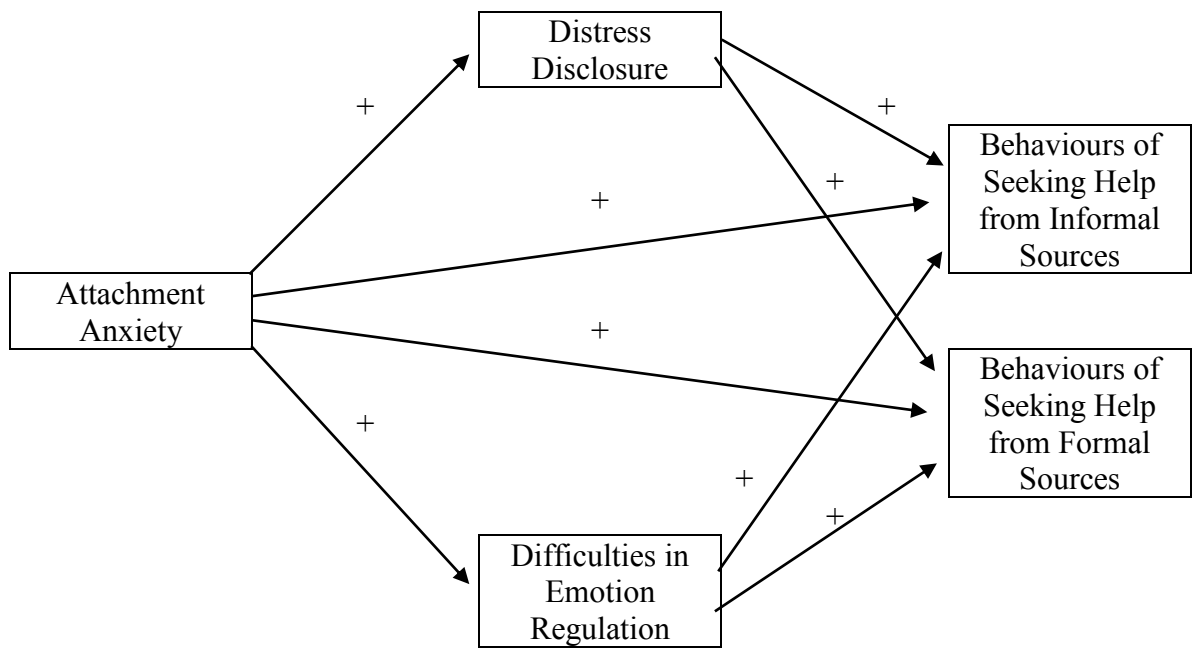
Figure 8. Hypothesis 6d. Hypothesized mediated model showing specific relations among attachment anxiety, distress disclosure, difficulties in emotion regulation, and behaviours of seeking help from informal sources and formal sources.

CHAPTER III

Method

Participants

Participants were 354 undergraduate university students who were enrolled at a university in a midsized city in southwestern Ontario, Canada. Study participants ranged in age from 17 to 25 years old ($M = 19.94$, $SD = 1.62$). The sample consisted of 299 females, ranging in age from 17 to 25 years old ($M = 19.96$, $SD = 1.61$), 53 males, ranging in age from 17 to 24 years old ($M = 19.85$, $SD = 1.70$), and two individuals who identified as genderqueer. A t-test showed that there was no significant difference in age between males and females, $t(250) = -.47$, $p = .64$. The sample was comprised of individuals who mostly identified as Caucasian, followed by Arab, South Asian, Chinese, Mixed/Biracial, African, Filipino, Caribbean, Latin American, Korean, and Indigenous. Regarding annual family income, approximately 40% of the participants were uncertain about their parents' household income. Of the 60% of participants who estimated their parents' household income, the median of annual family income was approximately $81,000 to $90,000. Demographic information, mental health service use, and technology use characteristics of the entire sample are presented in Table 1.

Concerning relationship status, the majority of the participants reported being single or in a relationship but not living together. With regard to mental health service use, 23 participants reported that they were currently receiving professional counselling services. In addition, 117 participants reported that they had previously received professional counselling services. Most of the participants identified owning a cell phone or a smartphone. Similarly, the majority of participants reported owning a laptop or

desktop computer, although fewer than half of the sample indicated owing a tablet.

Importantly, almost all of the participants reported using the Internet via a smartphone, cell phone, or tablet. Of those few participants who indicated that they did not use the Internet with a smartphone, cell phone, or tablet, they reported having access to the Internet via a computer.

Table 1

Demographic Characteristics of the Sample

	N	%
Gender		
Male	53	15.0
Female	299	84.5
Genderqueer	2	0.6
Ethnicity		
Caucasian	246	69.5
Arab	35	9.9
South Asian	20	5.6
Chinese	13	3.7
Mixed/Biracial	11	3.1
African	10	2.8
Filipino	5	1.4
Caribbean	4	1.1
Latin American	3	0.8
Korean	2	0.6
Indigenous	1	0.3
Other	4	1.1
Annual Family Income		
Uncertain	135	38.1
Under $30,000	25	7.1
$30,0000-$40,000	13	3.7
$41,0000-$50,000	8	2.3
$51,0000-$60,000	21	5.9
$61,0000-$70,000	18	5.1
$71,0000-$80,000	17	4.8
$81,0000-$90,000	32	9.0
$91,0000-$100,000	22	6.2
Over $100,000	63	17.8
Year of Undergraduate Study		
First	79	22.3
Second	89	25.1
Third	89	25.1
Fourth	82	23.2
Fifth	15	4.2
Relationship Status		
Single or In a Relationship but Not Living Together	339	95.7
In a Relationship and Living Together	13	3.7
Married	2	0.6

Table 1 (continued)

	N	%
Current Use of Counselling Services		
Yes	23	6.5
No	331	93.5
Current Mental Health Care Provider		
Psychologist	11	3.1
School Counsellor	5	1.4
Social Worker	4	1.1
Psychiatrist	3	0.8
Previous Use of Counselling Services		
Yes	117	33.1
No	237	66.9
Previous Mental Health Care Provider		
Psychologist	49	13.8
School Counsellor	28	7.9
Social Worker	25	7.1
Counsellor	9	2.5
Psychiatrist	6	1.7
Own a Cellphone		
Yes	346	97.7
No	8	2.3
Own a Smartphone		
Yes	342	96.6
No	12	3.4
Own a Tablet		
Yes	135	38.1
No	219	61.9
Own a Computer (laptop or desktop)		
Yes	343	96.9
No	11	3.1
Use the Internet on a Cell Phone, Smartphone, or Tablet		
Yes	351	99.2
No	3	0.8

Measures

Background Information

Demographic information was collected on participants' age, gender, ethnicity, current year of study in their undergraduate program, relationship status, estimated gross annual family income, and type of setting while growing up (i.e., urban, rural, or suburban; Appendix A). Participants were also asked as to whether they were currently receiving counselling services, if they had previously received counselling services, and if so, who provided the services (e.g., psychologist, social worker, school counsellor, or psychiatrist).

Attachment Style

Participants were administered the Experiences in Close Relationships – Relationship Structures questionnaire (ECR-RS; Fraley et al., 2011), which is a self-report measure that was used to assess emerging adults' general attachment style in close relationships. Specifically, the ECR-RS is designed to assess the attachment dimensions of anxiety and avoidance both generally within close relationships and across specific relational contexts (i.e., mother, father, romantic partner, and best friend). The dimension of *attachment anxiety* is conceptualized as the degree to which individuals worry about the availability and responsiveness of an attachment figure, including a concern about being alone or abandoned in relationships. In contrast, the dimension of *attachment avoidance* is conceptualized as the degree to which individuals feel uncomfortable opening up to and depending on other people within relationships. Individuals who are classified as having prototypical secure attachments tend to score low on both of these attachment dimensions.

In addition to generating continuous scores of both the anxiety and avoidance dimensions for each relationship-specific attachment structure, the ECR-RS also provides a general, global attachment score for both attachment anxiety and attachment avoidance so as to capture individuals' general attachment in close relationships. To yield two continuous scores for general attachment anxiety and general attachment avoidance in close relationships, a 9-item set of statements was administered to participants, who were asked to rate the extent to which they believe each statement describes their feelings about close relationships, in general, on a 7-point Likert-type scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Sample items include "I don't feel comfortable opening up to others" (attachment avoidance) and "I'm afraid that other people may abandon me" (attachment anxiety). Scores for the two dimensions of *global attachment avoidance* (6 items) and *global attachment anxiety* (3 items) were calculated for each participant by averaging the items associated with each respective dimension. In the present study, the Cronbach alphas for the scales of global attachment avoidance in close relationships and global attachment anxiety in close relationships were .85 and .88, respectively. These values are comparable to the alphas reported by Fraley et al. (2011) with respect to global attachment avoidance ($\alpha = .88$) and global attachment anxiety ($\alpha = .85$) of the ECR-RS in an online sample of 21,838 adults ($M_{age} = 31.35$ years old).

The ECR-RS has been shown to have good psychometric properties in samples of young people and adults (Fraley et al., 2011; Fraley et al., 2015). For example, Symons et al. (2016) found stable test-retest reliability across a 12-week time interval for global attachment avoidance ($r = .88$) and global attachment anxiety ($r = .81$) in close relationships, as well as moderate to high internal consistency (all α's $\geq .84$) for the

attachment dimensions of avoidance and anxiety for both general attachment in close

relationships and across specific relationship domains in a sample of undergraduate

students (n = 145; M_{age} = 21.20 years old). Similarly, Hudson et al. (2015) documented

adequate to strong internal consistency (all alpha values ranging from .80 to .92) for the

attachment dimensions of avoidance and anxiety both globally in relationships and for the

specific relationship contexts in two large online samples (n = 2,380 and n = 2,251) of

adults (M_{age} = 28.51 years old and M_{age} = 31.38 years old). The ECR-RS has also been

shown to have good structural, convergent, and discriminant validity in samples of both

adults (Fraley et al., 2011; Fraley et al., 2015) and adolescents (Donbaek & Elklit, 2014).

As previously noted, the 9-item set of the ECR-RS, which is used to assess global

attachment avoidance and global attachment anxiety, has been shown to have good

psychometric properties (Fraley et al., 2015). However, given that it has never been used

on its own (i.e., the 9-item set is typically used in conjunction with the four specific

relationship domains; R. C. Fraley, personal communication, March 13, 2015), an

additional 36 items were administered to participants, who were asked to rate the extent

to which they believe each statement describes their feelings in specific relationship

domains with mother, father, romantic partner, and best friend (i.e., 9 items per

relationship domain) on a 7-point scale, ranging from 1 (*strongly disagree*) to 7 (*strongly

agree*). For the current data, the Cronbach alphas for the relationship-specific dimensions

of attachment avoidance and attachment anxiety were as follows: .92 and .91 for

attachment avoidance and attachment anxiety to mother, respectively; .92 and .93 for

attachment avoidance and attachment anxiety to father, respectively; .91 and .93 for

attachment avoidance and attachment anxiety to romantic partner, respectively; and .91

and .94 for attachment avoidance and attachment anxiety to best friend, respectively.

Bivariate correlations were conducted among all the attachment scales (i.e., the

dimensions of attachment avoidance and attachment anxiety across global, mother,

father, romantic partner, and best friend relationship contexts). Results from this

correlation analysis are outlined in Table 2. Global attachment avoidance was

significantly positively correlated with attachment avoidance across all relationship

specific contexts: mother ($r = .39$, $p < .01$), father ($r = .38$, $p < .01$), romantic partner

($r = .44$, $p < .01$), and best friend ($r = .49$, $p < .01$). These global attachment avoidance

correlations are consistent with the results reported by Fraley et al. (2015) from two large

samples of adults (with correlations ranging from $r = .29$ to .35 for mother, $r = .27$ to .30

for father, $r = .40$ to .41 for romantic partner, and $r = .42$ to .47 for best friend). Similarly,

global attachment anxiety was significantly positively correlated with attachment anxiety

across all relationship specific contexts: mother ($r = .29$, $p < .01$), father ($r = .27$, $p < .01$),

romantic partner ($r = .46$, $p < .01$), and best friend ($r = .43$, $p < .01$). These global

attachment anxiety correlations are likewise consistent with the results documented by

Fraley et al. (2015; with correlations ranging from $r = .30$ to .38 for mother, $r = .28$ to .36

for father, $r = .53$ to .61 for romantic partner, and $r = .44$ to .46 for best friend).

Evidently, the dimensions of global attachment avoidance and global attachment anxiety

are related to their respective dimensions within specific close relationships and represent

reasonable ways in which to assess general attachment in close relationships.

Table 2

Correlations Among Relationship Domain Scales of Attachment Avoidance and Attachment Anxiety (N = 354)

Scale	1	2	3	4	5	6	7	8	9	10
Attachment Avoidance										
1. Global	-	.39**	.38**	.44**	.49**	.26**	.08	.14**	.26**	.19**
2. Mother		-	.48**	.33**	.42**	.21**	.40**	.17**	.20**	.28**
3. Father			-	.29**	.27**	.20**	.16**	.42**	.29**	.23**
4. Romantic Partner				-	.40**	.17**	.14*	.15**	.46**	.32**
5. Best Friend					-	.17**	.26**	.17**	.15**	.38**
Attachment Anxiety										
6. Global						-	.29**	.27**	.46**	.43**
7. Mother							-	.55**	.28**	.37**
8. Father								-	.34**	.36**
9. Romantic Partner									-	.53**
10. Best Friend										-

*Note. *p* < .05. **p* < .01.*

Offline Help-Seeking Intentions and Behaviours

Participants were administered a modified version of the General Help-Seeking

Questionnaire (GHSQ; Deane et al., 2001; Wilson, Deane, Ciarrochi, & Rickwood,

2005). The modified version of the GHSQ is a 39-item self-report measure that was used

to assess participants' help-seeking intentions and behaviours of seeking support from

numerous sources of help for an emotional or personal problem. With respect to the

GHSQ items assessing help-seeking intentions (19 items), the following instructions were

provided: "Below is a list of people who you might seek help or advice from if you were

experiencing a personal or emotional problem. Please indicate the number that shows

how likely is it that you would seek help from each of these people for a personal or

emotional problem during the next 4 weeks?" Respondents' intentions to seek help from

various support figures were assessed on a 7-point scale from 1 (*extremely unlikely*) to 7

(*extremely likely*). A *not applicable* option was also added to the questionnaire, which

included the following directions: "Note: The "Not Applicable" response should only be

endorsed if there is no person in your life who fits that particular role. For example, if

you do not have a step-mother, then indicate NA to show this."

Consistent with guidelines outlined by Wilson et al. (2005) that items of the

GHSQ can be added or tailored to address the research purpose, the sources of support

(subsequently identified in italics) were added to the original GHSQ so as to include a

greater number of options and to increase specificity. The following sources of support

were listed: mother, father, *step-mother*, *step-father*, *sister*, *brother*, *grandparent*, other

relative/family member *(e.g., cousin, aunt, or uncle)*, friend (not related to you),

boyfriend/girlfriend, *instructor*, *graduate assistant/teaching assistant*, *student volunteer*

peer support services, *student counselling services*, mental health professional (e.g.,

psychologist, counsellor, social worker, psychiatrist), doctor, and spiritual/religious

leader (e.g., priest, *rabbi, minister, imam, elder)*. The following sources of help were

originally classified as informal sources of support: boyfriend/girlfriend, friend (not

related to you), parent, and other relative/family member. The following sources of help

were originally categorized as formal sources of support: mental health professional (e.g.,

psychologist, counsellor, and psychiatrist), family doctor, teacher, and pastor/priest

(Rickwood et al., 2005; Wilson et al., 2005). The sources of support added to this

modified version of the GHSQ were considered to be either informal (i.e., step-mother,

step-father, sister, brother, and grandparent) or formal (i.e., instructor, graduate assistant,

student counselling services, and peer support services) in nature, which was based on

whether the source of help was a family relation or an individual in a professional/mental

health provider role, respectively. In addition, respondents were asked to identify their

intentions to seek help from "another source not listed above" and to specify the source

of support not listed. Finally, in keeping with the questionnaire format of the GHSQ

(Wilson et al., 2005), participants were asked to respond to the item, "I would *not* seek

help from anyone for a personal or emotional problem," as seeking help from no one is a

clear and preferable option for many individuals (Rickwood et al., 2005).

Regarding the assessment of GHSQ help-seeking behaviours (19 items), the items

used to measure help-seeking intentions were all replicated, but altered to assess whether

participants had actually recently sought help for a personal or emotional problem.

Instructions were modified to read, "Below is a list of people who you might seek help or

advice from if you were experiencing a personal or emotional problem. Please indicate

the response that shows whether you have sought help from each of these people for a personal or emotional problem during the past 4 weeks." Respondents were asked to respond to GHSQ behaviour items by endorsing "Yes" or "No." A *not applicable* option was also included. In addition, participants' perceptions of the degree to which it had been helpful to seek support from specific sources of support were assessed. More specifically, following each GHSQ behaviour item, participants were prompted and asked, "If you indicated 'yes,' how helpful was [specific source of support described]?" Respondents' perceived helpfulness of help-seeking behaviours from specific sources of support was assessed on a 5-point scale from 1 (*extremely unhelpful*) to 5 (*extremely helpful*). The following example is a sample item assessing the help-seeking behaviour from a particular source and perceived helpfulness: "Mother" and subsequently, "If you indicated 'yes,' how helpful was seeking help from your mother?"

Furthermore, an additional GHSQ item assessed past experiences of seeking help from mental health professionals, whereby participants were asked to indicate whether they had ever previously seen a mental health professional (e.g., counsellor, psychologist, psychiatrist), and if so, the extent to which their visit with the mental health professional had been helpful on a 5-point scale from 1 (*extremely unhelpful*) to 5 (*extremely helpful*).

As indicated by Rickwood et al. (2005) and Wilson et al. (2005), help-seeking intentions and behaviours were examined as subscales of *intentions* to seek help from *informal* sources and *formal* sources, as well as *behaviours* of seeking help from *informal* sources and *formal* sources. Specifically, mean scores were calculated for both intentions to seek help from informal sources (i.e., friend, boyfriend/girlfriend, mother, father, step-mother, step-father, sister, brother, grandparent, and other relative/family member) and

intentions to seek help from formal sources (i.e., doctor, mental health professional, student counselling services, spiritual/religious leader, instructor, graduate/teaching assistant, and volunteer peer support services). The variables of help-seeking intentions from informal and formal sources of support were considered continuous in nature. Higher scores on the subscales of help-seeking intentions from informal and formal sources signify greater intentions to seek help from informal and formal sources of support, respectively. The Cronbach alphas of the GHSQ intentions subscales were acceptable: $\alpha = .81$ for Intentions to Seek Help from Informal Sources and $\alpha = .84$ for Intentions to Seek Help from Formal Sources.

Subscale scores were computed for both help-seeking behaviours from informal sources and help-seeking behaviours from formal sources by summing the scores (i.e., 1 for "yes" and 0 for "no") of the respective items for informal sources and formal sources of the GHSQ. The variables of help-seeking behaviours from informal and formal sources of support were subsequently considered count data, with higher scores signifying a greater number of behaviours engaged in to seek help from informal sources and formal sources of support, respectively.

The GHSQ was originally constructed and tested on a sample ($n = 302$) of undergraduate university students ($M_{age} = 20.58$ years old, $SD = 4.98$ years) and has adequate psychometric properties (Deane et al., 2001). The GHSQ is commonly used in empirical research on help seeking with samples of emerging adults and adolescents (e.g., Mok, Jorm, & Pirkis, 2016; Moran, 2007; Rickwood et al., 2005; Ryan et al., 2010; Seward & Harris, 2016; Wilson et al., 2005). Intention scores on the GHSQ have been

shown to relate to actual help-seeking behaviours within the past month, as well as to predict future help-seeking behaviours (Ciarrochi & Deane, 2001; Deane et al., 2001).

Online Help-Seeking Intentions and Behaviours

Participants were administered the Online Help-Seeking Questionnaire (OHSQ), which is a 46-item self-report measure that was designed to assess emerging adults' *intentions* to seek help online and recent past *behaviours* of seeking help online for an emotional or personal problem by using different online tools/ platforms to seek help from various individuals/sources of support. Given the lack of research investigating *how* and from *whom* young people seek help online, it is not surprising that no questionnaire could be located that would address this particular focus of study. In developing the OHSQ, a similar format to that of the General Help-Seeking Questionnaire (GHSQ; Wilson et al., 2005) was employed. Furthermore, in constructing the items of the OHSQ, ideas outlined by Gowen et al. (2012), Davis (2012), and Subrahmanyam and Greenfield (2008) were initially used as guides for the purpose of brainstorming and identifying potential ways in which emerging adults might use the Internet or smartphones to connect with others and seek help online for a personal or emotional problem. Prior to this present research study, a pilot study was conducted using a different sample of undergraduate university students ($n = 200$; $M_{age} = 19.70$ years, $SD = 1.64$) in order to assess the validity of the OHSQ in a sample of young adults (see Appendix B and Table 17 for a summary of the results from the pilot study).

With respect to the OHSQ items assessing online help-seeking intentions (21 items), instructions were modified from the GHSQ to emphasize the key feature of seeking help *online* and were altered to read: "Below is a list of ways that you might use

the Internet or a smartphone to seek help or advice, online, if you were experiencing a personal or emotional problem. Please indicate the number that shows how likely it is that you would use each of these ways to seek help, online, for a personal or emotional problem during the next 4 weeks." The following list includes several sample items: "Send a personal message to a friend on a social networking site (e.g., Facebook, Twitter, Instagram);" "Send a message to my parent(s) on a smartphone (e.g., text message, iMessage, WhatsApp, SnapChat);" "Post a video (e.g., YouTube, Facebook, Vine, Instagram);" "Message others in an anonymous chat room (people don't know my real identity;" "Search for information about my personal or emotional problem (e.g., Google, Bing, Yahoo);" and "Search for professional mental health services available online." Respondents' intentions to seek help online were assessed on a 7-point scale from 1 (*extremely unlikely*) to 7 (*extremely likely*), which is the same Likert-type scale used in the GHSQ (Wilson et al., 2005).

An Exploratory Factor Analysis (EFA) was conducted on items 1 to 19 of the online help-seeking *intentions* component of the OHSQ. Four factors were identified: (1) *Posting to Anonymous Sources* – Help-Seeker Identity is Unknown (four items; items 11 to 14; e.g., "Post an anonymous message on a discussion board or a support group site [people don't know my real identity]); (2) *Searching For and Reading Information* (five items; items 15 to 19; e.g., "Search for information about my personal or emotional problem [e.g., Google, Bing, Yahoo, Wikipedia]"); (3) *Directly Messaging Close Others* (six items; items 1 to 6; e.g., "Send a personal message to a friend on a social networking site [e.g., Facebook, Twitter, Instagram]"); and (4) *Posting to a Large Audience* – Help-Seeker Identity is Known (four items; items 7 to 10; e.g., "Update my profile status [e.g.,

Facebook, Twitter]"). These four factors of online help-seeking intentions were continuous in nature and were outcome variables of interest in the current study. Four online help-seeking intentions subscale scores were computed by summing the scores (i.e., 1 to 7) of the items for each respective OHSQ intentions subscale (Tabachnick & Fidell, 2013). Higher scores on the online help-seeking intentions subscales signify greater intentions to seek help online. The Cronbach alphas of the OHSQ intentions subscales were acceptable: $\alpha = .91$ for Posting to Anonymous Sources (help-seeker identity is unknown); $\alpha = .89$ for Searching For and Reading Information; $\alpha = .81$ for Posting to a Large Audience (help-seeker identity is known); and $\alpha = .76$ for Directly Messaging Close Others. See the exploratory factor analyses section within the results section for greater details concerning the results of the EFA on the OHSQ intention items and subsequent factor solution (Tables 3 and 4).

In addition to these factor analyzed intentions items, respondents were asked to identify their intentions to seek help online from "another source not listed above" and to specify the online source of support not listed. Finally, in keeping with the questionnaire format of the GHSQ (Wilson et al., 2005), participants were asked to respond to the item, "I would *not* seek help online, in any way," on the same 7-point scale from 1 (*extremely unlikely*) to 7 (*extremely likely*).

Regarding the assessment of online help-seeking behaviours (21 items), the items used to measure online help-seeking intentions were all replicated, but altered to assess whether participants had actually recently sought help online for a personal or emotional problem. Instructions were modified to read, "Below is a list of ways that you might use the Internet or a smartphone to seek help or advice, online, if you were experiencing a

personal or emotional problem. Please indicate the response that shows whether you have used each of these ways to seek help, online, for a personal or emotional problem during the past 4 weeks." Respondents were asked to respond to OHSQ behaviour items by endorsing "Yes" or "No." In addition, participants' perceptions of the degree to which these online help-seeking behaviours had been helpful were assessed. More specifically, following each OHSQ behaviour item, participants were prompted and asked, "If you indicated 'yes,' how helpful was [specific online help-seeking behaviour described]?" Respondents' perceived helpfulness of online help-seeking behaviours was assessed on a 5-point scale from 1 (*extremely unhelpful*) to 5 (*extremely helpful*). The following example is a sample item assessing an online help-seeking behaviour and perceived helpfulness: "Read the personal stories of other people, who have experienced similar personal or emotional problems, for support or ideas about how to cope with it (e.g., on websites, blogs, or social network profiles)" and subsequently, "If you indicated 'yes,' how helpful was reading the personal stories of other people, who have experienced similar personal or emotional problems, for support or ideas about how to cope with it?"

Given the challenges and "misleading" nature of results associated with conducting exploratory factor analyses on dichotomous data (Fabrigar & Wegener, 2012, p. 94), it was decided that an EFA would not be the most appropriate way to proceed in analyzing the binary data (i.e., "yes" versus "no") of the OHSQ behaviour items. Accordingly, the OHSQ behaviour items were grouped together to reflect the way in which the OHSQ intention items were grouped based on the four-factor structure solution described above. Four online help-seeking behaviour subscale scores were computed by summing the scores (i.e., 1 for "yes" and 0 for "no") of the items for each respective

OHSQ *behaviour* subscale (i.e., items 36 to 40 for *Posting to Anonymous Sources*; items 36 to 40 for *Searching For and Reading Information*; items 22 to 27 for *Directly Messaging Close Others*; and items 28 to 31 for *Posting to a Large Audience*). Behaviour subscale scores were subsequently considered count data, with higher scores signifying a greater number of behaviours engaged in to seek help online. See the results section for a greater discussion regarding the calculation of the OHSQ behaviour subscale scores based on the EFA factor solution of the OHSQ intention items.

Emotion Regulation

Participants were administered the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004), which is a 36-item self-report questionnaire used to measure clinically relevant difficulties in emotion regulation. Respondents indicated the frequency to which each item pertains to themselves on a 5-point Likert-type scale ranging from 1 (*almost never*) to 5 (*almost always*). The DERS is comprised of six subscales: *Lack of Emotional Awareness* (e.g., "I pay attention to how I feel"); *Lack of Emotional Clarity* (e.g., "I have no idea how I am feeling"); *Impulse Control Difficulties* (e.g., "When I'm upset, I have difficulty controlling my behaviours"); *Non-Acceptance of Negative Emotional Responses* (e.g., "When I'm upset, I become embarrassed"); *Difficulties Engaging in Goal-Directed Behaviour* (e.g., "When I'm upset, I have difficulty focusing on other things"); and *Limited Access to Effective Emotion Regulation Strategies* (e.g., "When I'm upset, I believe that there is nothing I can do to make myself feel better"). Higher subscale scores signify greater difficulties in the respective area of emotion regulation. In the present study, the Cronbach alphas for five of the six DERS subscales were acceptable: $\alpha = .84$ for Lack of Emotional Awareness; $\alpha = .89$ for

Impulse Control Difficulties; $\alpha = .92$ for Non-Acceptance of Negative Emotional

Responses; $\alpha = .89$ for Difficulties Engaging in Goal-Directed Behaviour; and $\alpha = .91$ for

Limited Access to Effective Emotion Regulation Strategies. However, the internal

consistency for Lack of Emotional Clarity was low ($\alpha = .53$) and subsequently, this

subscale was not included in the data analyses of the current study.

The DERS was originally constructed and tested on two samples ($n = 357$ and $n = 194$) of undergraduate university students ($M_{age} = 23.10$ years old and $M_{age} = 25.95$ years old; Gratz & Roemer, 2004). As reported by Gratz and Roemer (2004), study results demonstrated strong internal consistency (α values ranging from .80 to .89 across the six subscales), good test-retest reliability across a 4 to 8-week time interval (ρ_I values ranging from .57 to .89 across the six subscales), empirical support for the 6-factor structure using exploratory factor analysis, and adequate construct and predictive validity. Subsequent research studies with university and community-based samples of young adults have similarly indicated good internal consistency of the six DERS subscales (e.g., Cronbach alphas ranging from .84 to .91 and .81 to .89 in Han & Pistole, 2014, and Lecce, 2008, respectively). The DERS has also been shown to have strong psychometric properties in community samples of adolescents (Neumann, van Lier, Gratz, & Koot, 2010; Weinberg & Klonsky, 2009).

Distress Disclosure

Participants completed the Distress Disclosure Index (DDI; Kahn & Hessling, 2001), which is a 12-item self-report measure that was used to assess emerging adults' tendency to disclose (versus conceal) personally distressing information about their thoughts, emotions, and personal problems to others. Confirmatory factor analysis of the

DDI provided support for one bipolar dimension, with frequent self-disclosure of distress and frequent self-concealment being at the two opposing ends, respectively (Kahn & Hessling, 2001). Respondents were asked to indicate the extent to which they agreed or disagreed with each item on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items include "When I feel upset, I usually confide in my friends" and "When I'm distressed I don't tell anyone" (reverse scored). Higher scores on this measure signify a greater tendency to disclose psychologically distressing information to others. In the current study, the Cronbach's alpha for the DDI was .87.

The DDI was originally developed and tested on two samples (*n* = 278 and *n* = 279) of undergraduate students (M_{age} = 19.75 years old and M_{age} = 19.74 years old) and shown to have strong internal consistency (α = .93), convergent validity, and discriminant validity (Kahn & Hessling, 2001). Since its development, the DDI has been widely used in research studies with undergraduate student samples (e.g., Garrison et al., 2012; Garrison et al., 2014; Kahn, Hucke, Bradley, Glinski, & Malak, 2012; Vogel & Wester, 2003; Wei et al., 2007) and found to have good psychometric properties, including high internal consistency (α = .93), stable test-retest reliability (*r* = .80), and adequate convergent and discriminant validity (Kahn et al., 2012).

Psychological Symptom Severity

Participants were administered the General Health Questionnaire – 12 Items (GHQ-12), which is a modified version of the General Health Questionnaire (Goldberg, 1978) that is commonly used as a brief screening measure to assess the severity of mental health problems (symptoms related to depression, anxiety, somatic complaints, and social withdrawal). Respondents were asked to indicate the extent to which they had recently

experienced various symptoms over the past two weeks on a 4-point Likert-type scale, ranging from 0 (*not at all*) to 3 (*much more than usual*). Sample items include "Lost much sleep over worry" and "Been feeling unhappy and depressed." An overall score of psychological symptom severity was computed, with higher scores reflecting more severe psychological symptoms. In the current study, the Cronbach's alpha for the GHQ overall index of psychological symptom severity was .89.

The GHQ-12 has been extensively used in research studies with samples of young people and undergraduate students and shown to have good psychometric properties, including high internal consistency (α ranging from .85 to .92), acceptable model fit (*RMSEA* ranging from .05 to .06; *CFI* ranging from .93 to .98), and adequate predictive and convergent validity (e.g., a significant negative correlation with global quality of life, $r = -.56$, $p < .001$; e.g., Biddle et al., 2004; Gelaye et al., 2015; Montazeri et al., 2003; Rey, Abad, Barrada, Garrido, & Ponsoda, 2014; Rickwood & Braithwaite, 1994).

Internet Use

Participants were administered a 34-item questionnaire designed to assess the amount of time spent and the ways/activities in which individuals use the Internet on both a typical weekday and typical weekend. The Internet Use Questionnaire was created via the combined use of the online activity items outlined by Livingstone and Gorzig (2014), as well as the directions and scoring/anchors employed by Romer, Bagdasarov, and More (2013). Participants completed 17 items (concerning online activities) with the following directions in mind: "For each item, please mark the box to tell us how you use the Internet on a typical weekday. What is the approximate number of hours you spend doing each of the following activities on a typical weekday?" (Romer et al., 2013) Participants

then responded to the same 17 items, but with the following modified instructions: "For each item, please mark the box to tell us how you use the Internet on a typical weekend. What is the approximate number of hours you spend doing each of the following activities on a typical weekend?" Online activity items included "Use the Internet for schoolwork," "Send/receive email," "Visit a social networking profile," and "Post photos, videos, or music to share with others" (Livingstone & Gorzig, 2014). As outlined by Romer et al. (2013), the following response options and respective scoring/weighted average estimates were used for each item: "0 hours" (0); "< 1 hour" (0.5); "1-2 hours" (1.5); "3-5 hours" (4.0); "6-8 hours" (7.0); and "> 8 hours" (8.5). A *Weekend Internet Use* score was computed for each participant by summing the weighted average estimates across the 17 items pertaining to Internet use on a typical weekend. A *Workweek Internet Use* score was similarly calculated for each participant by summing the weighted average estimates across the 17 items concerning Internet use on a typical weekday and multiplying that sum by five. Finally, a *Total Internet Use* score was computed by summing the two scores of Weekend Internet Use and Workweek Internet Use.

Technology Use

Participants were administered the first six items of the Teen Cell Phone and Online Behaviour Questionnaire (Norman, 2017), which was originally developed and tested on a sample of undergraduate university students (17 to 25 years old). Specifically, participants were instructed to respond with "yes" or "no" to the following questions, which were administered to obtain information regarding technology use: (1) Do you have a cell phone? (2) Do you have a smartphone? (3) Do you have a tablet? (4) Do you have a computer (i.e., laptop, desktop) in your bedroom? (5) On an average day, about

how many text messages do you send AND receive by cell phone, smartphone, and/or table (either your own device, or one that you borrow from someone else)? (6) Do you use the Internet (i.e., by cellular data or Wi-Fi) on a cell phone, smartphone, or tablet?

Procedure

Research ethics approval was obtained from the Research Ethics Board at the University of Windsor. Data collection was completed from September to November 2016. Participants were recruited through the undergraduate psychology participant pool at the University of Windsor. The age of participants was screened for during the recruitment process. Participants who responded to the screening question, "What is your current age?" with 17, 18, 19, 20, or 21-25, were eligible to participate in the present study and were able to view an online advertisement. When prospective participants signed up online for a participation timeslot, the primary investigator sent an email to each person so as to provide the study link. Participants were asked to review a Letter of Information and Informed Consent to Participate in Research Form. Participants were informed that they would receive 1.0 bonus point toward a course and that the survey would take no more than 60 minutes of their time.

After completing the online survey of questionnaires, participants were provided with the contact information for Student Counselling Services at the University of Windsor, in case they were experiencing any distress. Participants were also prompted to provide their name and student number for the purpose of awarding credit. All participants who completed the present study were compensated for their participation with course credit.

CHAPTER IV

Results

The IBM Statistical Package for the Social Sciences (SPSS; Version 22) was used to conduct most of the statistical analyses for the present research study. *Mplus* (Version 7.3) was used to conduct the mediation analyses that included count variables (i.e., help-seeking behaviours) as the outcome variables.

Missing Data

Before conducting the primary analyses of the current study, missing data analyses were conducted on the individual items of all the questionnaire data. With the exception of two items (OHSQ items 5 and 6), the amount of missing data for all items across the questionnaires was under 5%. For the online help-seeking *intentions* items 5 ("Send a personal message to my boyfriend/girlfriend on a social networking site") and 6 ("Send a personal message to my boyfriend/girlfriend on a smartphone"), 7.6% and 7.9% of the data were missing, respectively. The proportion of missing data on these two items is hypothesized to reflect that there was no "not applicable" option included for the online help-seeking intentions items (i.e., OHSQ items 1 to 21), which would have allowed participants to indicate that items 5 and 6 did not apply to their circumstances, as they did not have a romantic relationship partner. Although there are no standard guidelines for determining the acceptable amount of missing data (Tabachnick & Fidell, 2013), some researchers have suggested that a missing rate of 5% or less is suitable, whereas others have identified a missing rate of less than 10% as acceptable (Bennett, 2001; Dong & Peng, 2013). With that said, it has been argued that the pattern of missing data has greater consequences than the proportion of missing data (Tabachnick & Fidell, 2013).

In order to determine whether the data were missing completely at random, Little's Missing Completely at Random (MCAR) test was conducted on all the data. Little's MCAR test revealed non-significant results on all items of the ECR-RS, DDI, GHSQ, and GHQ-12, indicating that the data for these measures were missing completely at random. By comparison, Little's MCAR test was found to be significant on items of the DERS (χ^2 [233] = 365.58, p = .01), the OHSQ (χ^2 [103] = 207.45, p = .01), and the TIU (χ^2 [95] = 338.17, p = .01), signifying that the data were not missing completely at random. Upon further inspection of the eight DERS items with missing data, statistically significant results from separate variance t-tests showed that the missingness of the data was predicted from other variables (as opposed to the actual variables of interest), which suggests that data can be inferred as missing at random. Similarly, significant results from separate variance t-tests on the 14 OHSQ items with missing data and the six TIU items with missing data imply that the data can be inferred as missing at random. Accordingly, in order to address the missing data, Expectation Maximization was conducted to impute missing values for all the questionnaires with missing data. All items of the respective questionnaire were used as predictors in the Expectation Maximization analyses to estimate the missing data.

Testing of Assumptions

Prior to proceeding with the primary analyses, various tests were conducted to explore assumptions of the data within the entire dataset. More specifically, all of the data were inspected for outliers, whereby z-scores with an absolute value greater than 3.29 were considered potential outliers (Field, 2009; Tabachnick & Fidell, 2013). Three outliers were found on the overall GHQ variable and 18 outliers were identified on the

weekly TIU variable. As a result, these data points were addressed by applying the method of winsorizing, which was used so as to reduce the influence of these outliers and involved modifying these outlier data point scores on these variables to fit within the normal distribution (i.e., one unit greater than the next most extreme score in the distribution; Tabachnick & Fidell, 2013). The *z*-scores of these variables were subsequently re-calculated for the presence of outliers and found to be within the acceptable range (i.e., the *z*-scores of the GHQ variable and the weekly TIU variable ranged from -2.21 to 2.46 and from -1.78 to 1.84, respectively). With regard to examining the data for influential cases, no influential outliers were identified based on Cook's Distance (all values were less than 1.00) or Standardized DFBetas and Standardized DFFits (all values were between ±1; Field, 2009; Tabachnick & Fidell, 2013).

Concerning the assumption of normality, the skewness and kurtosis of the variable distributions were assessed, whereby absolute values of 2 and 3 for skewness and kurtosis, respectively, were considered to be within normal limits (Tabachnick & Fidell, 2013). The distributions of the ECR-RS, DERS, DDI, and GHQ subscales were found to be normally distributed with skewness ranging from -0.19 to 1.01 and kurtosis ranging from -1.30 to 0.70. Visual review of the data using histograms likewise signalled that the variables of ECR-RS, DERS, DDI, and GHQ were normally distributed.

In contrast, numerous absolute values of skewness and kurtosis on individual items of the OHSQ and the GHSQ (as well as several values on the OHSQ and GHSQ subscales, as later described in the Results section) were identified as exceeding the cut-off values, suggesting skewness and kurtosis to be of concern for the respective items. However, these results are not surprising given that seeking help, particularly from

formal sources of support, does not tend to be a behaviour that is normally distributed

(e.g., there tend to be significantly *more* people who do *not* seek help from a psychologist

or doctor than those people who do seek support from these professional sources).

Moreover, given that the investigation of online help seeking is so exploratory in nature,

as well as that particular online sources of support were expected to not be commonly

endorsed, but nonetheless, still important to investigate (e.g., online support from

anonymous sources), it was anticipated that certain methods of seeking help online would

not be normally distributed. Taken together, although various individual items of the

OHSQ and GHSQ violated the assumption of normality, these data were not transformed,

so as to maintain them in their originally reported format.

Visual inspection of the histogram of the TIU scale revealed that the data of the

Total Internet Use variable were not normally distributed. Moreover, other data call into

question whether the TIU scale is a true or valid representation of emerging adults' time

spent using the Internet on a weekly basis. More specifically, values on the TIU ranged

from 17 to 168 hours spent using the Internet per week ($M = 91.15$, $SD = 41.70$; *Median*

$= 84.74$), with 25 people (7.06% of the sample) endorsing 168 hours of Internet use per

week. However, given that there are only 168 hours of time in a week, these values are

not realistically feasible (i.e., an individual would need to be using the Internet 24 hours

per day and 7 days per week). Consequently, these data suggested that the TIU is not an

accurate measure of participants' weekly Internet use and subsequently, this scale was

not included in the data analyses of the current study.

The multicollinearity of predictor variables was investigated by examining

variance inflation factors (VIF), whereby VIF scores of 10 or above indicate the presence

of multicollinearity problems (Field, 2009). With respect to the current study data, all VIF values were below 4, suggesting the absence of multicollinearity. The assumption of multicollinearity was also tested by analyzing a correlation matrix of the predictor variables, with correlation values of r being equal to or greater than 0.90 indicating a problem with multicollinearity (Tabachnick & Fidell, 2013). Upon inspection of the correlation matrix of the predictor variables, no correlations were identified with values at or above $r = .90$. In addition, the predictor variables were tested for singularity by inspecting tolerance values, with values below 0.1 indicating serious problems and values below 0.2 suggesting singularity concerns (Field, 2009). Regarding these data, the tolerance values for all subtests were above 0.2, ranging from 0.40 to 0.97.

The independence of errors assumption was tested using the Durbin-Watson test statistic, whereby values less than 1 or greater than 3 indicate concerns, and values approximating 2 represent the ideal (Field, 2009). Regarding the present study data, all of the Durbin-Watson values were close to a value of 2 (and none were less than 1 or greater than 3), suggesting that the assumption of independence of errors had not been violated and a lack of autocorrelation can be assumed.

The assumptions of linearity and homoscedasticity were investigated by visually inspecting the scatterplots of the predicted outcome values and the standardized residual values (Field, 2009; Tabachnick & Fidell, 2013). Upon examination of these residual scatterplots, these assumptions appeared to have been met, as the spread of the values did not create a curved shape and was relatively equivalent in width across values of the dependent variables.

Power Analysis

Based on an a priori power analysis using G*Power 3.1.9.3 (Faul, Erdfelder, Buchner, & Lang, 2009), the total sample size of the current study ($n = 354$) met the sample size requirements to detect adequate power for multiple regression analyses ($n = 118$) and exploratory factor analyses ($n = 200$). In conducting the power analysis for multiple regression analyses, the input parameters were identified as having a desired statistical power level of 0.8 in detecting a medium effect ($f^2 = .15$; Cohen, 1988) with the significance level at .05 (two-tailed). Input parameters were also specified to allow up to ten predictor variables per analysis and twelve predictors in total. Output parameters of the power analysis provided the following information: $\lambda^2 = 17.70$, critical $F^2 = 1.92$, and an ideal total sample size of 118. Furthermore, with respect to the required sample size for conducting exploratory factor analyses, Fabrigar and Wegener (2012) recommend a sample of at least 200 participants when the testing conditions are moderately good (i.e., at least three variables load onto each factor and communalities range from .40 to .70), whereas Tabachnick and Fidell (2013) suggest a sample size of at least 300 cases to be suitable for an acceptable exploratory factor analysis.

Exploratory Factor Analyses

An exploratory factor analysis was conducted on items 1 to 19 of the online help-seeking intentions component of the OHSQ using the model fitting procedure of maximum likelihood (ML) and the oblique rotation method of direct oblimin rotation (i.e., direct quartimin rotation), as it was assumed that there would be some degree of correlation among the common factors (Fabrigar & Wegener, 2012). The overall Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was shown to be acceptable,

KMO = .83 ('great' according to Field, 2009), and all KMO values for individual items were ≥ .60 (ranged from .60 to .91), which is above the acceptable limit of .50 (Field, 2009). Bartlett's test of sphericity was found to be significant, χ^2 (171) = 3683.31, $p <$ .001, suggesting that the correlation matrix was significantly different from an identity matrix and accordingly, correlations between items were sufficiently large for exploratory factor analysis (Field, 2009).

Using Kaiser's criterion to retain factors with eigenvalues greater than 1, the exploratory factor analysis solution suggested that four factors comprise the model (see Table 3 for the eigenvalues of the extracted factors after rotation), with the model accounting for 56.35% of the total variance. Communalities for the items after factor extraction ranged in value from .260 (item 3) to .847 (item 18), signifying that 26.0% of the variance in item 3 and 84.7% of the variance in item 18 is accounted for in the shared variance of the common factors. The average value of communalities after factor extraction was .563. Communalities of .40 to .70 are considered within the range of "moderately good" conditions (Fabrigar & Wegener, 2012, p. 26). With respect to the model fit, the *RMSEA* model fit index for the four-factor solution was found to be a "marginally good fit" (Fabrigar & Wegener, p. 51), such that *RMSEA* was .09. To also evaluate the model fit, the percentage of non-redundant residuals with absolute values greater than 0.05 can be inspected, such that the percentage should be less than 50% and the smaller the percentage, the better the fit of the model (Field, 2009). Concerning these data, only 12.0% of the non-redundant residuals had absolute values greater than 0.05, which is well below the cutoff percentage of 50%.

Table 3

Summary of Exploratory Factor Analysis Results on Online Help-Seeking Intentions

| | Rotated Factor Loadings | | | |
	Post to Anonymous Sources	Search For and Read Information	Directly Message Close Others	Post to Large Audience
Eigenvalues after Extraction	4.17	4.05	2.77	3.69
Cronbach's α	.91	.89	.76	.81
Item				
Post an anonymous message on a message board or a support group site	**.91**	-.06	.07	.05
Join an anonymous support group	**.87**	-.05	.02	.06
Message others in an anonymous chat room	**.76**	.02	-.04	-.17
Post an anonymous blog entry	**.75**	-.01	-.01	-.04
Read information about my personal or emotional problem on websites with general help	-.03	**-.93**	.02	.03
Read the personal stories of other people, who have experienced similar personal or emotional problems, for support or ideas about how to cope with it	-.03	**-.86**	-.01	-.06
Read information about my personal/emotional problem on websites with professional help	-.02	**-.85**	-.06	-.08
Search for information about my personal or emotional problem	.02	**-.77**	.04	.07
Search for professional mental health services available online	.28	**-.43**	.04	-.04
Send a personal message to my boyfriend/girlfriend on a smartphone	.01	.01	**.70**	.10
Send a personal message to a friend on a smartphone	-.11	-.11	**.70**	.06
Send a personal message to my boyfriend/girlfriend on a social networking site	.13	.04	**.62**	-.02
Send a personal message to a friend on a social networking site	.01	-.04	**.54**	-.23
Send a personal message to my parent(s) on a smartphone	-.01	.03	**.45**	-.13
Send a personal message to my parent(s) on a on a social networking site	.09	.01	.29	-.27
Update my profile status	-.05	-.06	.04	**-.81**
Post a photo	-.13	-.01	.18	**-.68**
Post a video	.22	-.04	-.07	**-.63**
Post a blog entry on a site where people know who I am	.17	-.04	-.06	**-.60**

Note. Factor loadings over .30 appear in bold.

The factor loadings after rotation are shown in Table 3. Based on the factor loadings of the items, factor 1 represents intentions to seek help online by posting to anonymous sources (help-seeker identity is unknown), factor 2 denotes intentions to seek help online by searching for and reading information, factor 3 signifies intentions to seek help online by directly messaging close others, and factor 4 represents intentions to seek help online by posting to a large audience (help-seeker identity is known). In terms of identifying the value cutoff for suitable factor loadings, factor loadings with absolute values greater than .30 are regarded as important (Field, 2009; Tabachnick & Fidell, 2013). However, the importance of a factor loading can vary based on the sample size (Field, 2009). As noted by Field, factor loading values should be at or greater than .29 to be considered important in a sample of 300 cases. With the exception of item 3 ("Send a personal message to my parent(s) on a social networking site"), which loads onto factor 3 ("Directly message close others") with a factor loading value of .29, all of the items have factor loadings with values greater than .40 in relation to their respective factors.

Regarding the correlations among the extracted factors, the correlation coefficients between the factors are presented in Table 4. The correlation coefficients reveal that all of the factors are interrelated to some degree, indicating that the measured constructs can be correlated. As a result, it is not reasonable to assume independence between factors and accordingly, the results of an obliquely rotated solution are assumed to be more meaningful than those of an orthogonal rotation (Field, 2009). Reliability analyses of the four factors of online help-seeking intentions revealed Cronbach alphas ranging from satisfactory to excellent: $\alpha = .91$ for intentions to post to anonymous sources; $\alpha = .89$ for intentions to search for and read information; $\alpha = .81$ for intentions

Table 4

Factor Correlation Matrix of Online Help-Seeking Intentions

Factor	1	2	3	4
1. Posting to Anonymous Sources	-	-0.40	0.06	-0.43
2. Searching For and Reading Information		-	-0.19	0.24
3. Directly Messaging Close Others			-	-0.44
4. Posting to Large Audience				-

to post to a large audience; and α = .76 for intentions to directly message close others.

In calculating the factor scores of the online help-seeking intentions, the simple method of summing the scores on variables that load highly on each factor was used, as it is considered "entirely adequate for many research purposes" (Tabachnick & Fidell, 2013, p. 655). More specifically, four online help-seeking intentions subscale scores were computed by summing the scores (i.e., 1 to 7) of the items for each respective OHSQ intention subscale (i.e., items 11 to 14 for intentions to post to anonymous sources; items 15 to 19 for intentions to search for and read information; items 1 to 6 for intentions to directly message close others; and items 7 to 10 for intentions to post to a large audience). Higher scores on the online help-seeking intentions subscales signify greater intentions to seek help online.

Since there are inherent difficulties with conducting exploratory factor analyses on dichotomous data (Fabrigar & Wegener, 2012), it was determined that an EFA would not be a suitable approach to analyzing and representing the binary data of the OHSQ behaviour items. As such, the OHSQ behaviour items were grouped together based on the OHSQ intentions four-factor structure solution described above. Similar to the approach used for calculating the factor scores of the four online help-seeking intentions factors (Tabachnick & Fidell, 2013), four online help-seeking behaviour subscale scores were computed by summing the scores (i.e., 1 for "yes" and 0 for "no") of the items for each respective OHSQ behaviour subscale (i.e., items 32 to 35 for behaviours of posting to anonymous sources; items 36 to 40 for behaviours of searching for and reading information; items 22 to 27 for behaviours of directly messaging close others; and items 28 to 31 for behaviours of posting to a large audience). Behaviour subscale scores were

subsequently considered count variables, with higher scores signifying a greater number of behaviours engaged in to seek help online.

An exploratory factor analysis was conducted on items 1 to 17 of the help-seeking intentions component of the modified General Help-Seeking Questionnaire using the model fitting procedure of maximum likelihood (ML) and the oblique rotation method of direct oblimin rotation (i.e., direct quartimin rotation). The overall Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was shown to be .67, which is considered 'mediocre' (Field, 2009). Bartlett's test of sphericity was found to be significant, χ^2 (136) = 385.86, $p < .001$, suggesting that the correlation matrix was significantly different from an identity matrix and as such, correlations between items were sufficiently large for exploratory factor analysis (Field, 2009). However, although the extraction of factors was attempted, no factors could be extracted. As a result, no factor solution was generated for the GHSQ intentions items.

This result (i.e., no factor solution) is in keeping with the existing research literature on the GHSQ, whereby researchers tend not to report on common factors or subscales of the GHSQ, but rather, typically report on help-seeking intentions of individual sources of support. The approach of representing help-seeking intentions by individual sources of help (e.g., friend, parent, mental health professional, and doctor) was used in the original research on the GHSQ (Deane et al., 2001; Wilson et al., 2005) and has since been employed in subsequent studies on modified versions of the GHSQ with youth and emerging adults (e.g., Mok et al., 2016; Moran, 2007; Seward & Harris, 2016). Actual help-seeking behaviours have similarly been presented as behaviours from individual sources of support within the empirical literature (Rickwood et al., 2005).

Accordingly, the individual items of the GHSQ intentions and behaviours are presented in some of the subsequent descriptive data analyses.

In addition, Rickwood et al. (2005) note that help-seeking intentions and behaviours can be reported and analyzed as subscales of intentions and behaviours of seeking support from *informal* sources and *formal* sources. As such, mean scores were calculated for both intentions to seek help from informal sources (i.e., friend, boyfriend/girlfriend, mother, father, step-mother, step-father, sister, brother, grandparent, and other relative/family member) and intentions to seek help from formal sources (i.e., doctor, mental health professional, student counselling services, spiritual/religious leader, instructor, graduate/teaching assistant, and volunteer peer support services). Similarly, subscale scores were computed for help-seeking behaviours from informal sources and help-seeking behaviours from formal sources by summing the scores (i.e., 1 for "yes" and 0 for "no") of the respective items for informal sources and formal sources of the GHSQ. These data on intentions to seek help from informal and formal sources (continuous variables) and help-seeking behaviours from informal and formal sources (count variables) were examined in subsequent data analyses.

Descriptive Statistics

The means, standard deviations, and observed ranges for all study variables are presented in Table 5. In addition, the frequencies and respective percentages of participants who sought help online, in various ways and from different sources of support, for a personal or emotional problem during the past four weeks are outlined in Table 6. The means, standard deviations, and observed ranges for the perceived helpfulness of online help-seeking behaviours are outlined in Table 7. Furthermore, the

frequencies and respective percentages of the online sources of support perceived as the most helpful and the least helpful sources of help are shown in Table 8.

Of the 354 participants who completed the present study, 94.6% ($n = 335$) of them sought help online for a personal or emotional problem in the past four weeks. Only 5.4% ($n = 19$) of the participants did *not* seek help online in the past four weeks. With respect to the sources of online support and the ways in which participants sought help online, 89.8% ($n = 318$) of them directly messaged close others (e.g., friends, parents, or boyfriend/girlfriend via smartphones or social networking sites) and 27.4% ($n = 97$) of the participants posted to large online audiences (e.g., on Facebook, Twitter, or Instagram). By comparison, only 5.1% ($n = 18$) of the participants sought help online by way of posting to anonymous sources of support. In addition, 55.9% ($n = 198$) of the participants used the Internet to search for and read information related to their personal or emotional problems.

Table 5

Means, Standard Deviations, and Ranges of Study Variables

Scale	N	M	SD	Range
General Attachment in Close Relationships				
Attachment Avoidance	354	3.50	1.22	1-7
Attachment Anxiety	354	3.96	1.79	1-7
Tendency to Self-Disclose Distress	354	38.03	9.23	12-59
Difficulties in Emotion Regulation				
Lack of Emotional Awareness	354	14.87	4.85	6-30
Impulse Control Difficulties	354	13.18	5.71	6-30
Non-Acceptance of Negative Emotional Responses	354	15.58	6.54	6-30
Difficulties Engaging in Goal-Directed Behaviour	354	16.15	5.03	5-25
Limited Access to Effective Strategies	354	19.35	7.67	8-39
Psychological Symptom Severity	354	14.71	6.20	1-30
Online Help-Seeking Intentions				
Posting to Anonymous Sources	354	5.54	3.89	4-28
Searching For and Reading Information	354	14.84	8.34	5-35
Directly Messaging Close Others	354	24.09	8.79	6-42
Posting to Large Audience	354	7.79	5.04	4-28
Another Online Source Not Listed Above	288	1.46	1.17	1-7
Online Help-Seeking Behaviours				
Posting to Anonymous Sources	354	0.08	0.40	0-4
Searching For and Reading Information	354	1.46	1.59	0-5
Directly Messaging Close Others	354	2.59	1.58	0-6
Posting to Large Audience	354	0.43	0.81	0-4
General Help-Seeking Intentions				
Informal Sources	354	4.25	1.28	1-7
Mother	353	5.31	2.08	1-7
Father	335	3.91	2.15	1-7
Step-Mother	58	1.81	1.60	1-7
Step-Father	67	2.43	2.03	1-7
Sister	223	4.50	2.08	1-7
Brother	235	3.66	2.10	1-7
Grandparent	298	2.63	1.98	1-7
Other Relative/Family Member	337	2.95	2.05	1-7

Table 5 (continued)

Scale	N	M	SD	Range
Friend (not related to you)	350	5.59	1.54	1-7
Boyfriend/Girlfriend	221	5.98	1.69	1-7
Formal Sources	354	2.14	1.16	1-6
Instructor	337	2.17	1.58	1-7
Graduate/Teaching Assistant	344	1.78	1.32	1-7
Student Peer Support Services	333	1.71	1.21	1-7
Student Counselling Services	334	2.06	1.57	1-7
Mental Health Professional	327	2.51	1.98	1-7
Doctor	340	2.87	1.91	1-7
Spiritual/Religious Leader	313	1.78	1.46	1-7
Someone Else Not Listed Above	274	1.64	1.48	1-7
General Help-Seeking Behaviours				
Informal Sources	354	3.21	1.68	0-8
Formal Sources	354	0.38	0.73	0-5

Table 6

Frequencies and Percentages of Emerging Adults who Engaged in Online Help-Seeking Behaviours for a Personal or Emotional Problem from Different Online Sources of Support and Online Tools of Communication

Source of Support/Online Tool	Yes		No		Prefer Not to Answer	
	n	*%*	*n*	*%*	*n*	*%*
Posting to Anonymous Sources	18	5.1	336	94.9	-	-
1. Message others in an anonymous chat room	8	2.3	346	97.7	0	0
2. Join an anonymous support group	5	1.4	349	98.6	0	0
3. Post an anonymous message on a discussion board or a support group site	5	1.4	349	98.6	0	0
4. Post an anonymous blog entry	10	2.8	344	97.2	0	0
Searching For and Reading Information	198	55.9	156	44.1	-	-
1. Search for information about my personal or emotional problem	161	45.5	193	54.5	0	0
2. Search for professional mental health services available online	35	10.0	319	90.0	0	0
3. Read the personal stories of other people, who have experienced similar problems, for support or ideas about how to cope with it	147	41.5	207	58.5	0	0
4. Read information about my personal or emotional problem on websites with general help	115	32.5	236	66.7	3	0.8

Table 6 (continued)

Source of Support/Online Tool	Yes		No		Prefer Not to Answer	
	n	*%*	*n*	*%*	*n*	*%*
5. Read information about my personal or emotional problem on websites with professional help	59	16.7	295	83.3	0	0
Directly Messaging Close Others	318	89.8	36	10.2	-	-
1. Send a personal message to a friend on a social networking site	162	45.8	192	54.2	0	0
2. Send a personal message to a friend on a smartphone	283	80.0	67	18.9	4	1.1
3. Send a personal message to my parent(s) on a social networking site	35	9.9	316	89.3	3	0.8
4. Send a personal message to my parent(s) on a smartphone	163	46.1	188	53.1	3	0.8
5. Send a personal message to my boyfriend/girlfriend on a social networking site	88	24.9	256	72.3	10	2.8
6. Send a personal message to my boyfriend/girlfriend on a smartphone	185	52.3	158	44.6	11	3.1
Posting to Large Audience	97	27.4	257	72.6	-	-
1. Update my profile status	53	15.0	301	85.0	0	0
2. Post a blog entry on a site where people know who I am	18	5.1	336	94.9	0	0

Table 6 (continued)

Source of Support/Online Tool	Yes		No		Prefer Not to Answer	
	n	*%*	*n*	*%*	*n*	*%*
3. Post a video	7	2.0	347	98.0	0	0
4. Post a photo	75	21.2	279	78.8	0	0
Someone Else Not Listed Above	9	2.5	345	97.5	0	0
Did *Not* Seek Help from Anyone Online	19	5.4	335	94.6	-	-

Note. Based on the Online Help-Seeking Questionnaire data of 354 participants.

Table 7

Means, Standard Deviations, and Ranges for Perceived Helpfulness of Online Help-Seeking Behaviours

Source of Support/Online Tool	*N*	*M*	*SD*	Range
Posting to Anonymous Sources				
1. Message others in an anonymous chat room	8	3.25	1.67	1-5
2. Join an anonymous support group	5	3.60	0.55	3-4
3. Post an anonymous message on a discussion board or a support group site	5	2.80	1.48	1-5
4. Post an anonymous blog entry	10	3.60	1.08	2-5
Searching For and Reading Information				
1. Search for information about my personal or emotional problem	161	3.39	0.93	1-5
2. Search for professional mental health services available online	35	3.25	0.91	1-5
3. Read the personal stories of other people, who have experienced similar problems, for support or ideas about how to cope with it	147	3.73	0.85	2-5
4. Read information about my personal or emotional problem on websites with general help	115	3.28	1.02	1-5
5. Read information about my personal or emotional problem on websites with professional help	59	3.56	0.95	1-5
Directly Messaging Close Others				
1. Send a personal message to a friend on a social networking site	162	3.81	0.98	1-5

Table 7 (continued)

Source of Support/Online Tool	N	M	SD	Range
2. Send a personal message to a friend on a smartphone	283	4.08	0.85	1-5
3. Send a personal message to my parent(s) on a social networking site	35	4.05	1.01	1-5
4. Send a personal message to my parent(s) on a smartphone	163	4.12	0.98	1-5
5. Send a personal message to my boyfriend/girlfriend on a social networking site	88	4.19	0.87	1-5
6. Send a personal message to my boyfriend/girlfriend on a smartphone	185	4.33	0.84	1-5
Posting to Large Audience				
1. Update my profile status	53	2.75	1.08	1-5
2. Post a blog entry on a site where people know who I am	18	3.37	1.30	1-5
3. Post a video	7	3.71	0.76	3-5
4. Post a photo	75	3.09	1.00	1-5

Note. Based on the 335 participants who had sought help online for a personal or emotional problem in the past four weeks.

Table 8

Frequencies and Percentages of Different Online Sources of Support and Online Tools of Communication Identified as the Most Helpful and Least Helpful Sources of Online Support for a Personal or Emotional Problem

Source of Support/Online Tool	Most Helpful		Least Helpful	
	n	*%*	*n*	*%*
Posting to Anonymous Sources	9	2.7	5	1.5
1. Message others in an anonymous chat room	1	0.3	0	0
2. Join an anonymous support group	2	0.6	2	0.6
3. Post an anonymous message on a discussion board or a support group site	4	1.2	2	0.6
4. Post an anonymous blog entry	2	0.6	1	0.3
Searching For and Reading Information	59	17.6	52	15.5
1. Search for information about my personal or emotional problem	19	5.7	17	5.1
2. Search for professional mental health services available online	2	0.6	1	0.3
3. Read the personal stories of other people, who have experienced similar problems, for support or ideas about how to cope with it	17	5.1	5	1.5
4. Read information about my personal or emotional problem on websites with general help	17	5.1	24	7.2

Table 8 (continued)

Source of Support/Online Tool	Most Helpful		Least Helpful	
	n	*%*	*n*	*%*
5. Read information about my personal or emotional problem on websites with professional help	4	1.2	5	1.5
Directly Messaging Close Others	76	22.7	15	4.5
1. Send a personal message to a friend on a social networking site	17	5.1	5	1.5
2. Send a personal message to a friend on a smartphone	22	6.6	3	0.9
3. Send a personal message to my parent(s) on a social networking site	0	0	3	0.9
4. Send a personal message to my parent(s) on a smartphone	11	3.3	2	0.6
5. Send a personal message to my boyfriend/girlfriend on a social networking site	7	2.1	1	0.3
6. Send a personal message to my boyfriend/girlfriend on a smartphone	19	5.7	1	0.3
Posting to Large Audience	4	1.2	14	4.2
1. Update my profile status	2	0.6	10	3.0
2. Post a blog entry on a site where people know who I am	2	0.6	2	0.6

129

Table 8 (continued)

Source of Support/Online Tool	Most Helpful		Least Helpful	
	n	*%*	*n*	*%*
3. Post a video	0	0	1	0.3
4. Post a photo	0	0	1	0.3
Prefer Not to Answer	187	55.8	249	74.3

Note. Based on the 335 participants who had sought help online for a personal or emotional problem in the past four weeks.

Regarding the perceived helpfulness of the various ways in which to seek help online, participants reported variable perceptions as to which online source of support was the most helpful or least helpful in coping with a personal or emotional problem. Of the 335 participants who reported having sought help online in the past four weeks, 55.8% ($n = 187$) of them did not indicate which online source of support they perceived to be the *most* helpful in coping with their personal or emotional problem. With that said, 22.7% ($n = 76$) of the participants who sought help online identified communicating with close others online (e.g., friends, boyfriend/ girlfriend, and parents) as the most helpful source of online support. Another 17.6% ($n = 59$) of the participants who sought help online for a personal or emotional problem reported searching for and reading information as the most helpful source of online support. Only 2.7% ($n = 9$) and 1.2% ($n = 4$) of the participants who sought help online reported using anonymous sources of support and posting to large audiences as the most helpful source of online support, respectively.

Of the 335 participants who endorsed having sought help online in the past four weeks, 74.3% ($n = 249$) of them did not indicate which online source of support they perceived to be the *least* helpful in coping with their personal or emotional problem. Only 4.5% ($n = 15$) of the participants who sought help online for a personal or emotional problem identified communicating with close others online (e.g., friends, boyfriend/ girlfriend, and parents) as the least helpful source of online support. Another 15.5% ($n = 52$) of participants who sought help online reported searching for and reading information as the least helpful source of online support. In addition, 1.5% ($n = 5$) and 4.2% ($n = 14$)

of young adults who sought help online reported using anonymous sources of support and posting to large audiences as the least helpful source of online support, respectively.

Similarly, the frequencies and respective percentages of participants who sought help (i.e., in general and not specified as online) for a personal or emotional problem during the past four weeks are shown in Table 9. The means, standard deviations, and observed ranges for the perceived helpfulness of general (i.e., not specified as online) help-seeking behaviours are presented in Table 10.

Of the 354 participants who completed the current study, 95.2% ($n = 337$) of them reported seeking help from someone for a personal or emotional problem in the past four weeks, as compared to only 4.8% ($n = 17$) of participants who endorsed *not* seeking help from anyone in the past four weeks. More specifically, 71.2% ($n = 252$) and 34.7% ($n = 123$) of the participants sought help from their mothers and fathers, respectively, for a personal or emotional problem within the past four weeks. Participants also indicated seeking help from other various family members, including sisters (30.5%; $n = 108$), brothers (19.8%; $n = 70$), grandparents (11.0%; $n = 39$), and other relatives/family members (20.3%; $n = 72$). Furthermore, 79.4% ($n = 281$) and 47.7% ($n = 169$) of the participants sought help from their friends and boyfriend/girlfriend, respectively, for a personal or emotional problem. Overall, 333 participants (94.1%) sought help from an informal source of support for a personal or emotional problem within the past month.

As compared to informal sources of help, fewer participants reported seeking help from formal sources of support for a personal or emotional problem. Nevertheless, doctors, instructors, mental health professionals, and student counselling services were the most commonly endorsed formal sources from which to seek help, with 10.2% (i.e., *n*

= 36 from doctors), 7.6% (i.e., $n = 27$ from instructors), 6.8% (i.e., $n = 24$ from mental health professionals), and 4.8% (i.e., $n = 17$ from student counselling services) of the participants seeking help from these sources, respectively. In general, 92 participants (26.0%) sought help from a formal source of support for a personal or emotional problem within the past month.

In keeping with the help-seeking empirical literature (e.g., Rickwood et al., 2005; Wilson et al., 2011), participants reported significantly greater intentions to seek help from informal sources ($M = 4.25$, $SD = 1.28$) than from formal sources of support ($M = 2.14$, $SD = 1.16$) for a personal or emotional problem, $t(353) = 29.31$, $p < .001$. Similarly, participants endorsed having engaged in more help-seeking behaviours from informal sources ($M = 3.21$, $SD = 1.68$) than from formal sources of help ($M = 0.38$, $SD = 0.73$) for a personal or emotional problem during the past month, $t(353) = 31.62$, $p < .001$.

Table 9

Frequencies and Percentages of Emerging Adults who Engaged in General Help-Seeking Behaviours for a Personal or Emotional Problem from Different Sources of Support

Source of Help	Yes		No		Not Applicable	
	n	*%*	*n*	*%*	*n*	*%*
Informal Sources	333	94.1	21	5.9	0	0
Mother	252	71.2	98	27.7	4	1.1
Father	123	34.7	208	58.8	23	6.5
Step-Mother	10	2.8	33	9.3	311	87.9
Step-Father	12	3.4	43	12.1	299	84.5
Sister	108	30.5	106	29.9	140	39.5
Brother	70	19.8	161	45.5	123	34.7
Grandparent	39	11.0	252	71.2	63	17.8
Other Relative/Family Member	72	20.3	261	73.7	21	5.9
Friend (not related to you)	281	79.4	73	20.6	0	0
Boyfriend/Girlfriend	169	47.7	37	10.5	148	41.8
Formal Sources	92	26.0	262	74.0	0	0
Instructor	27	7.6	300	84.7	27	7.6
Graduate/Teaching Assistant	15	4.2	322	91.0	17	4.8
Student Peer Support Services	4	1.1	324	91.5	26	7.3
Student Counselling Services	17	4.8	315	89.0	22	6.2
Mental Health Professional	24	6.8	306	86.4	24	6.8
Doctor	36	10.2	308	87.0	10	2.8
Spiritual/Religious Leader	10	2.8	297	83.9	47	13.3

Table 9 (continued)

Source of Help	Yes		No		Not Applicable	
	n	*%*	*n*	*%*	*n*	*%*
Someone Else Not Listed Above	15	4.2	331	93.5	8	2.3
Did *Not* Seek Help from Anyone	17	4.8	337	95.2	-	-

Note. Based on the General Help-Seeking Questionnaire data of 354 participants.

Table 10

Means, Standard Deviations, and Ranges for Perceived Helpfulness of General Help-Seeking Behaviours

Source of Help	N	M	SD	Range
Mother	252	4.20	0.91	1-5
Father	123	4.00	0.97	1-5
Step-Mother	10	3.60	0.84	2-5
Step-Father	12	3.67	1.16	2-5
Sister	108	4.06	0.77	2-5
Brother	70	3.90	0.98	1-5
Grandparent	39	3.95	0.99	1-5
Other Relative/Family Member	72	3.90	0.90	2-5
Friend (not related to you)	281	4.20	0.88	1-5
Boyfriend/Girlfriend	169	4.44	0.78	2-5
Instructor	27	4.11	0.89	1-5
Graduate/Teaching Assistant	15	4.20	0.68	3-5
Student Peer Support Services	4	4.25	0.50	4-5
Student Counselling Services	17	3.68	1.16	1-5
Mental Health Professional	24	4.17	0.82	2-5
Doctor	36	4.03	1.13	1-5
Spiritual/Religious Leader	10	4.30	0.82	3-5

Preliminary Analyses

Correlation analyses among the study variables were conducted using the full sample of 354 participants. Poisson regression analyses were conducted between the four factors of online help-seeking intentions (continuous variables) and their respective online help-seeking behaviours (count variables). Moderate to strong relationships were found between participants' intentions to seek help online and actual behaviours of seeking help online by posting to anonymous sources (odds ratio = 1.20, $p < .001$), searching for and reading information (odds ratio = 1.07, $p < .001$), directly messaging close others (odds ratio = 1.05, $p < .001$), and posting to large online audience (odds ratio = 1.15, $p < .001$). Although no known research studies have investigated a connection between online help-seeking intentions and online help-seeking behaviours, the magnitude of these current correlations are comparable to that of the relations between help-seeking intentions and help-seeking behaviours from friends, parents, family, and romantic partners reported by other researchers (e.g., Nagai, 2015; Wilson et al., 2005).

Poisson regression analyses were also calculated between intentions to seek help from informal and formal sources of support (continuous variables) and their respective help-seeking behaviours (count variables). Consistent with past research findings (Nagai, 2015; Wilson et al., 2005), strong relationships were identified between participants' intentions to seek help and actual help-seeking behaviours from informal sources (odds ratio = 1.25, $p < .001$) and formal sources (odds ratio = 1.56, $p < .001$), respectively.

Pearson correlation analyses (with continuous variables) and Poisson regression analyses (with count variables) were conducted between the primary study variables and demographic variables so as to identify potential covariates and control for these

137

variables during the primary analyses. As delineated in Table 11, correlation analyses revealed that gender was significantly negatively correlated with attachment avoidance and lack of emotional awareness, such that being a female young adult was related to having lower levels of attachment avoidance and fewer difficulties with emotional awareness. Gender was also significantly positively associated with a tendency to self-disclose distress, whereby being a female was related to having greater tendencies to disclose distress to other people. In addition, gender was significantly related to both intentions and behaviours of seeking help from informal sources (e.g., friends and family), as well as help-seeking behaviours from formal sources of support (e.g., mental health professionals), such that being a female was associated with having greater intentions to seek informal support and to having engaged in more help-seeking behaviours from both informal and formal sources within the past month. Finally, gender was significantly associated with intentions to seek help online by searching for and reading information and with both intentions and behaviours of seeking help online by directly messaging close others. In particular, being female was related to having greater intentions to read information online and to directly message close others for support and to engaging in more online help-seeking behaviours via direct communication with close others.

Table 11

Correlations and Odds Ratios among Study Variables and Demographic Variables (N = 354)

Scale	Gender	Age	Previous Counselling	Current Counselling	Psychological Symptom Severity
General Attachment in Close Relationships					
Attachment Avoidance	-.14**	.03	-.06	.04	.13*
Attachment Anxiety	.06	-.11*	-.17**	-.18**	.43**
Tendency to Self-Disclose Distress	.20**	.02	.04	-.08	-.04
Difficulties in Emotion Regulation					
Lack of Emotional Awareness	-.11*	-.11*	.01	.08	.16**
Impulse Control Difficulties	.05	-.02	-.16**	-.12*	.42**
Non-Acceptance of Emotional Responses	.09	-.07	-.15**	-.11*	.41**
Difficulties with Goal-Directed Behaviour	.08	.04	-.12*	-.10	.31**
Limited Access to Effective Strategies	.04	-.05	-.19**	-.19**	.56**
Online Help-Seeking Intentions					
Posting to Anonymous Sources	.07	.06	-.06	.02	.11*
Searching For and Reading Information	.11*	.07	-.10	-.10	.17**
Directly Messaging Close Others	.20**	.05	.01	-.01	-.04
Posting to Large Audiences	.08	.02	.04	.06	.02
Online Help-Seeking Behaviours					
Posting to Anonymous Sources	*0.21*	*1.06*	*1.14*	*0.53*	*1.07**
Searching For and Reading Information	*0.90*	*1.07**	*1.51****	*1.04*	*1.03*
Directly Messaging Close Others	*0.62****	*1.03*	*1.03*	*1.05*	*1.01*
Posting to Large Audiences	*0.58*	*0.99*	*0.80*	*0.69*	*1.02*

Table 11 (continued)

Scale	Gender	Age	Previous Counselling	Current Counselling	Psychological Symptom Severity
General Help-Seeking Intentions					
Informal Sources of Support	.21**	.05	.12*	.08	-.17**
Formal Sources of Support	.05	.12*	-.17**	-.18**	-.04
General Help-Seeking Behaviours					
Informal Sources of Support	*0.60***	*1.02*	*1.01*	*1.02*	*0.99*
Formal Sources of Support	*0.46**	*1.17**	*2.42***	*4.01***	*1.02*

Note. Values presented in italics are odds ratios (e^B) calculated from Poisson regressions.
p < .05. **p* < .01. ***p* < .001.

Accordingly, *t*-tests were conducted to further explore the above noted significant relations between these study variables and gender, which are discussed below. Gender differences for these particular variables are presented in Table 12. Findings revealed that males endorsed significantly higher levels of attachment avoidance than did females. Males also reported significantly greater difficulties with emotional awareness (i.e., lack of emotional awareness) than did females. A *t*-test indicated that females had a significantly greater tendency to self-disclose distress to others than did males.

A *t*-test analysis showed that females did *not* have significantly greater intentions to seek help online by searching for and reading information related to their personal or emotional problem as compared to males. However, females had significantly greater intentions to seek help online by directly messaging close others than did males. Similarly, females reported engaging in significantly more online help-seeking behaviours by way of directly messaging close others than did males.

Findings also demonstrated that females reported significantly greater intentions to seek help from informal sources of support for an emotional or personal problem than did males. Consistent with this gender difference, females engaged in significantly more help-seeking behaviours from informal sources during the past month than did males. Moreover, females reported engaging in significantly more help-seeking behaviours from formal sources of support during the past four weeks than did males.

Being an older emerging adult was significantly correlated with having lower levels of attachment anxiety and fewer difficulties with emotional awareness. Being an older emerging adult was also significantly related to engaging in more online help-

Table 12

Gender Differences in Study Variables

Scale	Males (*n* = 53)		Females (*n* = 299)		
	M	*SD*	*M*	*SD*	*t*(350)
General Attachment in Close Relationships					
Attachment Avoidance	3.91	1.28	3.42	1.18	2.72**
Tendency to Self-Disclose Distress	33.57	9.38	38.83	8.98	-3.91***
Difficulties in Emotion Regulation					
Lack of Emotional Awareness	16.17	4.84	14.65	4.83	2.11*
Online Help-Seeking Intentions					
Searching For and Reading Information	12.75	8.05	15.18	8.33	-1.96
Directly Messaging Close Others	19.80	9.70	24.82	8.43	3.91**
Online Help-Seeking Behaviours					
Directly Messaging Close Others	1.72	1.51	2.73	1.55	-4.42***
General Help-Seeking Intentions					
Informal Sources of Support	3.63	1.27	4.36	1.25	-3.93***
General Help-Seeking Behaviours					
Informal Sources of Support	2.06	1.39	3.42	1.64	-5.69***
Formal Sources of Support	0.19	0.48	0.41	0.77	-2.79**

Note. *p* < .05. **p* < .01. ***p* < .001.

seeking behaviours by way of searching for and reading information concerning the personal or emotional problem, as well as with having greater intentions to seek help from formal sources and having engaged in more help-seeking behaviours from formal sources of support during the past four weeks.

Having previously received counselling services was significantly related to having lower levels of attachment anxiety and fewer emotion regulation difficulties with impulse control, non-acceptance of emotional responses, engaging in goal-directed behaviours when feeling upset, and having limited access to effective emotion regulation strategies. Having previously engaged in counselling services was significantly associated with reporting fewer behaviours of seeking help online by searching for and reading information, as well as with having lower intentions and endorsing fewer behaviours of seeking help from formal sources of support (e.g., student counselling services and mental health professionals) during the past month. However, having previously received counselling was significantly related to having greater intentions to seek support from informal sources of help (e.g., family members).

Currently receiving counselling services was significantly associated with having lower levels of attachment anxiety and fewer emotion regulation difficulties with impulse control, non-acceptance of emotional responses, and limited access to effective emotion regulation strategies. In addition, current participation in counselling was significantly related to having lower intentions to seek help from formal sources and reporting fewer behaviours of seeking help from formal sources of support (e.g., doctors).

Endorsing more severe psychological symptoms was significantly related to having higher levels of both attachment avoidance and attachment anxiety and having

greater emotion regulation difficulties with impulse control, non-acceptance of emotional responses, engaging in goal-directed behaviours when feeling upset, and having limited access to effective emotion regulation strategies. Greater psychological symptom severity was also significantly associated with having lower intentions to seek support from informal sources of help for a personal or emotional problem. Interestingly, however, endorsing more severe psychological symptoms was significantly related to having greater intentions to seek help online by way of searching for and reading information pertaining to the personal or emotional problem, as well as having greater intentions and reporting a greater number of online help-seeking behaviours of posting to anonymous sources of support.

The nature of the relations between the primary study variables and control variables are summarized in Table 13. Demographic variables were only entered as covariates into the primary analyses when correlated to both the outcome and predictor variables so as to prevent from over-controlling the data (Tabachnick & Fidell, 2013). Furthermore, it should be noted that when gender was incorporated as a covariate in the subsequently described primary analyses (i.e., mediation models), the two participants who had identified as genderqueer were not included in the analyses due to the limited sample size of participants in this particular grouping.

Table 13

Summary of Control Variables for Each Primary Study Variable

Scale	Gender	Age	Previous Counselling	Current Counselling	Psychological Symptom Severity
General Attachment in Close Relationships					
Attachment Avoidance	✓				✓
Attachment Anxiety		✓	✓	✓	✓
Tendency to Self-Disclose Distress	✓				
Difficulties in Emotion Regulation					
Lack of Emotional Awareness	✓	✓			✓
Impulse Control Difficulties			✓	✓	✓
Non-Acceptance of Emotional Responses			✓	✓	✓
Difficulties with Goal-Directed Behaviour			✓		✓
Limited Access to Effective Strategies			✓	✓	✓
Online Help-Seeking Intentions					
Posting to Anonymous Sources					✓
Searching For and Reading Information	✓				✓
Directly Messaging Close Others	✓				
Posting to Large Audiences					
Online Help-Seeking Behaviours					
Posting to Anonymous Sources					✓
Searching For and Reading Information		✓	✓		
Directly Messaging Close Others	✓				
Posting to Large Audiences					

Table 13 (continued)

Scale	Gender	Age	Previous Counselling	Current Counselling	Psychological Symptom Severity
General Help-Seeking Intentions					
Informal Sources of Support	✓		✓		✓
Formal Sources of Support		✓	✓	✓	
General Help-Seeking Behaviours					
Informal Sources of Support	✓				
Formal Sources of Support	✓	✓	✓	✓	

Table 14

Correlations and Odds Ratios among Predictor Variables and Online Help-Seeking Outcome Variables (N = 354)

Scale	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Attachment Avoidance	.26**	-.75**	.45**	.06	.14**	-.04	.16**	.01	-.14**	-.33**	-.13*	*1.12*	*0.94*	*0.87****	*0.97*
2. Attachment Anxiety	-	-.13*	.12*	.40**	.51**	.34**	.56**	.12*	.14**	-.01	.01	*1.07*	*1.08***	*0.99*	*1.06*
3. Tendency to Self-Disclose Distress		-	-.47**	-.01	-.13*	.09	-.11*	.01	.11*	.33**	.12*	*0.99*	*1.01*	*1.02****	*1.01*
4. Lack of Emotional Awareness			-	.09	.13*	-.07	.14**	-.04	-.17**	-.31**	-.07	*0.96*	*0.97***	*0.97****	*1.01*
5. Impulse Control Difficulties				-	.54**	.48**	.75**	.17**	.13*	.01	.14**	*1.04*	*1.03****	*1.01*	*1.05****
6. Non-Acceptance of Emotional Responses					-	.41**	.68**	.14*	.18**	-.01	.07	*1.08***	*1.03****	*1.01*	*1.04***
7. Difficulties with Goal Directed Behaviour						-	.55**	.05	.15**	.03	.04	*1.03*	*1.04****	*1.02**	*1.03*
8. Limited Access to Effective Strategies							-	.16**	.21**	-.02	.09	*1.05**	*1.03****	*1.01*	*1.04****
9. Intentions: Post to Anonymous Sources								-	.42**	.15**	.43**	*1.20****	*1.03***	*1.01*	*1.08****
10. Intentions: Search/ Read Information									-	.21**	.28**	*1.11****	*1.07****	*1.01**	*1.03***
11. Intentions: Message Close Others										-	.47**	*1.03*	*1.02****	*1.05****	*1.07***
12. Intentions: Post to Large Audiences											-	*1.06*	*1.02**	*1.03****	*1.15****
13. Behaviours: Post to Anonymous Sources												-	*1.52****	*1.29**	*1.57***
14. Behaviours: Search/ Read Information													-	*1.15****	*1.12**
15. Behaviours: Message Close Others														-	*1.23****
16. Behaviours: Post to Large Audiences															-

Note. Values presented in italics are odds ratios (e^B) calculated from Poisson regressions. *$p < .05$. **$p < .01$. ***$p < .001$.

Table 15

Correlations and Odds Ratios between Predictor Variables and General Help-Seeking Outcome Variables (N = 354)

Scale	Attachment Avoidance	Attachment Anxiety	Tendency to Self-Disclose Distress	Lack of Emotional Awareness	Impulse Control Difficulties	Non-Acceptance of Emotional Responses	Difficulties with Goal-Directed Behaviour	Limited Access to Effective Strategies
General Help-Seeking Intentions								
Informal Sources of Support	-.40**	-.14*	.36**	-.25**	-.07	-.05	-.02	-.15**
Formal Sources of Support	-.19**	.04	.19**	-.15**	.08	.03	.08	.02
General Help-Seeking Behaviours								
Informal Sources of Support	*0.86****	*0.96*	*1.02****	*0.98***	*1.01*	*1.01*	*1.01*	*0.99*
Formal Sources of Support	*0.86**	*1.11**	*1.03***	*0.97*	*1.03**	*1.02*	*1.04**	*1.02**

Note. Values presented in italics are odds ratios (e^B) calculated from Poisson regressions.
p < .05. **p* < .01. ***p* < .001.

Primary Analyses

The data presented in Tables 14 and 15 are the results from the Pearson correlation analyses among the predictor variables (attachment avoidance, attachment anxiety, tendency to disclose distress, and difficulties in emotion regulation) and continuous outcome variables (online help-seeking intentions and help-seeking intentions from informal and formal sources of support in Tables 14 and 15, respectively). In addition, the italicized values shown in Tables 14 and 15 are the results from Poisson regression analyses and represent the odds ratios between the predictor variables and count outcome variables (online help-seeking behaviours and help-seeking behaviours from informal and formal sources of support in Tables 14 and 15, respectively).

Hayes' (2013) PROCESS procedure was implemented using the PROCESS macro for SPSS to conduct all mediation analyses with continuous outcome variables (i.e., help-seeking intentions) in order to simultaneously test each step of the model and to incorporate multiple mediators within the model (specifically, the parallel multiple mediator model). As part of this approach, the bootstrapping method was employed so as to calculate bias-corrected bootstrap confidence intervals (10,000 samples) for determining the indirect effects in mediation analysis, whereby confidence intervals *not* containing zero are indicative of an indirect effect (Hayes, 2013). Similarly, all parallel multiple mediator models with count outcome variables (i.e., help-seeking behaviours) were conducted in *Mplus* and likewise used the bootstrapping method in computing confidence intervals for calculating the indirect effects in the mediation models.

Objective 1: Examine the relation between attachment and distress disclosure

Hypotheses 1a and 1b. As anticipated in hypothesis 1a, higher levels of attachment avoidance in close relationships were significantly related to lower tendencies to disclose distress to others. However, in contrast to hypothesis 1b, higher levels of attachment anxiety in close relationships were significantly related to lower tendencies to disclose distress to others (see Table 14).

Objective 2: Examine the relation between attachment and difficulties in emotion regulation

Hypotheses 2a and 2b. As predicted in hypothesis 2a, higher levels of attachment avoidance in close relationships were significantly related to greater difficulties with emotional awareness (i.e., lack of emotional awareness), non-acceptance of negative emotional responses, and limited access to effective emotion regulation strategies. Attachment avoidance was not significantly related to difficulties with impulse control or engaging in goal-directed behaviour when feeling upset. Similarly, as anticipated in hypothesis 2b, higher levels of attachment anxiety in close relationships were significantly related to greater difficulties with emotional awareness, impulse control, non-acceptance of negative emotional responses, limited access to effective emotion regulation strategies, and engaging in goal-directed behaviour when feeling upset (see Table 14).

Objective 3: Examine the relation between attachment and online help seeking

Hypothesis 3a. Consistent with the hypothesis, higher levels of attachment avoidance in close relationships were significantly related to lower intentions to seek help online by way of searching for and reading information pertaining to the emotional or

personal problem, directly messaging close others, and posting to large online audiences (e.g., Facebook and Twitter) for support. However, attachment avoidance was not significantly related to intentions to seek help online via posting to anonymous sources for support (see Table 14).

Hypothesis 3b. As anticipated, higher levels of attachment anxiety in close relationships were significantly related to greater intentions to seek help online by way of posting to anonymous sources for support and searching for and reading information concerning the emotional or personal problem. However, attachment anxiety was not significantly related to intentions to seek help online via directly messaging close others or posting to large online audiences for support (see Table 14).

Hypothesis 3c. As predicted, higher levels of attachment avoidance in close relationships were related to significantly decreased odds of engaging in online help-seeking behaviours by directly messaging close others. Conversely, attachment avoidance was not significantly related to the odds of engaging in online help-seeking behaviours of posting to anonymous sources, posting to large online audiences, or searching for and reading information regarding the emotional or personal problem (see odds ratios in Table 14).

Hypothesis 3d. As expected, higher levels of attachment anxiety in close relationships were related to significantly increased odds of engaging in online help-seeking behaviours by searching for and reading information pertaining to the emotional or personal problem. However, attachment anxiety was not significantly related to the odds of engaging in online help-seeking behaviours of posting to anonymous sources,

directly messaging close others, or posting to large online audiences for support (see odds ratios in Table 14).

Objective 4: Explore the link between attachment and online help seeking by way of distress disclosure and difficulties in emotion regulation

    Hypothesis 4a. It was hypothesized that the relation between attachment avoidance and *online* help-seeking *intentions* would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment avoidance would predict lower intentions to seek help online by way of lower tendencies to self-disclose distress and greater difficulties in emotion regulation. Based on significant prerequisite relations among attachment avoidance, distress disclosure, difficulties in emotion regulation, and online help-seeking intentions, three mediation models were tested with the following outcome variables: intentions to seek help online by searching for and reading information (Figure 9), intentions to seek help online by directly messaging close others (Figure 10), and intentions to seek help online by posting to large audiences (Figure 11).

    As outlined in Figure 9, a parallel multiple mediator model was employed to test Hypothesis 4a, with intentions to seek help online by searching for and reading information as the outcome variable. More specifically, the following variables were entered into the model: attachment avoidance as X; intentions to seek help online by searching for and reading information as Y; distress disclosure (M_1), difficulties with emotional awareness (M_2), non-acceptance of emotional responses (M_3), and limited access to effective strategies (M_4) as parallel mediators; and psychological symptom severity (C_1) and gender (C_2) as covariates.

Regarding the covariates, psychological symptom severity was significantly influential in predicting difficulties with emotional awareness (path a_2; [.01, .16]), non-acceptance of emotional responses (path a_3; [.31, .51]), and limited access to effective strategies (path a_4; [.56, .78]); however, it did not significantly contribute to the prediction of distress disclosure (path a_1; [-.02, .19]) or intentions to seek help online by searching for and reading information [-.01, .32]. Gender was significantly influential in predicting distress disclosure [.74, 4.36] and non-acceptance of emotional responses [.21, 3.73], but it did not make a significant contribution in predicting lack of emotional awareness [-1.95, .61], limited access to effective strategies [-.59, 3.16], or intentions to seek help online by searching for and reading information [-.84, 3.95].

After accounting for psychological symptom severity and gender, the overall regression model was statistically significant, $R^2 = .06$, $p < .001$. The direct effect of attachment avoidance on intentions to seek help online by searching for and reading information pertaining to the personal or emotional problem was not significant (path c'). However, even after controlling for the covariates, higher levels of attachment avoidance significantly predicted greater difficulties with emotional awareness (i.e., lack of emotional awareness; path a_2), and greater difficulties with emotional awareness significantly predicted lower intentions to seek help online by searching for and reading information (path b_2). A 95% BC bootstrap confidence interval for the indirect effect of attachment avoidance on intentions to seek help online by searching for and reading information through difficulties with emotional awareness ($a_2b_2 = -.52$) was entirely below zero [-.95, -.17], signifying that the indirect effect was statistically significant. In contrast, zero was included in the 95% confidence interval of the bootstrap estimates for

the indirect effects of distress disclosure (a_1b_1 = .34; [-.42, 1.18]), non-acceptance of emotional responses (a_3b_3 = .05; [-.03, .23]), and limited access to effective strategies (a_4b_4 = .09; [-.01, .31]), revealing no evidence to suggest the presence of indirect effects.

As depicted in Figure 10, a parallel multiple mediator model was used to test Hypothesis 4a, with intentions to seek help online by directly messaging close others as the outcome variable. The following variables were entered into the model: attachment avoidance as X; intentions to seek help online by directly messaging close others as Y; distress disclosure (M_1) and difficulties with emotional awareness (M_2) as parallel mediators; and gender (C_1) and psychological symptom severity (C_2) as covariates.

With respect to the covariates, gender was significantly influential in predicting distress disclosure (path a_1; [.74, 4.36]) and intentions to seek help online by directly messaging close others [1.06, 5.90], but it did not make a significant contribution in predicting lack of emotional awareness (path a_2; [-1.95, .61]). Psychological symptom severity was significantly influential in predicting difficulties with emotional awareness [.01, .16]; yet, it did not significantly contribute to the prediction of distress disclosure [-.02, .19] or intentions to seek help online by directly messaging close others [-.13, .15].

After accounting for gender and psychological symptom severity, the overall regression model was statistically significant, R^2 = .14, $p < .001$. The direct effect of attachment avoidance on intentions to seek help online by directly messaging close others was likewise significant (path c'). Even after controlling for the covariates, higher levels of attachment avoidance significantly predicted greater difficulties with emotional
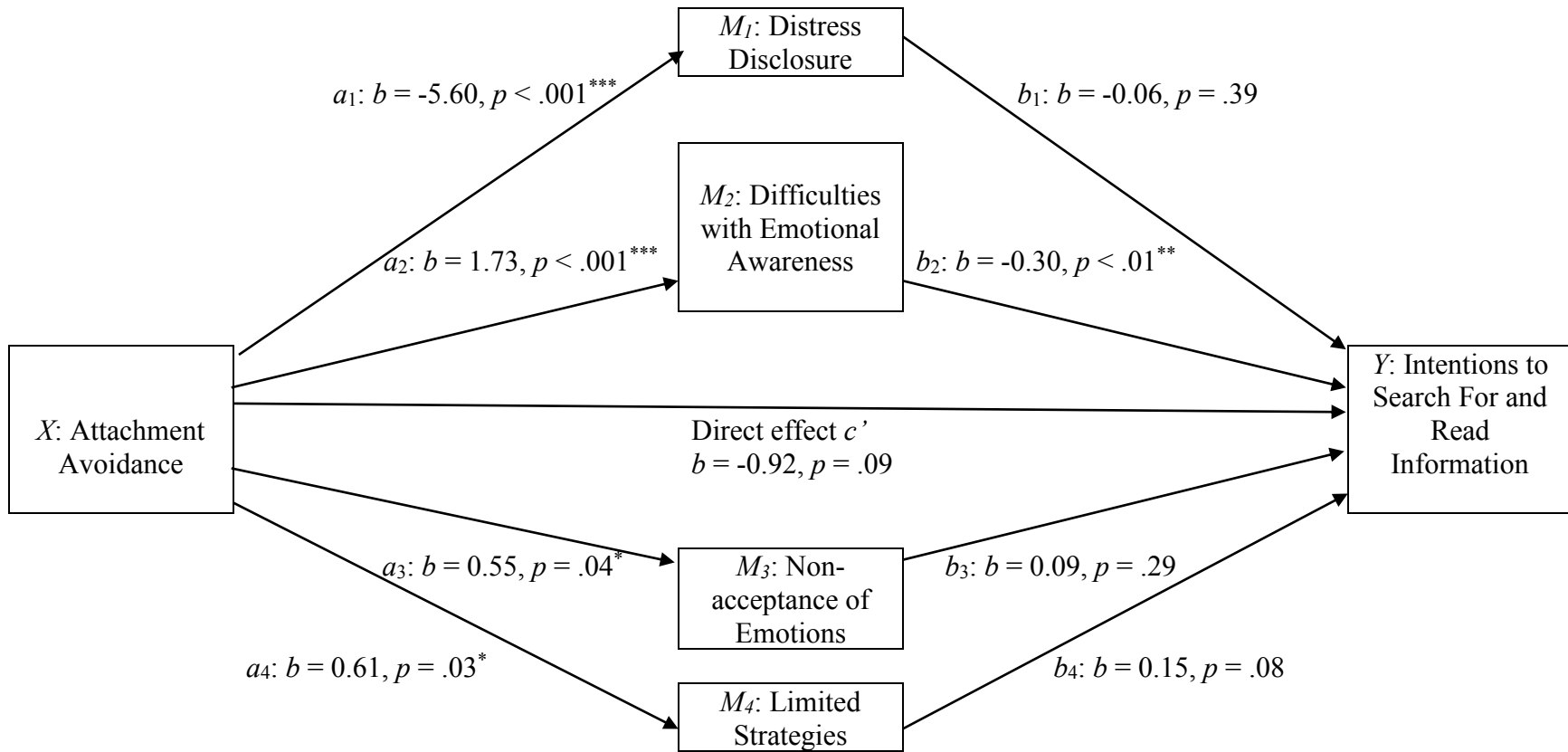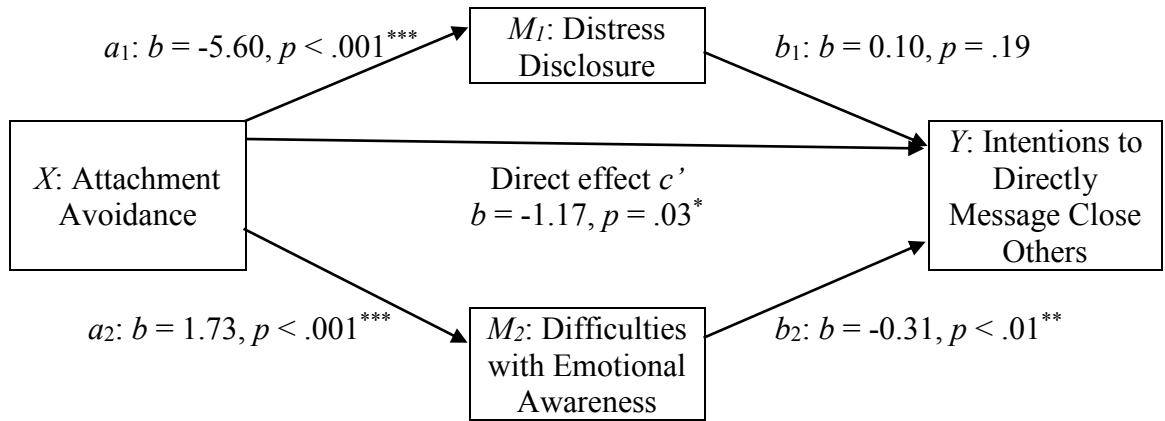
Figure 9. Hypothesis 4a: Results of the hypothesized model of distress disclosure and difficulties in emotion regulation mediating the

relation between attachment avoidance and intentions to seek help online by searching for and reading information, after controlling

for psychological symptom severity and gender. *Note.* *$p < .05$. **$p < .01$. ***$p < .001$.

awareness (i.e., lack of emotional awareness; path a_2), and greater difficulties with

emotional awareness significantly predicted lower intentions to seek help online by

directly messaging close others (path b_2). A 95% BC bootstrap confidence interval for the

indirect effect of attachment avoidance on intentions to seek help online by directly

messaging close others through difficulties with emotional awareness ($a_2b_2 = -.53$) was

entirely below zero [-.96, -.16], denoting that the indirect effect was statistically

significant. Conversely, zero was included in the 95% confidence interval of the

bootstrap estimate [-1.46, .39] for the indirect effect of distress disclosure ($a_1b_1 = -.54$),

indicating that there was no evidence suggestive of an indirect effect.

As represented in Figure 11, a simple mediation model was employed to test

Hypothesis 4a, with intentions to seek help online by posting to large audiences as the

outcome variable. Specifically, the following variables were entered into the model:

attachment avoidance as X; intentions to seek help online by posting to large audiences as

Y; and distress disclosure as M. The overall regression model was statistically significant,

$R^2 = .02$, $p < .05$. However, the direct effect of attachment avoidance on intentions to

seek help online by posting to large audiences was not significant (path c'). In addition,

zero was included in the 95% confidence interval of the bootstrap estimate [-.74, .43] for

the indirect effect of distress disclosure ($ab = -.20$), revealing no evidence to suggest the

presence of an indirect effect.

Taken together, Hypothesis 4a was partially supported in that the indirect effect of

attachment avoidance on intentions to seek help online by searching for and reading

information through difficulties with emotional awareness was significant, after

controlling for psychological symptom severity and gender. Similarly, the indirect effect

Figure 10. Hypothesis 4a: Results of the hypothesized model of distress disclosure and

difficulties in emotion regulation mediating the relation between attachment avoidance

and intentions to seek help online by directly messaging close others, after controlling for

gender and psychological symptom severity. *Note.* *$p < .05$. **$p < .01$. ***$p < .001$.
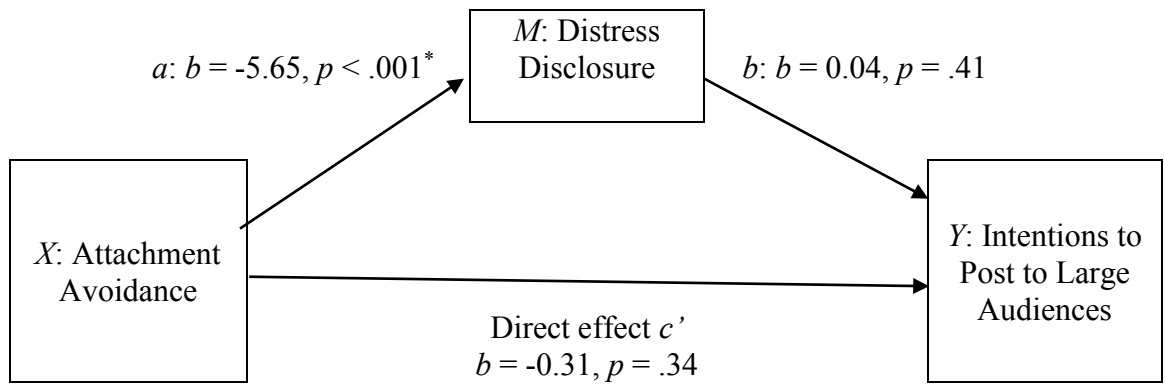
Figure 11. Hypothesis 4a: Results of the hypothesized model of distress disclosure

mediating the relation between attachment avoidance and intentions to seek help online

by posting to large audiences. *Note*. *$p < .001$.

of attachment avoidance on intentions to seek help online by directly messaging close others through difficulties with emotional awareness was significant, after controlling for gender and psychological symptom severity. However, the tendency to self-disclose distress to others did not significantly mediate the relation between attachment avoidance and intentions to seek help online.

Hypothesis 4b. It was hypothesized that the relation between attachment anxiety and *online* help-seeking *intentions* would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment anxiety would predict greater intentions to seek help online by way of greater tendencies to self-disclose distress and greater difficulties in emotion regulation. Given the significant prerequisite relations among attachment anxiety, distress disclosure, difficulties in emotion regulation, and online help-seeking intentions, two mediation models were tested with the following outcome variables: intentions to seek help online by posting to anonymous sources of support (Figure 12) and intentions to seek help online by searching for and reading information (Figure 13).

As shown in Figure 12, a parallel multiple mediator model was used to test Hypothesis 4b, with intentions to seek help online by posting to anonymous sources as the outcome variable. More specifically, the following variables were entered into the model: attachment anxiety as X; intentions to seek help online by posting to anonymous sources as Y; impulse control difficulties (M_1), non-acceptance of emotional responses (M_2), and limited access to effective strategies (M_3) as parallel mediators; and psychological symptom severity (C) as a covariate.

Concerning the covariate, psychological symptom severity was significantly influential in predicting difficulties with impulse control (path a_1; [.19, .38]), non-acceptance of emotional responses (path a_2; [.14, .34]), and limited access to effective strategies (path a_3; [.37, .59]); however, it did not significantly contribute to the prediction of intentions to seek help online by posting to anonymous sources [-.06, .10].

After accounting for psychological symptom severity, the overall regression model was statistically significant, $R^2 = .02$, $p < .05$. However, the direct effect of attachment anxiety on intentions to seek help online by posting to anonymous sources was non-significant (path c'). Furthermore, zero was included in the 95% confidence interval of the bootstrap estimates for the indirect effects of impulse control difficulties ($a_1b_1 = .07$; [-.01, .18]), non-acceptance of emotional responses ($a_2b_2 = .03$; [-.09, .17]), and limited access to effective strategies ($a_3b_3 = .01$; [-.12, .14]), revealing no evidence to suggest the presence of indirect effects.

As depicted in Figure 13, a parallel multiple mediator model was employed to test Hypothesis 4b, with intentions to seek help online by searching for and reading information as the outcome variable. The following variables were entered into the model: attachment anxiety as X; intentions to seek help online by searching for and reading information as Y; distress disclosure (M_1), difficulties with emotional awareness (M_2), difficulties with impulse control (M_3), non-acceptance of emotional responses (M_4), difficulties engaging in goal-directed behaviour when feeling upset (M_5), and limited access to effective strategies (M_6) as parallel mediators; and psychological symptom severity (C_1) and gender (C_2) as covariates.
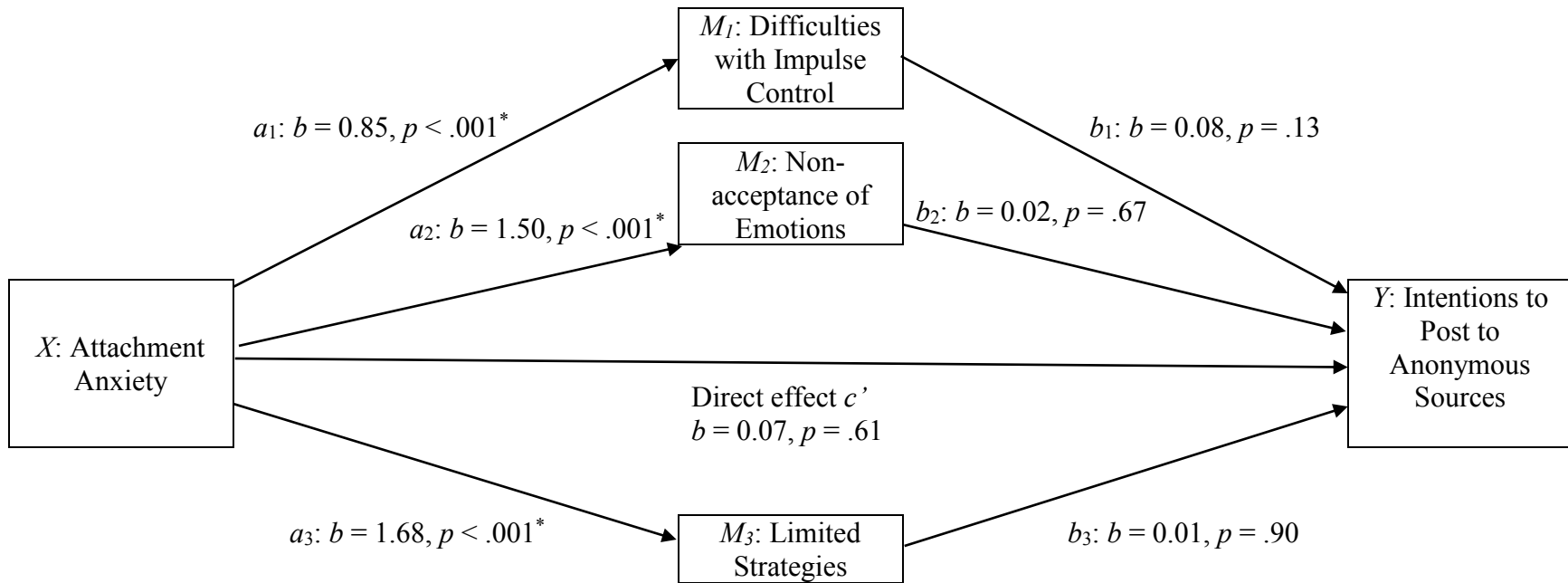
Figure 12. Hypothesis 4b: Results of the hypothesized model of difficulties in emotion regulation mediating the relation between attachment anxiety and intentions to seek help online by posting to anonymous sources, after controlling for psychological symptom severity. *Note.* *$p < .001$.

Regarding the covariates, psychological symptom severity was significantly influential in predicting difficulties with emotional awareness (path a_2; [.01, .19]), difficulties with impulse control (path a_3; [.20, .39]), non-acceptance of emotional responses (path a_4; [.13, .34]), difficulties with engaging in goal-directed behaviour when feeling upset (path a_5; [.08, .25]), and limited access to effective strategies (path a_6; [.37, .59]); however, it did not significantly contribute to the prediction of distress disclosure (path a_1; [-.11, .23]) or intentions to seek help online by searching for and reading information [-.02, .31]. Gender was significantly influential in predicting distress disclosure [2.89, 8.16] and difficulties with emotional awareness [-2.97, -.17], but it did not make a significant contribution in predicting difficulties with impulse control [-.99, 1.95], non-acceptance of emotional responses [-.39, 2.83], difficulties with engaging in goal-directed behaviour when feeling upset [-.45, 2.28], limited access to effective strategies [-1.25, 2.15], and intentions to seek help online by searching for and reading information [-.92, 3.91].

After accounting for psychological symptom severity and gender, the overall regression model was statistically significant, $R^2 = .05$, $p < .001$. However, the direct effect of attachment anxiety on intentions to seek help online by searching for and reading information was not significant (path c'). In addition, zero was included in the 95% confidence interval of the bootstrap estimates for the indirect effects of distress disclosure ($a_1b_1 = -.02$; [-.15, .06]), lack of emotional awareness ($a_2b_2 = -.06$; [-.22, .03]), difficulties with impulse control ($a_3b_3 = -.10$; [-.32, .09]), non-acceptance of emotional responses ($a_4b_4 = .03$; [-.09, .17]), difficulties engaging in goal-directed behaviour when
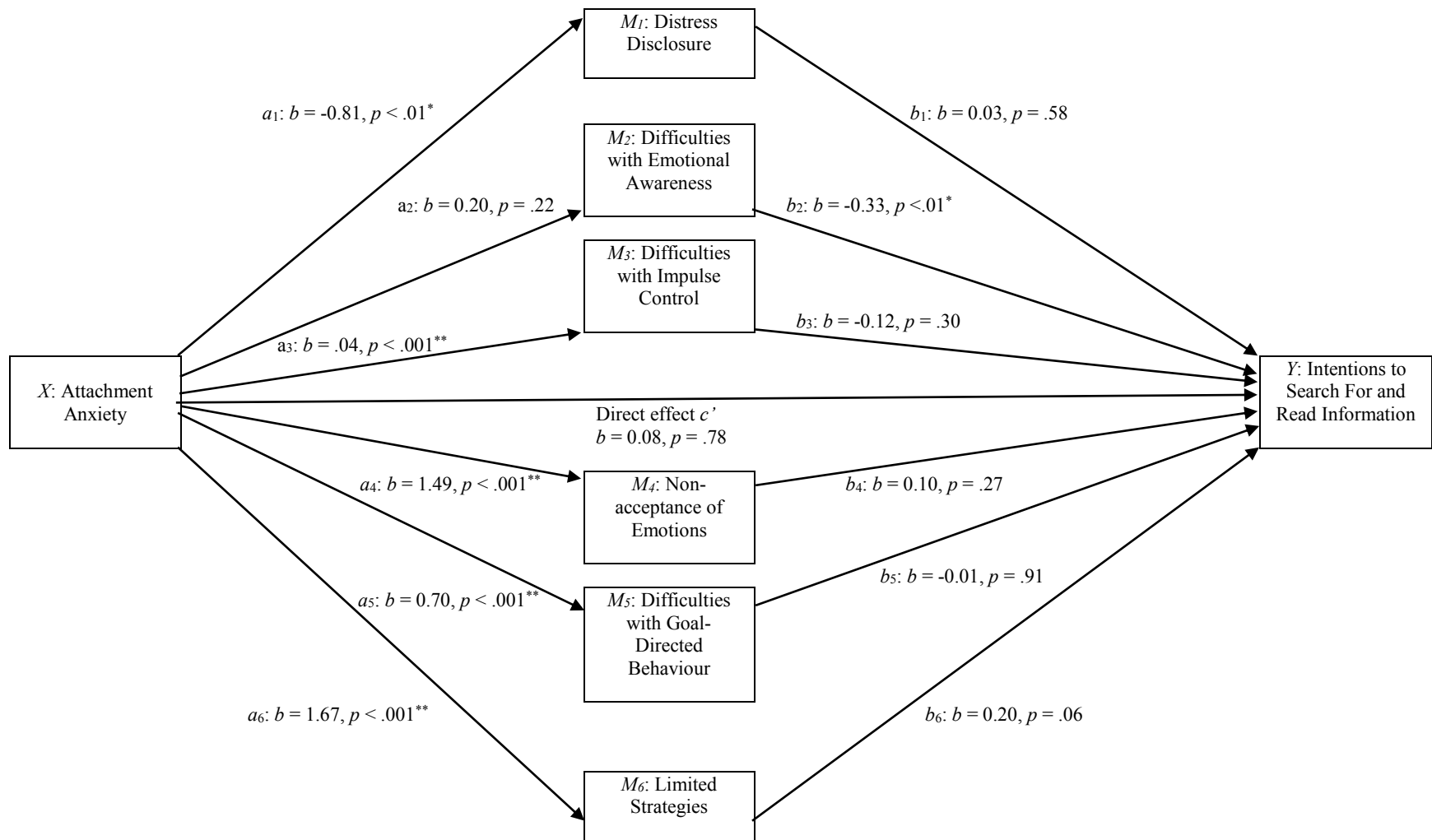
Figure 13. Hypothesis 4b: Results of the hypothesized model of distress disclosure and difficulties in emotion regulation mediating the relation between attachment anxiety and intentions to seek help online by searching for and reading information, after controlling for psychological symptom severity and gender. *Note.* *$p < .01$. **$p < .001$.

feeling upset (a_5b_5 = -.01; [-.16, .13]), and limited access to effective strategies (a_6b_6 = .34; [-.02, .71]), revealing no evidence to suggest the presence of indirect effects.

Overall, Hypothesis 4b was not supported. That is, neither the tendency to self-disclose distress to others nor difficulties in emotion regulation significantly mediated the relation between attachment anxiety and intentions to seek help online.

Hypothesis 4c. It was hypothesized that the relation between attachment avoidance and *online* help-seeking *behaviours* would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment avoidance would predict decreased odds of engaging in online help-seeking behaviours by way of lower tendencies to self-disclose distress and greater difficulties in emotion regulation. Based on significant prerequisite relations among attachment avoidance, distress disclosure, difficulties in emotion regulation, and online help-seeking behaviours, one mediation model was tested with the following outcome variable: online help-seeking behaviours of directly messaging close others (Figure 14).

As represented in Figure 14, a parallel multiple mediator model was used to test Hypothesis 4c, with online help-seeking behaviours of directly messaging close others as the outcome variable. The following variables were entered into the model: attachment avoidance as X; online help-seeking behaviours of directly messaging close others as Y; distress disclosure (M_1) and difficulties with emotional awareness (M_2) as parallel mediators; and gender (C) as a covariate.

Concerning the covariate, gender did not make a significant contribution to the prediction of distress disclosure (path a_1; [-.08, .10]), difficulties with emotional awareness (path a_2; [-.09, .03]), or online help-seeking behaviours of directly messaging

164

a_1: b = -5.65, $p < .001^{**}$

M_1: Distress Disclosure

b_1: odds ratio = 1.01, p = .22

X: Attachment Avoidance

Direct effect c'
odds ratio = 0.94, p = .12

Y: Behaviours of Directly Messaging Close Others

a_2: b = 1.78, $p < .001^{**}$

M_2: Difficulties with Emotional Awareness
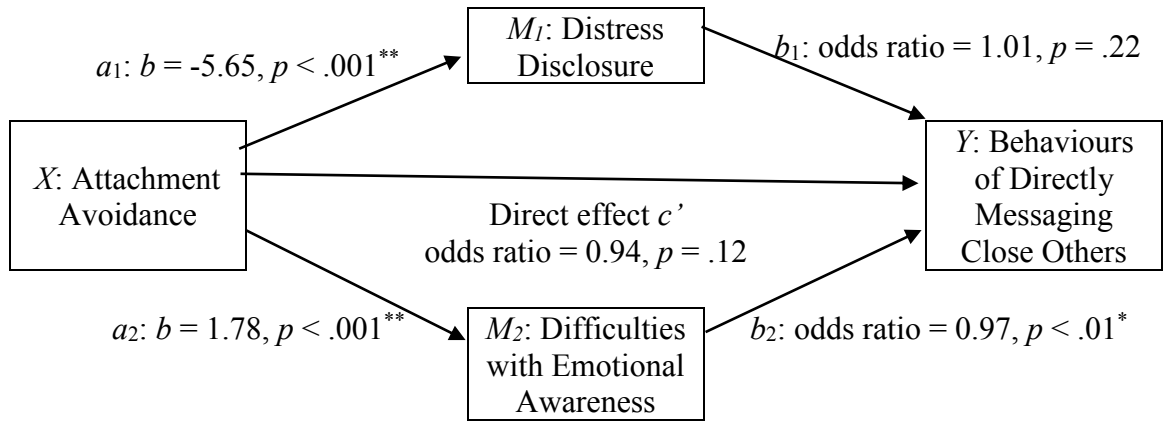
b_2: odds ratio = 0.97, $p < .01^{*}$

Figure 14. Hypothesis 4c: Results of the hypothesized model of distress disclosure and difficulties in emotion regulation mediating the relation between attachment avoidance and behaviours of seeking help online by directly messaging close others, after controlling for gender. *Note*. *$p < .01$. **$p < .001$.

close others [-.01, .01]. The direct effect of attachment avoidance on online help-seeking behaviours of directly messaging close others was not significant (path c'). Yet, higher levels of attachment avoidance significantly predicted greater difficulties with emotional awareness (i.e., lack of emotional awareness; path a_2), and greater difficulties with emotional awareness predicted significantly decreased odds of engaging in online help-seeking behaviours by directly messaging close others (path b_2). A 95% BC bootstrap confidence interval for the indirect effect of attachment avoidance on online help-seeking behaviours of directly messaging close others through difficulties with emotional awareness ($a_2b_2 = -.04$) was entirely below zero [-.07, -.01], denoting that the indirect effect was statistically significant. Conversely, zero was included in the 95% confidence interval of the bootstrap estimate [-.10, .02] for the indirect effect of distress disclosure ($a_1b_1 = -.04$), indicating that there was no evidence suggestive of an indirect effect.

Taken together, Hypothesis 4c was partially supported in that the indirect effect of attachment avoidance on help-seeking behaviours of directly messaging close others online through difficulties with emotional awareness was significant, after controlling for gender. Yet, the tendency to self-disclose distress to others did not significantly mediate the relation between attachment avoidance and behaviours of seeking help online.

Hypothesis 4d. It was hypothesized that the relation between attachment anxiety and *online* help-seeking *behaviours* would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment anxiety would predict increased odds of engaging in online help-seeking behaviours by way of greater tendencies to self-disclose distress and greater difficulties in emotion regulation. Given the significant prerequisite relations among attachment anxiety, difficulties in emotion

regulation, and online help-seeking behaviours, one mediation model was tested with the following outcome variable: online help-seeking behaviours of searching for and reading information (Figure 15).

As shown in Figure 15, a parallel multiple mediator model was employed to test Hypothesis 4d, with help-seeking behaviours of searching for and reading information online as the outcome variable. The following variables were entered into the model: attachment anxiety as X; online help-seeking behaviours of searching for and reading information as Y; difficulties with emotional awareness (M_1), difficulties with impulse control (M_2), non-acceptance of emotional responses (M_3), difficulties engaging in goal-directed behaviour when feeling upset (M_4), and limited access to effective strategies (M_5) as parallel mediators; and previous counselling experience (C) as a covariate.

With respect to the covariate, previous counselling experience was significantly influential in predicting difficulties with impulse control (path a_2; [-2.34, -.01]), difficulties with limited access to effective strategies (path a_5; [-3.05, -.22]), and help-seeking behaviours of searching for and reading information online [-.49, -.13]; yet, it did not significantly contribute to the prediction of non-acceptance of emotional responses (path a_3; [-2.23, .30]) and difficulties engaging in goal-directed behaviour when feeling upset (path a_4; [-1.76, .36]).

After accounting for previous counselling experience, the direct effect of attachment anxiety on help-seeking behaviours of searching for and reading information online was not significant (path c'). Nevertheless, higher levels of attachment anxiety significantly predicted greater difficulties with access to effective emotion regulation strategies (i.e., limited access to effective strategies; path a_5), and greater difficulties with

167

access to effective emotion regulation strategies predicted significantly increased odds of engaging in online help-seeking behaviours by searching for and reading information, even after controlling for the covariate (path b_5). A 95% BC bootstrap confidence interval for the indirect effect of attachment anxiety on online help-seeking behaviours of searching for and reading information through limited access to effective emotion regulation strategies (a_5b_5 = .07) was entirely above zero [.02, .12], indicating that the indirect effect was statistically significant. In contrast, zero was included in the 95% confidence interval of the bootstrap estimates for the indirect effects of difficulties with emotional awareness (a_1b_1 = -.01; [-.02, .01]), difficulties with impulse control (a_2b_2 = -.01; [-.03, .02]), non-acceptance of emotional responses (a_3b_3 = .01; [-.03, .04]), and difficulties engaging in goal-directed behaviour when feeling upset (a_4b_4 = .01; [-.01, .03]), revealing no evidence to suggest the presence of indirect effects.

Overall, Hypothesis 4d was partially supported in that the indirect effect of attachment anxiety on help-seeking behaviours of searching for and reading information online through limited access to effective emotion regulation strategies was significant, after controlling for previous counselling experience. However, the tendency to self-disclose distress to others did not significantly mediate the relation between attachment anxiety and behaviours of seeking help online.
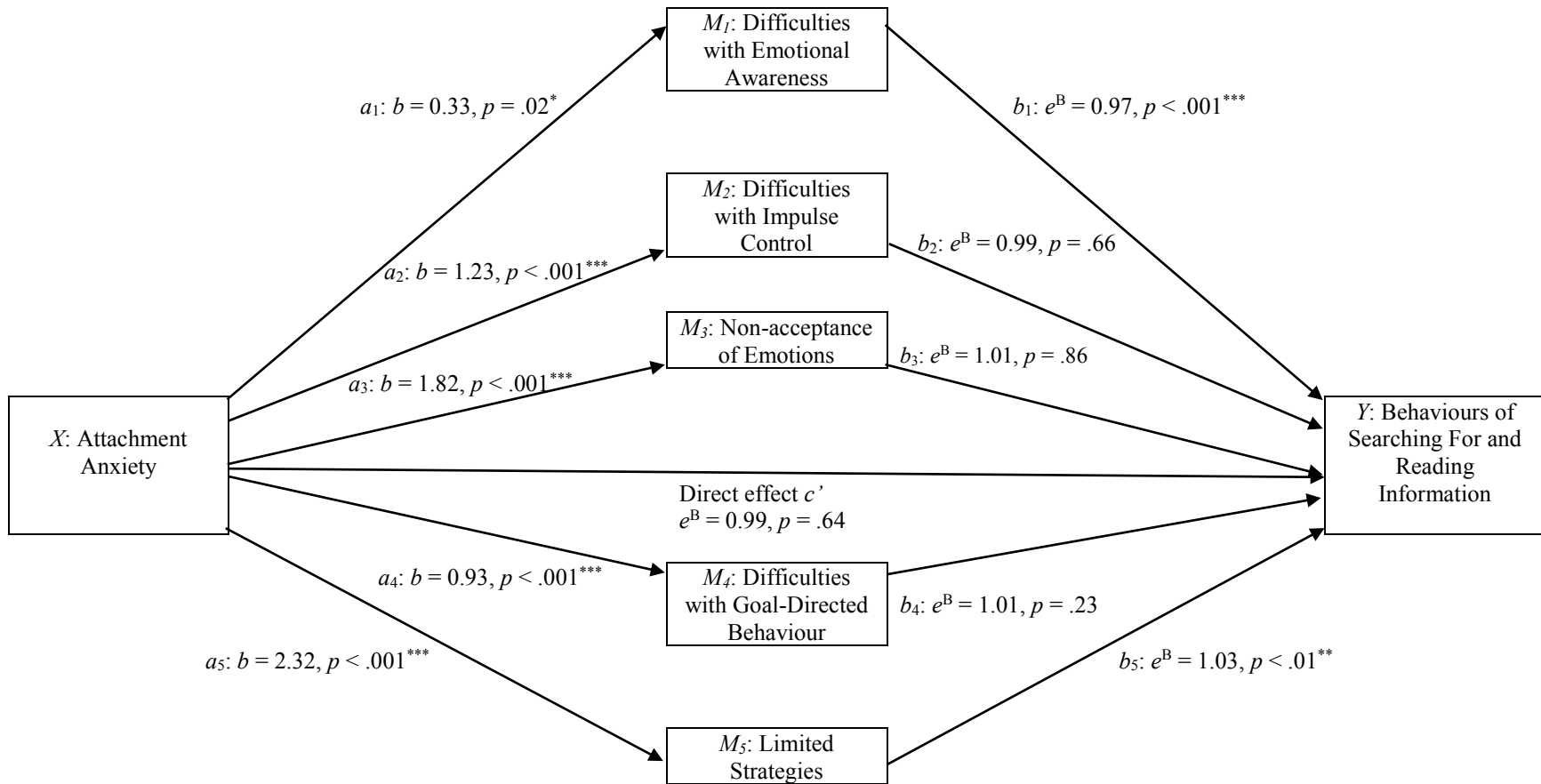
Figure 15. Hypothesis 4d: Results of the hypothesized model of difficulties in emotion regulation mediating the relation between attachment anxiety and behaviours of seeking help online by searching for and reading information, after controlling for previous counselling experience. *Note. e^B* denotes odds ratio. **p* < .05. ***p* < .01. ****p* < .001.

Objective 5: Examine the relation between attachment and help seeking from informal and formal sources of support

Hypothesis 5a. Consistent with predictions, higher levels of attachment avoidance in close relationships were significantly related to lower intentions to seek help from informal and formal sources of support (see Table 15).

Hypothesis 5b. In contrast to the hypothesis, higher levels of attachment anxiety in close relationships were significantly related to lower intentions to seek help from informal sources of support. Attachment anxiety was not significantly related to intentions to seek support from formal sources (see Table 15).

Hypothesis 5c. As anticipated, higher levels of attachment avoidance in close relationships were related to significantly decreased odds of engaging in help-seeking behaviours from informal sources and to significantly decreased odds of engaging in help-seeking behaviours from formal sources of support (see odds ratios in Table 15).

Hypothesis 5d. As expected, higher levels of attachment anxiety in close relationships were related to significantly increased odds of engaging in help-seeking behaviours from formal sources. Inconsistent with predictions, attachment anxiety in close relationships was not significantly related to the odds of engaging in help-seeking behaviours from informal sources of support (see odds ratios in Table 15).

Objective 6: Explore the link between attachment and help seeking from informal and formal sources by way of distress disclosure and difficulties in emotion regulation

Hypothesis 6a. It was hypothesized that the relation between attachment avoidance and *intentions* to seek help from *informal* and *formal* sources of support would be mediated by distress disclosure and difficulties in emotion regulation. Specifically,

higher levels of attachment avoidance would predict lower intentions to seek support from informal and formal sources of help by way of lower tendencies to self-disclose distress and greater difficulties in emotion regulation. Based on significant prerequisite relations among attachment avoidance, distress disclosure, difficulties in emotion regulation, and help-seeking intentions, two mediation models were tested with the following outcome variables: intentions to seek help from informal sources (Figure 16) and intentions to seek help from formal sources (Figure 17).

As outlined in Figure 16, a parallel multiple mediator model was used to test Hypothesis 6a, with intentions to seek help from informal sources of support as the outcome variable. The following variables were entered into the model: attachment avoidance as X; intentions to seek help from informal sources of support as Y; distress disclosure (M_1), difficulties with emotional awareness (M_2), and limited access to effective strategies (M_3) as parallel mediators; and psychological symptom severity (C_1) and gender (C_2) as covariates.

Regarding the covariates, psychological symptom severity was significantly influential in predicting difficulties with emotional awareness (path a_2; [.01, .16]) and limited access to effective strategies (path a_3; [.56, .78]), but it did not make a significant contribution in predicting distress disclosure (path a_1; [-.02, .19]) or intentions to seek help from informal sources [-.05, .01]. Gender was significantly influential in predicting distress disclosure [.74, 4.36] and intentions to seek help from informal sources of support [.16, .85]; yet, it did not significantly contribute to the prediction of difficulties with emotional awareness [-1.95, .61] or limited access to effective strategies [-.59, 3.16].

171

After accounting for psychological symptom severity and gender, the overall regression model was statistically significant, $R^2 = .20$, $p < .001$. The direct effect of attachment avoidance on intentions to seek help from informal sources was likewise significant (path c'). However, zero was included in the 95% confidence interval of the bootstrap estimates for the indirect effects of distress disclosure ($a_1b_1 = -.09$; [-.21, .03]), lack of emotional awareness ($a_2b_2 = -.02$; [-.08, .03]), and limited access to effective strategies ($a_3b_3 = -.01$; [-.02, .01]), revealing no evidence to suggest the presence of indirect effects.

As depicted in Figure 17, a parallel multiple mediator model was employed to test Hypothesis 6a, with intentions to seek help from formal sources of support as the outcome variable. More specifically, the following variables were entered into the model: attachment avoidance as X; intentions to seek help from formal sources of support as Y; and distress disclosure (M_1) and difficulties with emotional awareness (M_2) as parallel mediators. The overall regression model was statistically significant, $R^2 = .04$, $p < .001$. However, the direct effect of attachment avoidance on intentions to seek help from formal sources was not significant (path c'). In addition, zero was included in the 95% confidence interval of the bootstrap estimates for the indirect effects of distress disclosure ($a_1b_1 = -.07$; [-.20, .06]) and lack of emotional awareness ($a_2b_2 = -.03$; [-.08, .02]), indicating that there was no evidence suggestive of indirect effects.

Taken together, Hypothesis 6a was not supported. That is, neither the tendency to self-disclose distress to others nor difficulties in emotion regulation significantly mediated the relation between attachment avoidance and intentions to seek help from informal sources of support. Furthermore, the tendency to disclose distress and

172

Figure 16. Hypothesis 6a: Results of the hypothesized model of distress disclosure and difficulties in emotion regulation mediating the

relation between attachment avoidance and intentions to seek help from informal sources of support, after controlling for

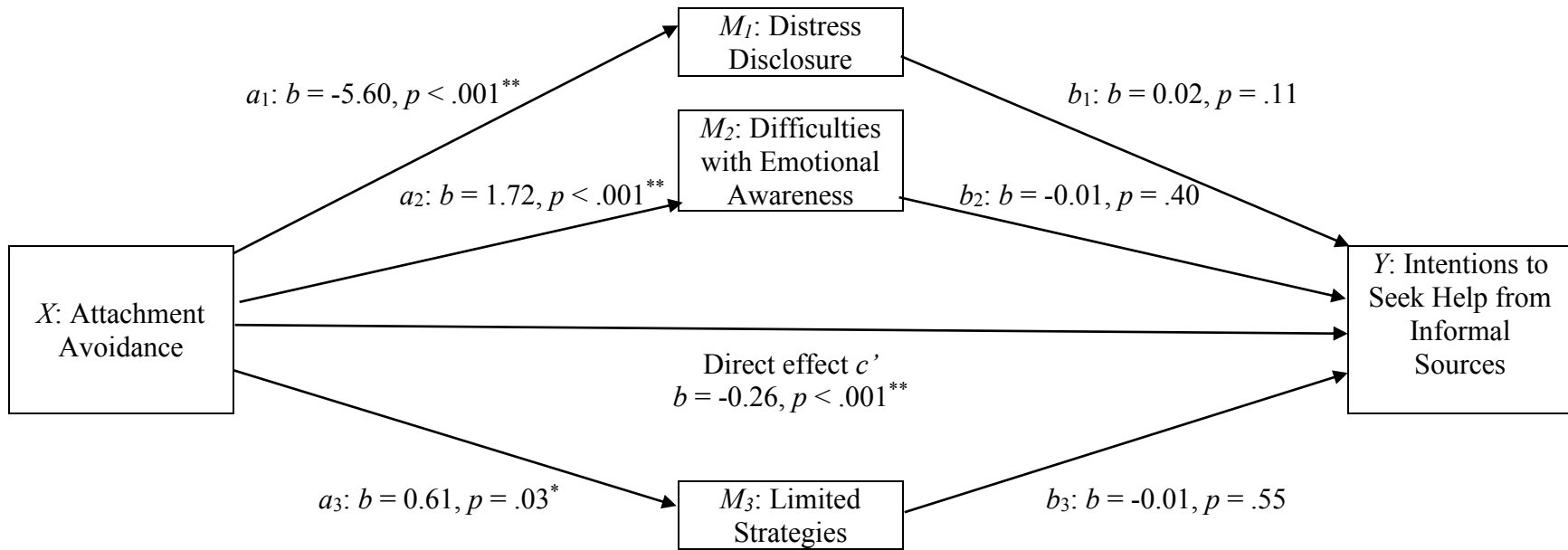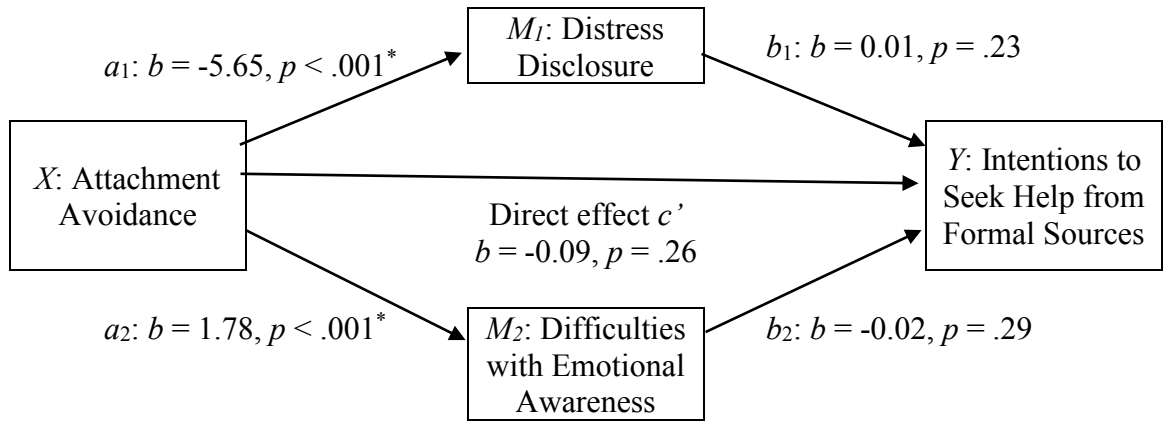psychological symptom severity and gender. *Note.* *p < .05. **p < .001.

Figure 17. Hypothesis 6a: Results of the hypothesized model of distress disclosure and difficulties in emotion regulation mediating the relation between attachment avoidance and intentions to seek help from formal sources of support. *Note*. *$p < .001$.

difficulties in emotion regulation did not significantly mediate the relation between attachment avoidance and intentions to seek help from formal sources.

Hypothesis 6b. It was hypothesized that the relation between attachment anxiety and *intentions* to seek help from *informal* and *formal* sources of support would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment anxiety would predict greater intentions to seek support from informal and formal sources of help by way of greater tendencies to self-disclose distress and greater difficulties in emotion regulation. Given the significant prerequisite relations among attachment anxiety, distress disclosure, difficulties in emotion regulation, and help-seeking intentions, one mediation model was tested with the following outcome variable: intentions to seek help from informal sources (Figure 18).

As delineated in Figure 18, a parallel multiple mediator model was used to test Hypothesis 6b, with intentions to seek help from informal sources of support as the outcome variable. The following variables were entered into the model: attachment anxiety as X; intentions to seek help from informal sources of support as Y; distress disclosure (M_1), difficulties with emotional awareness (M_2), and limited access to effective strategies (M_3) as parallel mediators; and psychological symptom severity (C_1) and gender (C_2) as covariates.

Concerning the covariates, psychological symptom severity was significantly influential in predicting difficulties with emotional awareness (path a_2; [.01, .19]) and limited access to effective strategies (path a_3; [.37, .59]); yet, it did not significantly contribute to the prediction of distress disclosure (path a_1; [-.11, .23]) or intentions to seek help from informal sources [-.05, .01]. Gender was significantly influential in

175

predicting distress disclosure [2.89, 8.16], difficulties with emotional awareness [-2.97, -.17], and intentions to seek help from informal sources of support [.15, .86], but it did not make a significant contribution in predicting limited access to effective strategies [-1.25, 2.15].

After accounting for psychological symptom severity and gender, the overall regression model was statistically significant, $R^2 = .08$, $p < .001$. The direct effect of attachment anxiety on intentions to seek help from informal sources was not significant (path c'). Even after controlling for the covariates, higher levels of attachment anxiety significantly predicted lower tendencies to self-disclose distress (path a_1), and lower tendencies to disclose distress to others significantly predicted lower intentions to seek help from informal sources of support (path b_1). A 95% BC bootstrap confidence interval for the indirect effect of attachment anxiety on intentions to seek help from informal sources through the tendency to self-disclose distress to others ($a_1b_1 = -.03$) was entirely below zero [-.07, -.01], denoting that the indirect effect was statistically significant. Conversely, zero was included in the 95% confidence interval of the bootstrap estimates for the indirect effects of lack of emotional awareness ($a_2b_2 = -.01$; [-.02, .01]) and limited access to effective strategies ($a_3b_3 = -.01$; [-.05, .03]), revealing no evidence to suggest the presence of indirect effects.

Overall, Hypothesis 6b was partially supported in that the indirect effect of attachment anxiety on intentions to seek help from informal sources of support through a tendency to disclose distress was significant, after controlling for psychological symptom severity and gender; yet, the nature of these relations was not consistent with that which was anticipated. That is, in contrast to expectations outlined in Hypothesis 6b, higher
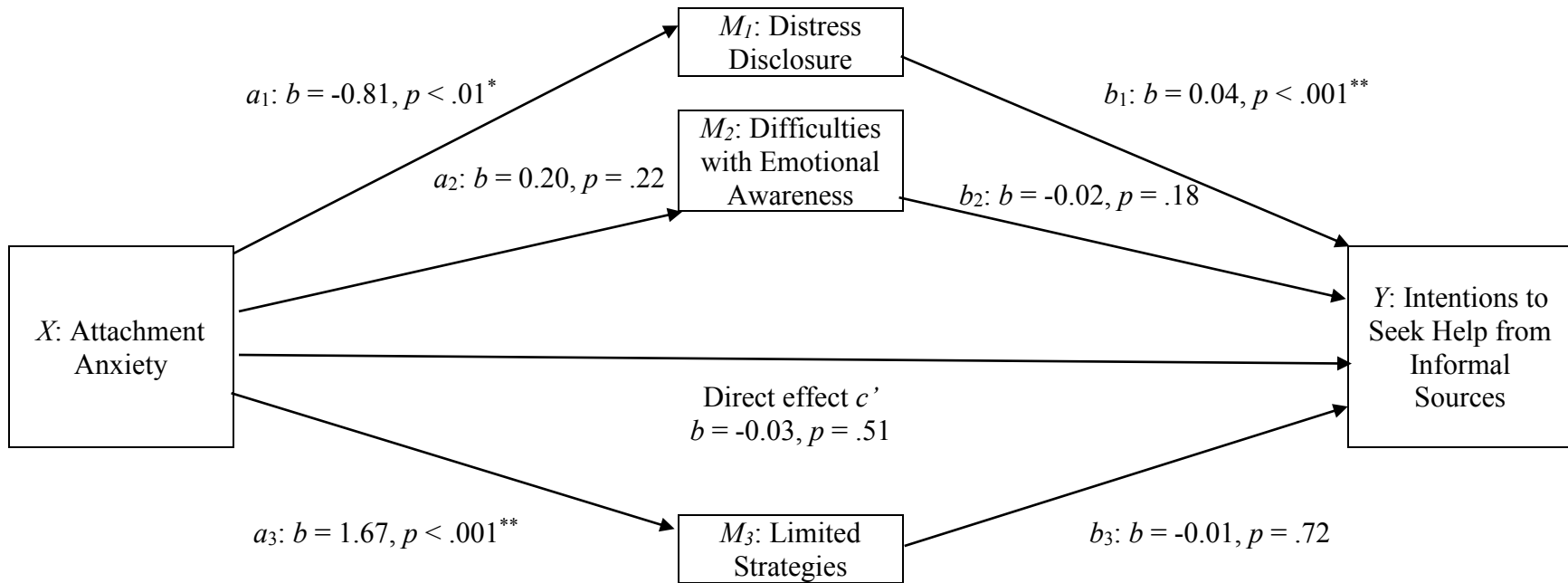
Figure 18. Hypothesis 6b: Results of the hypothesized model of distress disclosure and difficulties in emotion regulation mediating the relation between attachment anxiety and intentions to seek help from informal sources of support, after controlling for psychological symptom severity and gender. *Note*. *$p < .01$. **$p < .001$.

levels of attachment anxiety predicted lower intentions to seek support from informal sources of help by way of lower tendencies to self-disclose distress to others. Difficulties in emotion regulation did not significantly mediate the relation between attachment anxiety and intentions to seek help from informal sources. Moreover, the tendency to disclose distress and difficulties in emotion regulation did not significantly mediate the relation between attachment anxiety and intentions to seek help from formal sources.

Hypothesis 6c. It was hypothesized that the relation between attachment avoidance and *behaviours* of seeking help from *informal* and *formal* sources of support would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment avoidance would predict decreased odds of engaging in help-seeking behaviours from informal and formal sources of help by way of lower tendencies to self-disclose distress and greater difficulties in emotion regulation. Based on the significant prerequisite relations among attachment avoidance, distress disclosure, difficulties in emotion regulation, and help-seeking behaviours, two mediation models were tested with the following outcome variables: help-seeking behaviours from informal sources of support (Figure 19) and help-seeking behaviours from formal sources of support (Figure 20).

As represented in Figure 19, a parallel multiple mediator model was employed to test Hypothesis 6c, with behaviours of seeking help from informal sources of support as the outcome variable. More specifically, the following variables were entered into the model: attachment avoidance as X; behaviours of seeking help from informal sources of support as Y; distress disclosure (M_1) and difficulties with emotional awareness (M_2) as parallel mediators; and gender (C) as a covariate.

178

With respect to the covariate, gender was not significantly influential in predicting distress disclosure (path a_1; [-.08, 0.10]), difficulties with emotional awareness (path a_2; [-.09, .03]), or behaviours of seeking help from informal sources [-.01, .01]. However, the direct effect of attachment avoidance on behaviours of seeking help from informal sources was significant (path c'). Higher levels of attachment avoidance significantly predicted lower tendencies to self-disclose distress (path a_1), and lower tendencies to disclose distress to others predicted significantly decreased odds of engaging in behaviours of seeking help from informal sources of support (path b_1). A 95% BC bootstrap confidence interval for the indirect effect of attachment avoidance on behaviours of seeking help from informal sources through the tendency to self-disclose distress to others (a_1b_1 = -.07) was entirely below zero [-.12, -.01], signifying that the indirect effect was statistically significant. Conversely, zero was included in the 95% confidence interval of the bootstrap estimate [-.03, .02] for the indirect effect of difficulties with emotional awareness (a_2b_2 = -.01), indicating that there was no evidence suggestive of an indirect effect.

As depicted in Figure 20, a parallel multiple mediator model was employed to test Hypothesis 6c, with behaviours of seeking help from formal sources of support as the outcome variable. The following variables were entered into the model: attachment avoidance as X; behaviours of seeking help from formal sources of support as Y; and distress disclosure (M_1) and limited access to effective emotion regulation strategies (M_2) as parallel mediators.
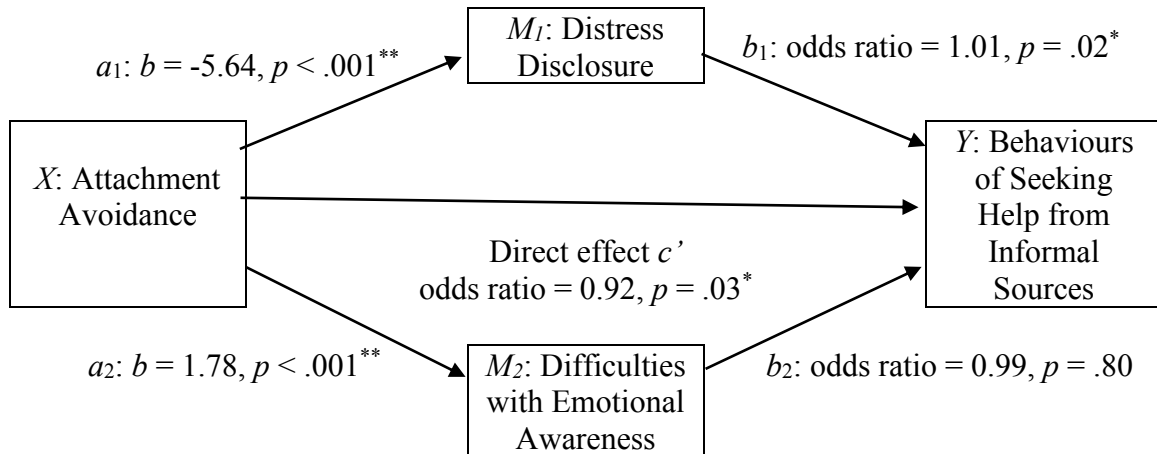
Figure 19. Hypothesis 6c: Results of the hypothesized model of distress disclosure and difficulties in emotion regulation mediating the relation between attachment avoidance and behaviours of seeking help from informal sources of support, after controlling for gender. *Note*. *$p < .05$. **$p < .001$.
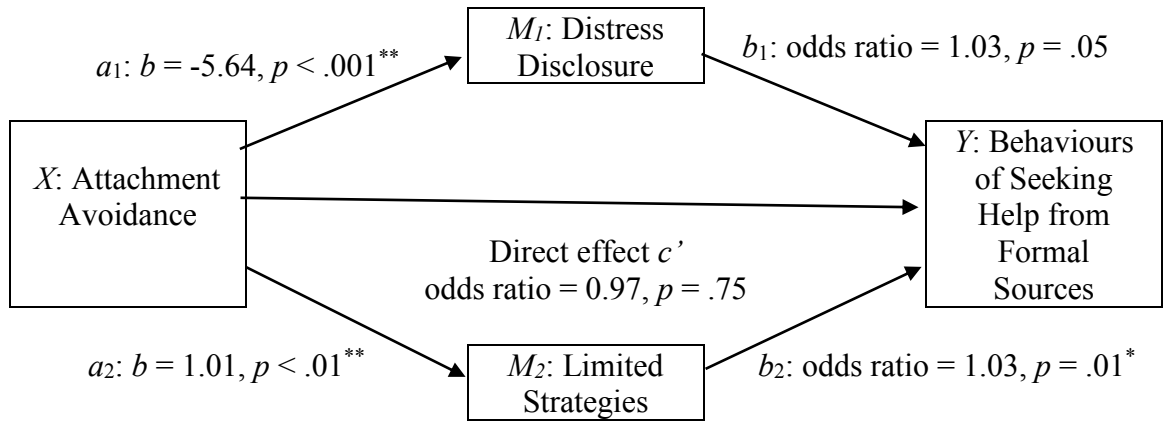
Figure 20. Hypothesis 6c: Results of the hypothesized model of distress disclosure and difficulties in emotion regulation mediating the relation between attachment avoidance and behaviours of seeking help from formal sources of support. *Note. *$p < .05$. **$p < .01$. ***$p < .001$.

Results demonstrated that the direct effect of attachment avoidance on behaviours of seeking help from formal sources was not significant (path c'). Interestingly, however, higher levels of attachment avoidance significantly predicted greater difficulties with access to effective emotion regulation strategies (i.e., limited access to effective strategies; path a_2), and greater difficulties with access to effective emotion regulation strategies predicted significantly increased odds of engaging in help-seeking behaviours from formal sources of support (path b_2). A 95% BC bootstrap confidence interval for the indirect effect of attachment avoidance on help-seeking behaviours from formal sources through limited access to effective emotion regulation strategies ($a_2b_2 = .03$) was entirely above zero [.01, .06], indicating that the indirect effect was statistically significant. In contrast, zero was included in the 95% confidence interval of the bootstrap estimate [-.31, .01] for the indirect effect of distress disclosure ($a_1b_1 = -.15$), revealing no evidence to suggest the presence of an indirect effect.

Taken together, Hypothesis 6c was partially supported in that the indirect effect of attachment avoidance on help-seeking behaviours from informal sources through a tendency to self-disclose distress to others was significant, after controlling for gender. Yet, difficulties in emotion regulation did not significantly mediate the relation between attachment avoidance and behaviours of seeking help from informal sources of support. Furthermore, the indirect effect of attachment avoidance on help-seeking behaviours from formal sources through limited access to effective emotion regulation strategies was similarly significant. However, the tendency to disclose distress did not significantly mediate the relation between attachment avoidance and help-seeking behaviours from formal sources of support.

Hypothesis 6d. It was hypothesized that the relation between attachment anxiety and *behaviours* of seeking help from *informal* and *formal* sources of support would be mediated by distress disclosure and difficulties in emotion regulation. Specifically, higher levels of attachment anxiety would predict increased odds of engaging in help-seeking behaviours from informal and formal sources of help by way of greater tendencies to self-disclose distress and greater difficulties in emotion regulation. Given the significant prerequisite relations among attachment anxiety, distress disclosure, difficulties in emotion regulation, and help-seeking behaviours, one mediation model was tested with the following outcome variable: help-seeking behaviours from formal sources of support (Figure 21).

As delineated in Figure 21, a parallel multiple mediator model was used to test Hypothesis 6d, with behaviours of seeking help from formal sources of support as the outcome variable. More specifically, the following variables were entered into the model: attachment anxiety as *X*; behaviours of seeking help from formal sources of support as *Y*; distress disclosure (M_1), difficulties with impulse control (M_2), difficulties with goal-directed behaviour (M_3), and limited access to effective strategies (M_4) as parallel mediators; and previous counselling experience (C_1) as a covariate.

Concerning the covariate, previous counselling experience was significantly influential in predicting difficulties with impulse control (path a_2; [-2.34, -.01]), limited access to effective strategies (path a_4; [-3.05, -.22]), and help-seeking behaviours from formal sources [-1.18, -.48]; yet, it did not significantly contribute to the prediction of difficulties with goal-directed behaviours (path a_3; [-1.76, .36]).

After accounting for previous counselling experience, the direct effect of attachment anxiety on help-seeking behaviours from formal sources was not significant (path c'). Furthermore, zero was included in the 95% confidence interval of the bootstrap estimates for the indirect effects of distress disclosure (a_1b_1 = -.02; [-.04, .01]), difficulties with impulse control (a_2b_2 = .01; [-.05, .06]), difficulties with goal-directed behaviour (a_3b_3 = .01; [-.03, .05]), and limited access to effective strategies (a_4b_4 = .01; [-.09, .10]), indicating that there was no evidence suggestive of indirect effects.

Overall, hypothesis 6d was not supported given that a tendency to self-disclose distress to others and difficulties in emotion regulation did not significantly mediate the relation between attachment anxiety and behaviours of seeking help from formal sources, as well as the non-significant prerequisite relations between attachment anxiety and help-seeking behaviours from informal sources (see the results from Hypothesis 5d and Table 15). See Table 16 for a summary of the study findings.
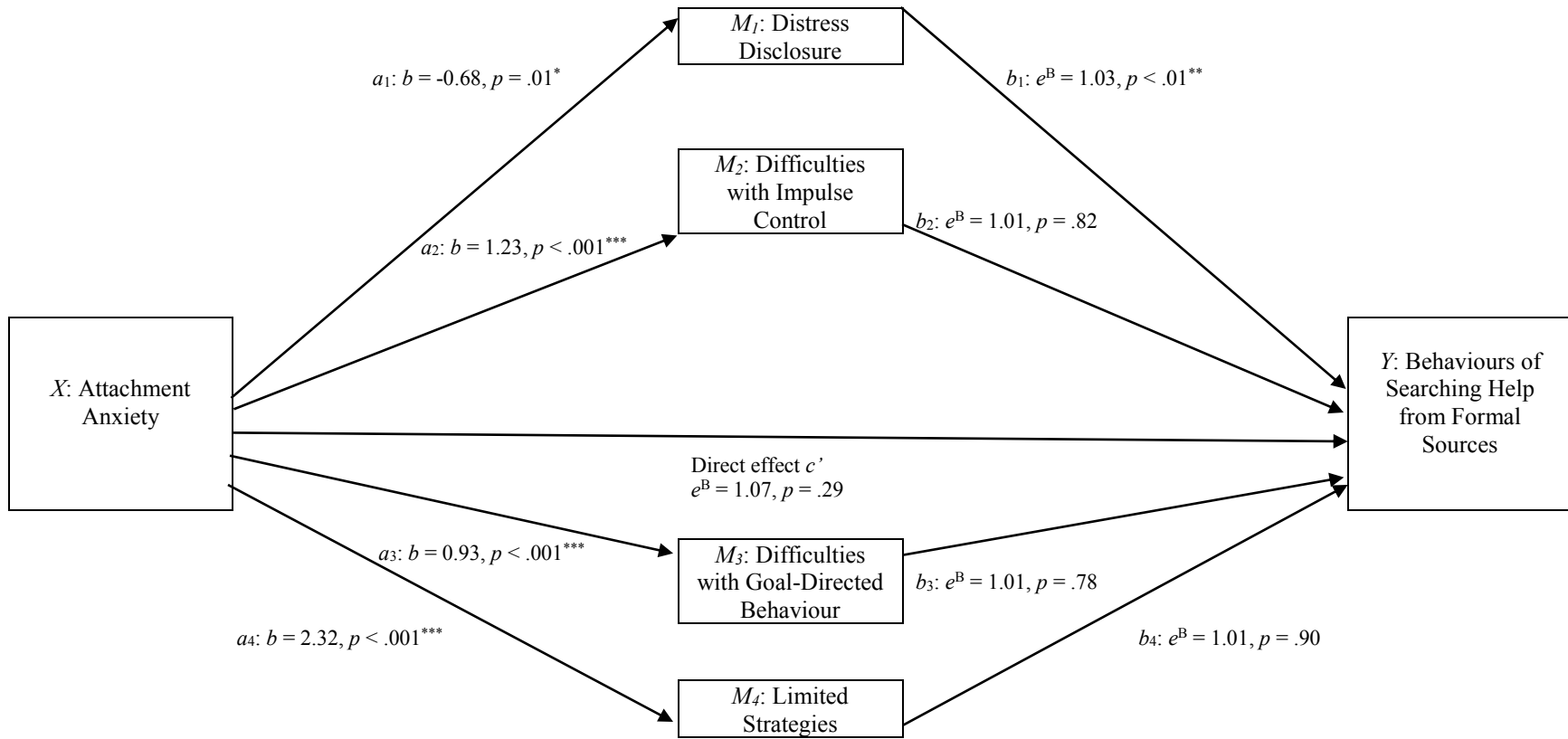
Figure 21. Hypothesis 6d: Results of the hypothesized model of distress disclosure and difficulties in emotion regulation mediating

the relation between attachment anxiety and behaviours of seeking help from formal sources of support, after controlling for previous

counselling experience. *Note.* e^B denotes odds ratio. *$p < .05$. **$p < .01$. ***$p < .001$.

Table 16

Summary of Study Results

Hypotheses	Main Findings	Summary
Objective 1:		
a. Higher levels of attachment avoidance would be associated with lower tendencies to self-disclose personally distressing information to other people.	• Higher levels of attachment avoidance in close relationships were significantly related to lower tendencies to disclose distress to others.	Supported
b. Higher levels of attachment anxiety would be associated with greater tendencies to self-disclose personally distressing information to other people.	• In contrast to this prediction, higher levels of attachment anxiety in close relationships were significantly related to *lower* tendencies to disclose distress to others.	Not Supported
Objective 2:		
a. Higher levels of attachment avoidance would be associated with greater difficulties in emotion regulation.	• Higher levels of attachment avoidance in close relationships were significantly related to greater difficulties with emotional awareness, non-acceptance of negative emotion, and limited access to effective emotion regulation strategies. • Attachment avoidance was not significantly related to difficulties with impulse control or engaging in goal-directed behaviour when feeling upset.	Partially Supported
b. Higher levels of attachment anxiety would be associated with greater difficulties in emotion regulation.	• Higher levels of attachment anxiety in close relationships were significantly related to greater difficulties with emotional awareness, impulse control, non-acceptance of negative emotion, limited access to effective emotion regulation strategies, and engaging in goal-directed behaviour when feeling upset.	Supported

Table 16 (continued)

Hypotheses	Main Findings	Summary
Objective 3:		
a. Higher levels of attachment avoidance would be associated with lower *intentions* to seek help *online* for a personal or emotional problem.	• Higher levels of attachment avoidance in close relationships were significantly related to lower intentions to seek help online by way of searching for and reading information pertaining to the emotional or personal problem, directly messaging close others, and posting to large online audiences. • Attachment avoidance was not significantly related to intentions to seek help online via posting to anonymous sources of support.	Partially Supported
b. Higher levels of attachment anxiety would be associated with greater *intentions* to seek help *online* for a personal or emotional problem.	• Higher levels of attachment anxiety in close relationships were significantly related to greater intentions to seek help online by way of posting to anonymous sources of support and searching for and reading information concerning the emotional or personal problem. • Attachment anxiety was not significantly related to intentions to seek help online via directly messaging close others or posting to large online audiences.	Partially Supported
c. Higher levels of attachment avoidance would be associated with fewer *behaviours* of actually seeking help *online* for a personal or emotional problem.	• Higher levels of attachment avoidance in close relationships were significantly related to engaging in fewer behaviours of seeking help online by directly messaging close others. • Attachment avoidance was not significantly related to engaging in online help-seeking behaviours of searching for and reading information, posting to anonymous sources, or posting to large online audiences.	Partially Supported

Table 16 (continued)

Hypotheses	Main Findings	Summary
d. Higher levels of attachment anxiety would be associated with more *behaviours* of actually seeking help *online* for a personal or emotional problem.	• Higher levels of attachment anxiety in close relationships were significantly related to engaging in more behaviours of seeking help online by searching for and reading information pertaining to the emotional or personal problem.	Partially Supported
Objective 4:		
a. Higher levels of attachment avoidance would predict lower *intentions* to seek help *online* by way of lower tendencies to self-disclose distress and greater difficulties in emotion regulation.	• The indirect effect of attachment avoidance on intentions to seek help online by searching for and reading information through difficulties with emotional awareness was significant. Similarly, the indirect effect of attachment avoidance on intentions to seek help online by directly messaging close others through difficulties with emotional awareness was significant. • The tendency to self-disclose distress to others did not significantly mediate the relation between attachment avoidance and intentions to seek help online.	Partially Supported
b. Higher levels of attachment anxiety would predict greater *intentions* to seek help *online* by way of greater tendencies to self-disclose distress and greater difficulties in emotion regulation.	• Neither the tendency to self-disclose distress to others nor difficulties in emotion regulation significantly mediated the relation between attachment anxiety and intentions to seek help online.	Not Supported
c. Higher levels of attachment avoidance would predict fewer *behaviours* of actually seeking help *online* by way of lower tendencies to self-disclose distress and greater difficulties in emotion regulation.	• The indirect effect of attachment avoidance on help-seeking behaviours of directly messaging close others online through difficulties with emotional awareness was significant. • The tendency to self-disclose distress to others did not significantly mediate the relation between attachment avoidance and behaviours of seeking help online.	Partially Supported

Table 16 (continued)

Hypotheses	Main Findings	Summary
d. Higher levels of attachment anxiety would predict more *behaviours* of actually seeking help *online* by way of greater tendencies to self-disclose distress and greater difficulties in emotion regulation.	• The indirect effect of attachment anxiety on help-seeking behaviours of searching for and reading information online through limited access to effective emotion regulation strategies was significant. • The tendency to self-disclose distress to others did not significantly mediate the relation between attachment anxiety and behaviours of seeking help online.	Partially Supported
Objective 5:		
a. Higher levels of attachment avoidance would be associated with lower *intentions* to seek help from *informal* and *formal* sources of support for a personal or emotional problem.	• Higher levels of attachment avoidance in close relationships were significantly related to lower intentions to seek help from both informal and formal sources of support.	Supported
b. Higher levels of attachment anxiety would be associated with greater *intentions* to seek help from *informal* and *formal* sources of support for a personal or emotional problem.	• In contrast to this prediction, higher levels of attachment anxiety in close relationships were significantly related to *lower* intentions to seek help from informal sources. • Attachment anxiety was not significantly related to intentions to seek support from formal sources.	Partially Supported
c. Higher levels of attachment avoidance would be associated with fewer *behaviours* of actually seeking help from *informal* and *formal* sources of support.	• Higher levels of attachment avoidance in close relationships were significantly related to engaging in fewer behaviours of seeking help from both informal and formal sources of support.	Supported

Table 16 (continued)

Hypotheses	Main Findings	Summary
d. Higher levels of attachment anxiety would be associated with more *behaviours* of actually seeking help from *informal* and *formal* sources of support for a personal or emotional problem.	• Higher levels of attachment anxiety in close relationships were significantly related to engaging in a greater number of help-seeking behaviours from formal sources of support. • Attachment anxiety in close relationships was not significantly related to engaging in help-seeking behaviours from informal sources of support.	Partially Supported
Objective 6:		
a. Higher levels of attachment avoidance would predict lower *intentions* to seek support from *informal* and *formal* sources of help by way of lower tendencies to self-disclose distress and greater difficulties in emotion regulation.	• Neither the tendency to self-disclose distress to others nor difficulties in emotion regulation significantly mediated the relation between attachment avoidance and intentions to seek help from informal sources of support. Similarly, the tendency to disclose distress and difficulties in emotion regulation did not significantly mediate the relation between attachment avoidance and intentions to seek help from formal sources of support.	Not Supported
b. Higher levels of attachment anxiety would predict greater *intentions* to seek support from *informal* and *formal* sources of help by way of greater tendencies to self-disclose distress and greater difficulties in emotion regulation.	• The indirect effect of attachment anxiety on intentions to seek help from informal sources of support through a tendency to disclose distress was significant; yet, in contrast to expectations, higher levels of attachment anxiety predicted *lower* intentions to seek support from informal sources of help by way of *lower* tendencies to self-disclose distress to others. • The tendency to disclose distress and difficulties in emotion regulation did not significantly mediate the relation between attachment anxiety and intentions to seek help from formal sources of support.	Partially Supported

Table 16 (continued)

Hypotheses	Main Findings	Summary
c. Higher levels of attachment avoidance would predict fewer *behaviours* of seeking support from *informal* and *formal* sources of help by way of lower tendencies to self-disclose distress and greater difficulties in emotion regulation.	• The indirect effect of attachment avoidance on help-seeking behaviours from informal sources through a tendency to self-disclose distress to others was significant. • Difficulties in emotion regulation did not significantly mediate the relation between attachment avoidance and behaviours of seeking help from informal sources of support. • The indirect effect of attachment avoidance on help-seeking behaviours from formal sources through limited access to effective emotion regulation strategies was significant. • The tendency to disclose distress did not significantly mediate the relation between attachment avoidance and help-seeking behaviours from formal sources of support.	Partially Supported
d. Higher levels of attachment anxiety would predict more *behaviours* of seeking support from *informal* and *formal* sources of help by way of greater tendencies to self-disclose distress and greater difficulties in emotion regulation.	• The prerequisite relations between attachment anxiety and help-seeking behaviours from informal sources of support were non-significant. • Neither the tendency to disclose distress nor difficulties in emotion regulation significantly mediated the relation between attachment anxiety and help-seeking behaviours from formal sources of support.	Not Supported

CHAPTER V

Discussion

The overall focus of the current study was to explore the connection between young adults' attachment style and how and from whom young adults seek help online for an emotional or personal problem. More specifically, it was of interest to examine the relations of attachment avoidance and attachment anxiety with intentions and behaviours of seeking help online. Although researchers are beginning to explore how and from whom young people seek help online (e.g., Blight et al., 2015; Gowen, 2013; Gowen et al., 2012; Horgan & Sweeney, 2010), to the author's knowledge, no research study could be found that either comprehensively examined how emerging adults use the Internet and computer-mediated technology to seek help or alternatively, explored the potential association between attachment style and online help seeking. Accordingly, the present study has meaningfully extended the help seeking literature by providing timely insight into the connections between young adults' attachment style and their intentions and behaviours of seeking help online, as well as through the development of a questionnaire uniquely designed to comprehensively assess online help seeking intentions and behaviours from various sources of support via different online tools of communication.

A second goal of this study was to investigate the associations of attachment avoidance and attachment anxiety with both intentions and behaviours of seeking help from informal and formal sources of support. Even though researchers have examined the relations between attachment and intentions and behaviours of seeking help from informal and formal sources in young adults (e.g., Bumbacco, 2015; Cheng et al., 2015; DeFronzo et al., 2001; Shaffer et al., 2006; Vogel & Wei, 2005), to the author's

192

knowledge, no studies have been conducted that comprehensively investigate the links between attachment and both help-seeking intentions and behaviours from informal and formal sources. Consequently, the present study has notably contributed to the empirical literature by concurrently assessing the relations between emerging adults' attachment style and their intentions to seek help and actual help-seeking behaviours from both informal and formal sources of support.

Similarly, the current research represents the first study to examine the potential mediating role of emotion regulation and distress disclosure in the links between attachment style and both help-seeking intentions and behaviours. As a result, the present study findings offer a unique understanding into the specific mediating role of difficulties in emotional awareness, limited access to effective emotion regulation strategies, and the tendency to self-disclose distress to others in the relations of attachment avoidance and attachment anxiety with intentions and behaviours of seeking help online and from informal and formal sources of support.

How and From Whom Emerging Adults Seek Help Online

The current study has distinctly added to the body of empirical research on help seeking by deepening our understanding about how and from whom young people are seeking help via the Internet and computer-mediated communication. Approximately 95% of the sample of emerging adults sought help for an emotional or personal problem by using online computer-mediated technology, in some capacity, over the past four weeks. Clearly, seeking support by using online tools of communication and computer-mediated technology is a commonly occurring behaviour among emerging adults and

represents a timely and prevalent means by which young people are connecting with others for help.

Directly messaging close others (i.e., friends, parents, and romantic partners) via smartphones or social networking sites was the most popular form of seeking help online, whereby almost 90% of emerging adults endorsed having sought help online from close others for a personal or emotional problem within the past four weeks. In particular, 80%, 52%, and 46% of young adults sent a personal message on their smartphones to their friends, romantic partners, and parents, respectively, in an effort to seek help. In addition, 46% and 25% of the sample sent a personal message on a social networking site to their friends and romantic partners, respectively, for support with a personal or emotional problem. Another common way by which young people sought help online was by searching for and reading information, which included searching for professional mental health services available online (10%), reading information about the problem on websites with professional help (17%), and reading the personal stories of other people, who have experienced similar problems, for support or ideas about how to cope with it (42%). Overall, approximately 56% of emerging adults indicated that they had sought help online by searching for and reading information related to their emotional or personal problem. About 27% of the participants reported having sought help online via posting to large online audiences (e.g., updating a profile status or posting a photo, video, or blog entry to Facebook, Twitter, Instagram, YouTube, or Tumblr) for support with a personal or emotional problem. Albeit an uncommon way to seek help online, 5% of emerging adults did identify that they had sought help by posting to anonymous sources

of support (e.g., messaging others in an anonymous chat room and posting an anonymous blog entry) within the past four weeks.

The present study has enhanced the help seeking knowledge base by also concurrently investigating how and from whom emerging adults seek help from various informal and formal sources of support. Approximately 94% of the sample of young adults sought help from an informal source for an emotional or personal problem within the past month. Specifically, young people most commonly sought help from their mothers (71%), fathers (35%), friends (79%), and romantic partners (48%), which is consistent with past research showing that parents, friends, and romantic partners are the most frequently endorsed sources of help for young adults (e.g., Rickwood et al., 2005, 2015; Wilson et al., 2011). By comparison, only 26% of emerging adults sought help from a formal source for an emotional or personal problem during the past four weeks. In particular, individuals sought professional help from family doctors (10%), mental health professionals, such as psychologists, social workers, and psychiatrists (7%), and student counselling services (5%). Similar to previous research (Rickwood et al., 2007; 2015; Wilson et al., 2011), emerging adults engaged in more help-seeking behaviours from informal sources than formal sources of help.

Interestingly, this pattern of findings that young adults more commonly seek support from their family, friends, and romantic partners than from professional services was consistent across both online help-seeking behaviours (i.e., directly messaged close others versus searched for and read information online [from professional sources]) and in-person help-seeking behaviours (i.e., informal sources versus formal sources). This

finding of the particular similarity between online and in-person help seeking represents a fundamental contribution to the advancement of the help seeking literature.

Attachment and Online Help Seeking

To the author's knowledge, the present investigation of the relation between attachment and intentions to seek help online/behaviours of seeking help online was the first of its kind and, consequently, is noteworthy in its focus. Study hypotheses were developed based on the attachment theory literature and past research studies on the link between attachment style and intentions and behaviours of seeking help from sources of support not in an online context.

As predicted, higher levels of attachment avoidance in close relationships were significantly associated with lower *intentions* to seek help online by way of searching for and reading information related to the emotional or personal problem, directly messaging close others, and posting to large online audiences. With attachment avoidance conceptualized as a tendency to feel uncomfortable and avoid intimacy in relationships (Brennan et al., 1998; Fraley et al., 2011), these findings are consistent with both the tenets of attachment theory and previous empirical literature showing that individuals who endorse higher levels of attachment avoidance report lower intentions to seek help from others (Shaffer et al., 2006; Vogel & Wei, 2005). Interestingly, however, attachment avoidance was not significantly associated with intentions to seek help online via posting to anonymous sources of support. Given that individuals who feel discomfort with closeness in relationships are less likely to seek help from others, it is possible that seeking help online from anonymous sources represents an alternative means to do so, while still maintaining some emotional distance from sources of support. Nevertheless, it

may be that people who report greater attachment avoidance continue to anticipate feeling discomfort in seeking help online from anonymous sources, as seeking support in this way would still require their acknowledgment and disclosure of an emotional or personal problem, which individuals with higher levels of attachment avoidance are less likely to do (Mikulincer & Shaver, 2007, 2008).

As anticipated, higher levels of attachment avoidance in close relationships were significantly associated with engaging in fewer *behaviours* of seeking help online by directly messaging close others (e.g., sent a personal message to close others via a smartphone or social networking site). This finding is consistent with the result outlined above (i.e., that higher levels of attachment avoidance were significantly related to lower intentions to seek help online by directly messaging close others) and is in keeping with the theoretical and empirical literature on attachment avoidance in relationships (Brennan et al., 1998; Bumbacco, 2015; Fraley et al., 2011; Mikulincer & Shaver, 2008). However, not consistent with hypotheses, attachment avoidance was not significantly associated with engaging in online help-seeking behaviours of posting to large online audiences, searching for and reading information, or posting to anonymous sources. Evidently, it is important to make a distinction between intentions and behaviours of seeking help online, as attachment avoidance significantly related to intentions to seek help online, but did not do so for all respective behaviours of actually seeking help online.

As expected, higher levels of attachment anxiety in close relationships were significantly associated with greater *intentions* to seek help online by way of posting to anonymous sources and searching for and reading information pertaining to the personal or emotional problem. Yet, attachment anxiety was not significantly associated with

197

intentions to seek help online via directly messaging close others or posting to large online audiences. With attachment anxiety conceptualized as a tendency to worry about being alone, rejected, or abandoned in relationships (Brennan et al., 1998; Fraley et al., 2011), individuals who endorse higher levels of attachment anxiety may worry that if other people were to perceive them as being unable to cope with their problems, then they would abandon them, and thus, these individuals may have lower intentions to disclose their distress and need for help to close or familiar others (Garrison et al., 2014). Accordingly, it is possible that individuals who worry about being alone or rejected in relationships may prefer seeking help online from anonymous sources or by reading relevant information themselves, as these ways of seeking help may be perceived as not endangering the maintenance of their close relationships in the offline world. Indeed, the anonymity that the Internet can provide is an essential feature for some individuals who choose to seek help online for a personal or emotional problem (Greidanus, 2010).

As predicted, higher levels of attachment anxiety in close relationships were significantly associated with engaging in more *behaviours* of seeking help online by searching for and reading information pertaining to the emotional or personal problem (e.g., searched for professional mental health services available online and read the personal stories of other people, who have experienced similar personal or emotional problems, for support or ideas about how to cope). This finding is consistent with the result delineated above (i.e., that higher levels of attachment anxiety were significantly related to greater intentions to seek help online by searching for and reading information) and corresponds to the results of previous research studies and the theoretical literature on attachment anxiety (Bumbacco, 2015; Cheng et al., 2015; Mikulincer & Shaver, 2007,

2008; Shaffer et al., 2006; Vogel & Wei, 2005). However, not in line with the

hypotheses, attachment anxiety was not significantly related to engaging in online help-

seeking behaviours of directly messaging close others, posting to large online audiences,

or posting to anonymous sources. Given that individuals who report higher levels of

attachment anxiety tend to view other people as unreliable attachment figures and worry

that others will reject them, it is possible that anxiously attached individuals perceive that

ultimately, they can only rely on themselves to resolve their problems and subsequently,

turn to information and resources online for support.

Attachment and Seeking Help from Informal and Formal Sources of Support

Consistent with hypotheses and previous empirical findings (e.g., Shaffer et al.,

2006; Vogel & Wei, 2005), higher levels of attachment avoidance in close relationships

were significantly associated with lower *intentions* to seek help from both informal and

formal sources of support. Furthermore, as expected, higher levels of attachment

avoidance in close relationships were significantly associated with engaging in fewer

behaviours of seeking help from informal sources of support. That is, individuals who

reported greater feelings of discomfort with depending on and opening up to others in

relationships engaged in fewer help-seeking behaviours with friends, parents, family

members, and/or romantic partners for a personal or emotional problem over the past

month. This finding is in keeping with past research studies (e.g., Bumbacco, 2015;

DeFronzo et al., 2001), which likewise documented that young adults with greater

attachment avoidance engaged in significantly fewer behaviours of seeking help from

informal sources. As anticipated, greater attachment avoidance in close relationships was

likewise significantly related to engaging in fewer *behaviours* of seeking support from

formal sources. In the only previous study, which could be located that explored this relation, no significant association was documented between attachment avoidance and help-seeking behaviours from professional support (Bumbacco, 2015).

Inconsistent with hypotheses, attachment anxiety was not significantly associated with *intentions* to seek help from formal sources of support. This finding differs from past research results showing that emerging adults with higher levels of attachment anxiety reported significantly greater intentions to seek professional help (Cheng et al., 2015; Shaffer et al., 2006; Vogel & Wei, 2005). Additionally, in contrast to hypotheses, the present study results revealed that higher levels of attachment anxiety in close relationships were significantly associated with lower intentions to seek help from informal sources of support. That is, emerging adults who endorsed greater concerns of rejection or abandonment in relationships reported lower intentions to seek help from friends, parents, family members, and/or romantic partners for a personal or emotional problem. Once again, it is possible that anxiously attached individuals may worry about pushing others away if they disclose their distress or need for help to close others (Garrison et al., 2014), and subsequently, may report lower intentions to seek help from informal sources. Interestingly, however, this line of thinking is in contrast to previous research findings (Bumbacco, 2015), which revealed that individuals with a preoccupied attachment style (comparable to attachment anxiety) indicated engaging in more help-seeking *behaviours* from both informal and formal sources of support. In keeping with predictions and these past results (Bumbacco, 2015), the current study findings demonstrated that higher levels of attachment anxiety in close relationships was significantly related to engaging in a greater number of help-seeking *behaviours* from

formal sources. Yet, inconsistent with expectations, attachment anxiety was not significantly associated with engaging in help-seeking *behaviours* from informal sources.

Attachment and Emotion Regulation

Consistent with hypotheses and the theoretical literature on attachment avoidance and deactivating strategies of suppressing negative emotions and denying feelings of emotional distress (Cassidy, 1994; Mikulincer & Shaver, 2007, 2008; Mikulincer et al., 2003; Sroufe et al., 2005), higher levels of attachment avoidance in close relationships were significantly related to greater difficulties with emotional awareness, non-acceptance of negative emotional responses, and limited access to effective emotion regulation strategies. These findings are in keeping with previous research results (Han & Pistole, 2014; Lecce, 2008), which also revealed that young adults with greater attachment avoidance endorsed greater difficulties with emotional awareness, non-acceptance of negative emotions, and limited access to effective strategies. Han and Pistole (2014) also found that higher levels of attachment avoidance were significantly positively related to greater difficulties with impulse control and engaging in goal-directed behaviour when feeling upset. However, in the present study, attachment avoidance was not significantly associated with difficulties with impulse control or engaging in goal-directed behaviour.

In line with hypotheses and the theoretical literature (Mikulincer & Shaver, 2008; Mikulincer et al., 2003), higher levels of attachment anxiety in close relationships were significantly related to greater difficulties with emotional awareness, impulse control, non-acceptance of negative emotional responses, limited access to effective emotion regulation strategies, and engaging in goal-directed behaviour when feeling upset. These

results are in agreement with prior empirical findings (Han & Pistole, 2014; Lecce, 2008), which similarly showed that young adults with higher levels of attachment anxiety endorsed greater difficulties with emotional awareness, impulse control, non-acceptance of negative emotions, limited access to effective strategies, and engaging in goal-directed behaviour. That is, Han and Pistole (2014) and Lecce (2008) found that a greater tendency to worry about being alone or rejected in relationships was positively associated with more challenges related to ignoring or being inattentive to one's emotions, remaining in control of one's behaviour when feeling distressed, being unaccepting of one's negative emotions, having the belief that there is little that can be done to effectively regulate one's emotions, and concentrating and accomplishing tasks when one is feeling distressed.

Attachment and Distress Disclosure

As anticipated, higher levels of attachment avoidance in close relationships were significantly associated with lower tendencies to disclose distress to others. This finding is in line with both attachment theory and past research studies (Mikulincer & Shaver, 2007, 2008; Garrison et al., 2014; Garrison et al., 2012), which likewise demonstrated that emerging adults with greater attachment avoidance reported significantly lower tendencies to self-disclose distress to other people. That is, individuals who feel discomfort with closeness and intimacy in relationships endorsed lower propensities to share and talk openly about their upsetting feelings with others.

Higher levels of attachment anxiety in close relationships were significantly associated with lower tendencies to disclose distress to others. In comparing this finding to the existing empirical literature, it is important to highlight that researchers have

documented variable results on the link between attachment anxiety and self-disclosure of distress. More specifically, the current finding is inconsistent with the results outlined by Mikulincer and Nachshon (1991), who revealed that having an ambivalent attachment style (analogous to attachment anxiety) was significantly positively related to greater levels of self-disclosure. However, the present finding is comparable to that reported by Garrison et al. (2012), who found that emerging adults with greater attachment anxiety endorsed significantly lower tendencies to self-disclose distress. Interestingly, though, Garrison et al. (2012) had likewise hypothesized (similar to the hypothesis of the current study) a positive relation between attachment anxiety and distress disclosure in accordance with the theoretical perspective that anxiously attached individuals tend to disclose and amplify the expression of their distress to others. Finally, Garrison et al. (2014) delineated a non-significant negative relation between attachment anxiety and the tendency to self-disclose distress to other people. As noted by Garrison et al. (2014), anxiously attached individuals tend to believe that close others can be unreliable attachment figures and subsequently, worry that other people may abandon them. Consequently, these individuals may choose to inhibit the disclosure of their distress, as it may not be beneficial to do so.

Emotion Regulation and Distress Disclosure as Mediators of the Association between Attachment and Help Seeking

A central objective of the present study was to explore whether the relations of attachment avoidance and attachment anxiety with intentions and behaviours of seeking help online and from informal and formal sources of support would be mediated by difficulties in emotion regulation and the tendency to self-disclose distress to others. In

general, the hypotheses were partially supported. In keeping with hypotheses, the indirect effect of attachment avoidance on intentions to seek help online by searching for and reading information through difficulties with emotional awareness (i.e., lack of emotional awareness) was significant after controlling for psychological symptom severity and gender. In particular, higher levels of attachment avoidance predicted greater difficulties with emotional awareness, which in turn, predicted lower intentions to seek help online by searching for and reading information pertaining to the personal or emotional problem. That is, emerging adults who identified feeling discomfort with closeness in relationships were more likely to experience a lack of awareness related to their feelings, and in turn, reported lower intentions to seek help by searching for and reading information online for an emotional or personal problem.

Similarly, the indirect effect of attachment avoidance on intentions to seek help online by directly messaging close others through difficulties with emotional awareness was significant after accounting for gender and psychological symptom severity. Specifically, higher levels of attachment avoidance predicted greater difficulties with emotional awareness, which in turn, predicted lower intentions to seek help online by directly messaging close others. In other words, emerging adults who reported a greater sense of discomfort with depending on and opening up to others in relationships were more likely to experience a lack of awareness concerning their emotions, and in turn, reported lower intentions to seek help by directly connecting with close others through smartphone or social networking messaging.

Conversely, the hypothesis that distress disclosure would mediate the link between attachment avoidance and intentions to seek help online by posting to large

audiences was not supported. As no previous research has explored these specific relations, it is not feasible to compare this result to past study findings. Still, in an effort to understand why the tendency to self-disclose distress did not mediate the association between attachment avoidance and intentions to seek help by posting to large online audiences (e.g., on Facebook, Twitter, Instagram, or YouTube), it is helpful to consider existing research examining the motivations for why young people self-disclose on social networking sites. For example, Bazarova and Choi (2014) found that the most common reasons for emerging adults to self-disclose to broad audiences on social network sites (through the profile status update on Facebook) were for social validation (i.e., to validate one's self-concept and seek approval from others) and self-expression (i.e., to express thoughts and feelings). Correspondingly, the public sharing of written messages, photos, and videos is meant to initiate a dialogue or conversation between people, and in doing so, young people are seeking out feedback from others (Bazarova & Choi, 2014; Manago et al., 2012). As a result, it is possible that other variables, such as the need for approval or validation from others or the need for emotional expression, may help to explain why higher levels of attachment avoidance in close relationships were significantly associated with lower intentions to seek help online by posting to large online audiences.

Consistent with hypotheses, the indirect effect of attachment avoidance on online help-seeking behaviours of directly messaging close others through difficulties with emotional awareness was likewise significant after controlling for gender. Higher levels of attachment avoidance predicted greater difficulties with emotional awareness, which in turn, predicted fewer online help-seeking behaviours of directly messaging close others. That is, emerging adults who endorsed feeling uncomfortable with emotional intimacy in

relationships were more likely to have difficulties with being aware of their own emotions, and in turn, reported engaging in fewer help-seeking behaviours of directly connecting with close others via a social networking site or smartphone. Taken together, it is important to highlight that difficulties with emotional awareness played a comparable role in the indirect effect of attachment avoidance on both intentions and behaviours of seeking help online by directly messaging close others for support. It is noteworthy that the nature of these relations (i.e., among attachment avoidance, difficulties with emotional awareness, and online help seeking by messaging close others) was the only consistent pattern of connections across both online help-seeking intentions and behaviours, demonstrating that intentions and behaviours represent distinct help-seeking outcomes, which cannot be assumed to be one in the same, and should both be examined within the context of the help seeking literature (Nagai, 2015).

Regarding attachment anxiety and seeking help online, the hypothesis that difficulties in emotion regulation would mediate the link between attachment anxiety and intentions to seek help online by posting to anonymous sources of support was not supported. In addition, the hypothesis that distress disclosure and difficulties in emotion regulation would mediate the relation between attachment anxiety and intentions to seek help online by searching for and reading information was not supported. In considering why difficulties in emotion regulation and the tendency to self-disclose distress did not mediate the associations of attachment anxiety with intentions to seek help online by posting to anonymous sources and by searching for and reading information, it is possible that other variables might better explain why higher levels of attachment anxiety in close relationships were significantly associated with greater intentions to seek help online by

206

posting to anonymous sources of support and by searching for and reading information. For example, the stigma associated with seeking help, as well as the subsequent feelings of worry, embarrassment, or shame that some individuals experience, has been identified as a barrier to seeking help (e.g., Rickwood et al., 2005; Rickwood et al., 2007), and may deter individuals who worry about being rejected or abandoned in relationships from seeking help from close or familiar others. As a result, it is possible that anxiously attached individuals may anticipate that seeking help online from strangers/anonymous sources represents a safer option to seek support (i.e., less likely to jeopardize their relationships with close others). Alternatively, it is possible that individuals with higher levels of attachment anxiety may believe that ultimately, they can only rely on themselves to resolve their problems (as seeking help from other people may result in their being abandoned within the relationship), and subsequently, these individuals may endorse greater intentions to turn to information and resources online in the event that they need support for a personal or emotional problem.

In line with hypotheses, the indirect effect of attachment anxiety on online help-seeking behaviours of searching for and reading information through limited access to effective strategies was significant after accounting for previous counselling experience. In particular, higher levels of attachment anxiety predicted greater difficulties in accessing effective emotion regulation strategies, which in turn, predicted more help-seeking behaviours of searching for and reading information online regarding the personal or emotional problem. That is, emerging adults who endorsed a tendency to worry about being alone or abandoned in relationships were more likely to have greater challenges in retrieving and implementing useful strategies so as to regulate their

emotions, and in turn, reported engaging in a greater number of help-seeking behaviours by searching for and reading information online.

With respect to attachment avoidance and seeking help, the hypothesis that distress disclosure and difficulties in emotion regulation would mediate the connection between attachment avoidance and intentions to seek help from formal sources of support was not supported. As no prior studies have examined these relations together, it is not possible to compare this result to existing empirical research. Nevertheless, previous studies have documented that other variables, such as being in greater denial of psychological distress and identifying greater anticipated risks, lower anticipated benefits, and more negative attitudes toward help seeking, do help to elucidate the indirect effect of higher levels of attachment avoidance on lower intentions to seek help from professional support (e.g., Shaffer et al., 2006; Vogel & Wei, 2005). Consequently, it is possible that other variables may help to better explain why higher levels of attachment avoidance in close relationships were significantly associated with lower intentions to seek help from formal sources of support.

Similarly, the hypothesis that distress disclosure and difficulties in emotion regulation would mediate the relation between attachment avoidance and intentions to seek help from informal sources of support was not supported. Interestingly, however, the indirect effect of attachment avoidance on help-seeking behaviours from informal sources through distress disclosure was significant after controlling for gender. That is, in keeping with hypotheses, higher levels of attachment avoidance predicted lower tendencies to disclose distress (i.e., more concealment of distress), which in turn, predicted fewer help-seeking behaviours from informal sources of support. In other words, emerging adults

208

who endorsed greater feelings of discomfort with depending on and opening up to others in relationships identified having lower inclinations to self-disclose distress to others, and in turn, reported engaging in fewer behaviours of seeking help from informal sources.

As anticipated, the indirect effect of attachment avoidance on help-seeking behaviours from formal sources through limited access to effective strategies was significant; yet, the direction of these relations was unexpected. That is, higher levels of attachment avoidance predicted greater difficulties in accessing effective emotion regulation strategies, which in turn, predicted *more* help-seeking behaviours from professional support. Given that no past research has investigated these particular connections, this result cannot be assessed relative to previous empirical findings. This finding suggests that young adults who reported feeling discomfort with emotional closeness in relationships were more likely to experience difficulties in generating and utilizing effective strategies to regulate their emotions, which in turn, was associated with engaging in a greater number of help-seeking behaviours from formal sources of support.

Lastly, but in contrast to hypotheses, the indirect effect of attachment anxiety on intentions to seek help from informal sources through distress disclosure was significant after accounting for psychological symptom severity and gender. Specifically, higher levels of attachment anxiety predicted lower tendencies to disclose distress, which in turn, predicted lower intentions to seek help from informal sources of support. That is, emerging adults who endorsed a tendency to worry about being rejected or abandoned in relationships identified having lower inclinations to self-disclose distress to others, and in turn, reported lower intentions to seek help from informal sources for a personal or emotional problem. Conversely, the hypothesis that distress disclosure and difficulties in

emotion regulation would mediate the link between attachment anxiety and help-seeking behaviours from formal sources was not supported.

In summary, these findings contribute to the empirical literature by exploring the connections of attachment avoidance and attachment anxiety with online help-seeking via various sources of support and computer-mediated technologies, as well as by deepening our understanding of the pathways by which attachment style relates to intentions and behaviours of seeking help online and from informal and formal sources of support through difficulties with emotion regulation and distress disclosure. In particular, significant indirect effects of attachment anxiety on online help-seeking intentions by way of limited access to effective strategies and of attachment avoidance on online help-seeking intentions and behaviours through a lack of emotional awareness were identified. Furthermore, significant indirect effects of attachment anxiety on intentions to seek help from informal sources and of attachment avoidance on help-seeking behaviours from informal sources through the tendency to self-disclose distress were supported. Similarly, a significant indirect effect of attachment avoidance on help-seeking behaviours from formal sources through limited access to effective emotion regulation strategies was demonstrated. Taken together, these novel findings represent the first of their kind and distinctively add to the knowledge base in that online help-seeking intentions and behaviours were comprehensively examined and distress disclosure, emotional awareness, and access to effective emotion regulation strategies were shown to play a mediating role in the connections between attachment style and help seeking.

Study Limitations and Future Research Directions

In addition to the several limitations of the present study, specific areas of focus for future research endeavours are identified and discussed. In terms of the generalizability of the findings, it is important to acknowledge that the results of the study specifically relate to young people during the developmental period of emerging adulthood. In particular, the sample was comprised of emerging adults who were 17 to 25 years of age, living in a midsized urban city, and enrolled in an undergraduate university program. These results should be understood as reflecting the online help-seeking intentions and behaviours of a particular sample of young adults that may not generalize to individuals of other age groups or even necessarily to other emerging adults.

Comparable to the lack of research examining online help seeking in emerging adults, there is an even fewer number of studies exploring how and from whom adolescents/high school students seek help online (e.g., Gould et al., 2002; Rickwood et al., 2015). The paucity of research investigating the online help seeking intentions and behaviours of adolescents is all the more surprising given how commonplace and frequent adolescents use the Internet, computer-mediated/smartphone technology, and social media on a daily basis (Steeves, 2014; Valkenburg & Peter, 2011). Similarly, the body of empirical literature exploring online help seeking in other periods of the lifespan (e.g., pre-adolescence and middle adulthood) appears to be practically non-existent. Consequently, it would be beneficial for researchers to likewise study how and from whom individuals from different age groups use the Internet, social media, and online technologies to seek help for emotional or personal problems.

In order to address the potentially limited generalizability of the current results to other young people in emerging adulthood, future research endeavours could also focus on better understanding online help seeking and its relation to attachment style, emotion regulation, and distress disclosure in other, more diverse samples of emerging adults. For example, it may be advantageous to explore how emerging adults who are not enrolled in university (or even post-secondary school) utilize the Internet and online technologies to connect with other people or search for information in an effort to seek help from close others or professional support services. That is, individuals who are in emerging adulthood tend to be at a heightened risk to experience emotional, behavioural, and relational problems (Costello et al., 2011; Kessler et al., 2005); however, young adults who attend university programs represent only one segment of the emerging adulthood population that may ultimately seek help online or support from informal or formal sources for an emotional or personal problem. Yet, most of the extant empirical literature on help seeking during emerging adulthood has been conducted on samples of university students (Hunt & Eisenberg, 2010). Thus, researchers should also consider examining the online help-seeking intentions and behaviours of emerging adults who are not enrolled in post-secondary institutions.

Furthermore, researchers might also consider investigating both the connection between attachment and online help seeking and how and from whom young people seek help online in samples of emerging adults living in rural communities. Given the numerous barriers experienced by emerging adults in seeking help within rural settings, including the potential lack of anonymity, social stigma, and limited access to or availability of resources, seeking help online via computer and smartphone technology,

212

social media, and telepsychological services represents an alternative means by which individuals in rural areas may seek or access help for emotional or personal problems (Boyd et al., 2007; Orlowski et al., 2016; Reed, Messler, Coombs, & Quevillon, 2014). As a result, it would be valuable to comprehensively explore whether there are any similarities or differences in the online help-seeking experiences of emerging adults living in rural communities versus urban centres.

Another limitation of the present study is that only 15% of the sample consisted of male emerging adults. However, both current research findings and previous studies have documented that male young adults tend to report significantly lower intentions to seek help online and from informal and formal sources, as well as to engage in significantly fewer help-seeking behaviours online and from informal and formal sources of support (e.g., Bergeron et al., 2005; Biddle et al., 2004; Rickwood et al., 2005; Rickwood et al., 2015). Accordingly, future research studies should be centred on gaining greater insight into the experiences of male emerging adults seeking help online, particularly in relation to the barriers/obstacles that get in the way of seeking help online or alternatively, the facilitating variables that encourage male young people to seek support via the Internet.

Concerning the composition of the present sample, it is also important to acknowledge that approximately 70% of the sample reported being Caucasian, with another 30% of participants identifying as non-Caucasian in cultural ethnicity (e.g., Arab, South Asian, Chinese, Mixed/Biracial, African, Filipino, Caribbean, Latin American, Korean, and Indigenous). Given that variations in help seeking exist for young people across cultures and ethnicities (Cauce et al., 2002), it is vital that the online help-seeking experiences, as well as the connection between attachment and online help-seeking

intentions and behaviours, of emerging adults be further explored within and across different cultural groups. Consequently, future research directions might include conducting studies that encompass more culturally diverse samples of young adults from various cultures and ethnic backgrounds in an effort to understand whether any similarities or differences exist in the online help-seeking experiences of individuals within or across cultural groups.

An additional limitation of the current study relates to how relationship status was measured. Specifically, participants were asked to identify the nature of their "marital status" (as opposed to romantic relationship status), with being "single or in a relationship but not living together" representing one response option (see Appendix A for all response options of the marital status item). As a result, participants who were in a relationship with a romantic partner (but not living together) and participants who were single (i.e., not in a romantic relationship) were unfortunately grouped together in one category and comprised almost 96% of the sample. Consequently, it is not possible to distinguish between those participants who were single and those participants who were in a romantic relationship (but not living with their partner). Accurately assessing romantic relationship status with a more detailed, nuanced approach will be beneficial in future studies focused on further investigating from whom emerging adults seek help online and the role of attachment style in the online help-seeking process.

Another possible measurement limitation pertains to how help-seeking behaviours were initially evaluated as binary variables (i.e., only providing "yes" and "no" response options), as opposed to assessing help-seeking behaviours as continuous variables. Although online help-seeking behaviours and help-seeking behaviours from informal and

formal sources were subsequently scored as count variables, it may be methodologically beneficial to measure the degree or frequency to which individuals engage in help-seeking behaviours for emotional or personal problems (e.g., "not at all," "rarely," "sometimes," or "often"). Relatedly, this present study only assessed help seeking in relation to one type of problem (i.e., an emotional or personal problem). Future research endeavours might broaden the scope to also investigate how and from whom emerging adults seek help online for specific mental health problems, suicidal problems, academic difficulties, or physical health-related concerns.

Finally, a methodological drawback is the cross-sectional design employed in this study. Specifically, data were collected at only one point in time and as a result, causal relations among attachment style (attachment avoidance and attachment anxiety), the tendency to disclose distress to others, difficulties with emotional awareness, limited access to effective emotion regulation strategies, help-seeking intentions, and help-seeking behaviours cannot be conclusively determined. Therefore, future research efforts that incorporate longitudinal designs so as to collect data over time would be valuable in enabling the examination of causal relations among these variables.

Applied Implications

The present study findings provide important practical implications for engaging young people in the help-seeking process via online platforms and computer-mediated technology, namely that trusting relationships with close others and greater awareness of emotions continue to be crucial facilitators of seeking help in an online context. Overall, the results highlight the fundamental role of the attachment relationship in how emerging adults view themselves and others in the context of their relationships (i.e., the degree to

which they feel comfortable with closeness or worry about being abandoned in relationships), which in turn, influences whether emerging adults anticipate that they can go to other people for support and also whether and from whom they choose to ultimately seek help for a personal or emotional problem. Consistent with the principles of attachment theory, the study findings showcase the connection between individuals' attachment relationships and the degree to which individuals are aware of their feelings and tend to share their distressing feelings with other people – both of which influence emerging adults' help seeking online and from informal sources, respectively. For example, young adults who reported a tendency to feel uncomfortable or avoid intimacy in relationships endorsed more difficulties with emotional awareness and lower tendencies to disclose distress to others, which in turn, predicted fewer online help-seeking behaviours of directly messaging close others and fewer help-seeking behaviours from informal sources, respectively. In broad terms then, these findings may be valuable for professionals who are providing counselling or treatment with a focus on supporting young people and parents within their relationships to foster a deeper sense of trust and comfort in being emotionally close, intimate, or vulnerable and to enhance a greater capacity to identify, express, and share negative or distressing emotions with close others or informal sources of support.

In general, these findings highlight that it is arguably vital for present-day mental health professionals to consider using online platforms, technology, and computer-mediated communication as a way in which to connect with young adults, deliver resources, and support their endeavours to seek professional support. In particular, it may become all the more valuable for mental health professionals to have a greater

professional online presence so as to increase the visibility and accessibility of their services online for young people. Related to this idea, young adults who reported a tendency to worry about being alone, rejected, or abandoned in relationships identified more difficulties with accessing effective emotion regulation strategies, which in turn, predicted a greater number of online help-seeking behaviours of searching for and reading information relevant to the problem (e.g., searching for professional mental health services available online). Importantly then, individuals who are anxiously attached are indeed seeking help online, but are doing so in such a way that tends to be more passive in nature (e.g., searching for professional resources and reading personal lived experiences online), as opposed to adopting a more directive approach of seeking help from specific close others whom they may view as unreliable to their emotional needs. Taken together, having access to professional resources online, and to information online that would assist in navigating the help-seeking process from formal sources or in understanding how to access available mental health services, may be especially valuable for emerging adults who endorse greater attachment anxiety in their close relationships.

These findings also emphasize that seeking help online by communicating via smartphones, posting to social networking sites, searching for online resources, and reading information relevant to the problem is an increasingly common approach for emerging adults to seek support for emotional or personal difficulties. In promoting student mental health and help seeking, universities and post-secondary schools might consider offering educational programs or implementing awareness campaigns focused on teaching how technology can be optimally used to locate mental health resources and sources of support online (e.g., apps or websites with professional support or empirically

217

supported information/resources), providing relevant and easily accessed information as to how mental health services can be sought online or on-campus, and increasing awareness and recognition of emotional or distressing problems in both self and others.

Finally, it is important to underline that young men are at an increased risk of *not* seeking help online for emotional or personal problems. Emerging male adults may benefit from school or university-based educational programs or support groups, which are specifically designed for young men and focus on promoting help seeking, reducing the stigma associated with help seeking, enhancing skills in emotional awareness and expression (e.g., learning how to recognize particular negative feelings/emotional states and signs of distress and how to manage and cope with such emotional responses), and encouraging the sharing and disclosure of emotions and personal problems with other young men who may be experiencing similar problems.

REFERENCES

Abidi, S. (2017). Paving the way to change for youth at the gap between child and

adolescent and adult mental health services. *The Canadian Journal of Psychiatry,*
62, 388-392.

Aday, L. A., & Andersen, R. (1974). A framework for the study of access to medical

care. *Health Services Research, 9,* 208-220.

Ahmed, T., & Brumbaugh, C. C. (2014). One foot out of the nest: How parents and

friends influence social perceptions in emerging adulthood. *Journal of Adult*
Development, 21, 147-158.

Ainsworth, M. D. S. (1973). The development of infant-mother attachment. In B.

Caldwell, & H. Ricciuti (Eds.), *Review of child development research* (pp. 1-94).

Chicago, IL: University of Chicago Press.

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of*

attachment: A psychological study of the Strange Situation. Hillsdale, NJ:

Lawrence Erlbaum.

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl, &

J. Beckmann (Eds.), *Action-control: From cognition to behavior* (pp. 11-39).

Heidelberg, Germany: Springer.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human*

Decision Processes, 50, 179-211.

Allen, J. P. (2008). The attachment system in adolescence. In J. Cassidy, & P. Shaver

(Eds.), *Handbook of attachment: Theory, research, and clinical applications (2nd*

ed.) (pp. 419-435). New York, NY: The Guilford Press.

Andersen, R. M. (1968). *Behavioral model of families' use of health services*. Research

    Series No. 25. Chicago, IL: Center for Health Administration Studies, University

    of Chicago.

Andersen, R. M. (1995). Revisiting the Behavioral Model and access to medical care:

    Does it matter? *Journal of Health and Social Behavior, 36*, 1-10.

Andersen, R., & Newman, J. F. (1973). Societal and individual determinants of medical

    care utilization in the United States. *The Milbank Quarterly, 83*, 1-28.

Arnett, J. J. (2010). *Adolescence and emerging adulthood: A cultural approach* (4th ed.)

    Upper Saddle River, NJ: Prentice Hall.

Avila, M., Cabral, J., & Matos, P. M. (2011). Parental attachment and romantic

    relationships in emerging adults: The role of emotional regulation processes.

    Family Science, 2, 13-23.

Bartholomew, K., & Horowitz, L. (1991). Attachment styles among young adults: A test

    of a four category model. *Journal of Personality and Social Psychology, 61*, 226-

    244.

Bazarova, N. N., & Choi, Y. H. (2014). Self-disclosure in social media: Extending the

    functional approach to disclosure motivations and characteristics on social

    network sites. *Journal of Communication, 64*, 635-657.

Bennett, D. (2001). How can I deal with missing data in my study? *Australian and New

    Zealand Journal of Public Health, 25*, 464-469.

Bergeron, E., Poirier, L. R., Fournier, L., Pasquale, R., & Barrette, G. (2005).

    Determinants of service use among young Canadians with mental disorders.

    Canadian Journal of Psychiatry, 50, 629-636.

Biddle, L., Gunnell, D., Sharp, D., & Donovan, J. L. (2004) Factors influencing help

    seeking in mentally distressed young adults: A cross-sectional survey. *British*

    Journal of General Practice, 54, 248-253.

Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., Liu, S., & Olfson, M.

    (2008). Mental health of college students and their non-college-attending peers:

    Results from the National Epidemiological Study on Alcohol and Related

    Conditions. *Archives of General Psychiatry, 65*, 1429-1437.

Blight, M. G., Jagiello, K., & Ruppel, E. K. (2015). 'Same stuff different day:' A mixed-

    method study of support seeking on Facebook. *Computers in Human Behavior,*

    53, 366-373.

Bowlby, J. (1956). The growth of independence in the young child. *Royal Society of*

    Health Journal, 76, 587-591.

Bowlby, J. (1969, 1982). *Attachment and loss: Vol. 1*. New York, NY: Basic Books.

Brennan, K., Clark, C., & Shaver, P. (1998). Self-report measurement of adult

    attachment: An integrative overview. In J. A. Simpson and W. S. Rholes (Eds.),

    Attachment theory and close relationships (pp. 46-76). New York, NY: The

    Guilford Press.

Bretherton, I., & Munholland, K. A. (2008). Internal working models in attachment

    relationships: Elaborating a central construct in attachment theory. In J. Cassidy,

    & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical*

    applications (2nd ed.) (pp. 102-127). New York, NY: The Guilford Press.

Bumbacco, C. (2015). Help wanted: Attachment, help-seeking attitudes, and help-seeking

    behaviour among university students (Master thesis). Retrieved from ProQuest

Dissertations and Theses.

Cabral, J., Matos, P. M., Beyers, W., & Soenens, B. (2012). Attachment, emotion
regulation and coping in Portuguese emerging adults: A test of a mediation
hypothesis. *The Spanish Journal of Psychology, 15*, 1000-1012.

Cash, T. F., Begley, P. J., McCown, D. A., & Weise, B. C. (1975). When counselors are
heard but not seen: Initial impact of physical attractiveness. *Journal of Counseling
Psychology, 22*, 273-279.

Cassidy, J. (1994). Emotion regulation: Influences of attachment relationships. In N. Fox
(Ed.), The development of emotion regulation. *Monographs of the
society for research in child development, 59* (2-3, Serial No. 240), pp. 228-249.

Cassidy, J. (2008). The nature of the child's ties. In J. Cassidy, & P. Shaver (Eds.),
Handbook of attachment: Theory, research, and clinical applications (2nd ed.)
(pp. 3-22). New York, NY: The Guilford Press.

Cauce, A. M., Domenech-Rodriguez, M., Paradise, M., Cochran, B. N., Shea, J. M.,
Srebnik, D., et al. (2002). Cultural and contextual influences in mental health help
seeking: A focus on ethnic minority youth. *Journal of Consulting and Clinical
Psychology, 70*, 44-55.

Cepeda-Benito, A., & Short, P. (1998). Self-concealment, avoidance of psychological
services, and perceived likelihood of seeking professional help. *Journal of
Counseling Psychology, 45*, 58-64.

Cheng, H. L., McDermott, R. C., & Lopez, F. G. (2015). Mental health, self-stigma, and
help-seeking intentions among emerging adults: An attachment perspective. *The
Counseling Psychologist, 43*, 463-487.

Ciarrochi, J., & Deane, F. P. (2001). Emotional competence and willingness to seek help

   from professional and non-professional sources. *British Journal of Guidance and*

   Counselling, 29, 233-246.

Ciarrochi, J., Deane, F. P., Wilson, C. J., & Rickwood, D. (2002). Adolescents who need

   help the most are the least likely to seek it: The relationship between low

   emotional competence and low intention to seek help. *British Journal of*

   Guidance and Counselling, 30, 173-188.

Ciarrochi, J., Wilson, C. J., Deane, F. P., & Rickwood, D. (2003). Do difficulties with

   emotions inhibit help-seeking in adolescence? The role of age and emotional

   competence in predicting help-seeking intentions. *Counselling Psychology*

   Quarterly, 16, 103-120.

Cohen, J. E. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale,

   NJ: Lawrence Erlbaum.

Cole, P., Martin, S., & Dennis, T. (2004). Emotion regulation as a scientific construct:

   Methodological challenges and directions for child development research. *Child*

   Development, 75, 317-333.

Collin, P. J., Metcalf, A. T., Stephens-Reicher, J. C., Blanchard, M. E., Herrman, H. E.,

   Rahilly, K. et al. (2011). ReachOut.com: The role of an online service for

   promoting help-seeking in young people. *Advances in Mental Health, 10*, 39-51.

Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review.

   Psychological Bulletin, 116, 457-475.

Costello, E. J., Copeland, W., & Angold, A. (2011). Trends in psychopathology across

   the adolescent years: What changes when children become adolescents, and when

adolescents become adults? *Journal of Child Psychology and Psychiatry, 52,* 1015-1025.

Costello, E. J., Egger, H., & Angold, A. (2005). 10-year research update review: The epidemiology of child and adolescent psychiatric disorders: I. Methods and public health burden. *Journal of the American Academy of Child and Adolescent Psychiatry, 44,* 972-986.

Cramer, K. M. (1999). Psychological antecedents to help-seeking behavior: A reanalysis using path modeling structures. *Journal of Counseling Psychology, 29,* 381-387.

Crowell, J. A., Fraley, R. C., & Shaver, P. R. (2008). Measurement of individual differences in adolescent and adult attachment. In J. Cassidy, & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications (2nd ed.)* (pp. 599-634). New York, NY: The Guilford Press.

Davis, K. (2012). Friendship 2.0: Adolescents' experiences of belonging and self-disclosure online. *Journal of Adolescence, 35,* 1527-1536.

Deane, F. P., Ciarrochi, J., Wilson, J., Rickwood, D., & Anderson, S. (2001, July). *Do high school students' intentions predict actual help seeking from school counsellors?* Paper presented at the Suicide Prevention Annual Conference, Sydney, Australia.

Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2001). Suicidal ideation and help-negation: Not just hopelessness or prior help. *Journal of Clinical Psychology, 57,* 901-914.

DeFronzo, R., Panzarella, C., & Butler, A. C. (2001). Attachment, support seeking, and adaptive inferential feedback: Implications for psychological health. *Cognitive and Behavioral Practice, 8,* 48-52.

Derlega, V. J., Metts, S., Petronio, S., & Margulis, S. T. (1993). *Self-disclosure.* Newbury Park, CA: Sage.

Dolev-Cohen, M., & Barak, A. (2013). Adolescents' use of instant messaging as a means of emotional relief. *Computers in Human Behavior, 29*, 58-63.

Donbaek, D. F., & Elklit, A. (2014). A validation of the Experiences in Close Relationships – Relationship Structures scale (ECR-RS) in adolescents. *Attachment and Human Development, 16*, 58-76.

Dong, Y. & Peng, C. Y. J. (2013). Principled missing data methods for researchers. *SpringerPlus, 2*, 1-17.

Duggan, M. (2015). Mobile messaging and social media 2015. PEW Research Center.

Escoffery, C., Miner, K. R., Adame, D. D., Butler, S., McCormick, L., & Mendell, E. (2005). Internet use for health information among college students. *Journal of American College Health, 53*, 183-188.

Fabrigar, L. R., & Wegener, D. T. (2012). *Exploratory factor analysis: Understanding statistics*. New York, NY: Oxford University Press.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*, 1149-1160.

Feeney, J. A. (2008). Adult romantic attachment: Developments in the study of couple relationships. In J. Cassidy, & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications (2nd ed.)* (pp. 456-481). New York, NY: The Guilford Press.

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). London, England: Sage.

Fraley, R. C., & Davis, K. E. (1997). Attachment formation and transfer in young adults'
close friendships and romantic relationships. *Personal Relationships, 4*, 131-144.

Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The
Experiences in Close Relationships – Relationship Structures Questionnaire: A
model for assessing attachment orientations across relationships. *Psychological
Assessment, 23*, 615-625.

Fraley, R. C., Hudson, N. W., Heffernan, M. E., & Segal, N. (2015). Are adult attachment
styles categorical or dimensional? A taxometric analysis of general and
relationship-specific attachment orientations. *Journal of Personality and Social
Psychology.*

Fraley, R. C., & Waller, N. G. (1998). Adult attachment patterns: A test of the
typological model. In J. A. Simpson, & W. S. Rholes (Eds.), *Attachment theory
and close relationships* (pp. 77-114). New York, NY: The Guilford Press.

Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis
of self-report measures of adult attachment. *Journal of Personality and Social
Psychology, 78*, 350-365.

Garrison, A. M., Kahn, J. H., Miller, S. A., & Sauer, E. M. (2014). Emotional avoidance
and rumination as mediators of the relation between adult attachment and
emotional disclosure. *Personality and Individual Differences, 70*, 239-245.

Garrison, A. M., Kahn, J. H., Sauer, E. M., & Florczak, M. A. (2012). Disentangling the
effects of depression symptoms and adult attachment on emotional disclosure.
Journal of Counseling Psychology, 59, 230-239.

Gelaye, B., Tadesse, M. G., Lohsoonthorn, V., Lertmeharit, S., Pensuksan, W. C.,

Sanchez, S. E., et al. (2015). Psychometric properties and factor structure of the General Health Questionnaire as a screening tool for anxiety and depressive symptoms in a multi-national study of young adults. *Journal of Affective Disorders, 187*, 197-202.

Goldsmith, H. F., Jackson, D. J., & Hough, R. L. (1988). Process model of seeking mental health services: Proposed framework for organizing the research literature on help seeking. In H. F. Goldsmith, E. Lin, R. A. Bell, & D. J. Jackson (Eds.), *Needs assessment: Its future* (pp. 49-63). Washington, DC: US Government.

Gonzalez, J. M., Alegria, M., & Prihoda, T. J. (2005). How do attitudes toward mental health treatment vary by age, gender, and ethnicity/race in young adults? *Journal of Community Psychology, 33*, 611-629.

Gould, M. S., Munfakh, J. L. H., Lubell, K., Kleinman, M., & Parker, S. (2002). Seeking help from the Internet during adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry, 41*, 1182-1189.

Gourash, N. (1978). Help-seeking: A review of the literature. *American Journal of Community Psychology, 6*, 413-423.

Gowen, K. (2013). Online mental health information seeking in young adults with mental health challenges. *Journal of Technology in Human Services, 31*, 97-111.

Gowen, K., Deschaine, M., Gruttadara, D., & Markey, D. (2012). Young adults with mental health conditions and social networking websites: Seeking tools to build community. *Psychiatric Rehabilitation Journal, 35*, 245-250.

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the

Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 26*, 41-54.

Greenwood, S., Perrin, A., & Duggan, M. (2016). Social media update 2016. PEW Research Center.

Greidanus, E. (2010). Online help seeking (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses.

Griffin, D. W., & Bartholomew, K. (1994). The metaphysics of measurement: The case of adult attachment. In K. Bartholomew & D. Perlman (Eds.), *Attachment processes in adulthood: Advances in personal relationships: Vol. 5.* (pp. 17-52). London: Jessica Kingsley.

Gross, A. E., & McMullen, P. A. (1983). Models of the help-seeking process. In B. M. DePaulo, A. Nadler, & J. D. Fisher (Eds.), *New directions in help: Help-seeking* (pp. 45-70). New York, NY: Academic Press.

Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review. *BioMed Central Psychiatry, 10*, 1-9.

Han, S., & Pistole, M. C. (2014). College student binge eating: Insecure attachment and emotion regulation. *Journal of College Student Development, 55*, 16-29.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression based approach.* New York, NY: Guilford Press.

Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*, 511-524.

Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for

research on close relationships. *Psychological Inquiry, 5*, 1-22.

Hazan, C., & Ziefman, D. (1994). Sex and the psychological tether. In K. Bartholomew & D. Perlman (Eds.), *Attachment processes in adulthood: Advances in personal relationships: Vol. 5.* (pp. 151-177). London: Jessica Kingsley.

Hesse, E. (1999). The Adult Attachment Interview: Historical and current perspectives. In J. Cassidy, & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 395-433). New York, NY: The Guilford Press.

Hinson, J. A., & Swanson, J. L. (1993). Willingness to seek help as a function of self-disclosure and problem severity. *Journal of Counseling and Development, 71*, 465-470.

Hoey, S. (2014). College students and help-seeking behavior: How students make the final decision to seek counseling services (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses.

Hoffner, C. A., & Lee, S. (2015). Mobile phone use, emotion regulation, and well-being. *Cyberpsychology, behaviour, and social networking, 18*, 411-416.

Horgan, A., & Sweeney, J. (2010). Young students' use of the Internet for mental health information and support. *Journal of Psychiatric and Mental Health Nursing, 17*, 117-123.

Hudson, N. W., Fraley, C. R., Chopik, W. J., & Heffernan, M. E. (2015). Not all attachment relationships develop alike: Normative cross-sectional age trajectories in attachment to romantic partners, best friends, and parents. *Journal of Research in Personality, 59*, 44-55.

Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behavior

among college students. *Journal of Adolescent Health, 46*, 3-10.

Joinson, A. N. (2001). Self-disclosure in computer-mediated communication: The role of self-awareness and visual anonymity. *European Journal of Social Psychology, 31*, 177-192.

Kahn, J. H., & Hessling, R. M. (2001). Measuring the tendency to conceal versus disclose psychological distress. *Journal of Social and Clinical Psychology, 20*, 41-65.

Kahn, J. H., Hucke, B. E., Bradley, A. M., Glinski, A. J., & Malak, B. L. (2012). The Distress Disclosure Index: A research review and multitrait-multimethod examination. *Journal of Counseling Psychology, 59*, 134-149.

Kauer, S. D., Mangan, C., & Sanci, L. (2014). Do online mental health services improve help-seeking for young people? A systematic review. *Journal of Medical Internet Research, 16*, 314-331.

Kerns, K. A., Tomich, P. L., Aspelmeier, J. E., & Contreras, J. M. (2000). Attachment-based assessments of parent-child relationships in middle childhood. *Developmental Psychology, 36*, 614-626.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age of onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*, 593-602.

Kessler, R. C., Brown, R. L., & Broman, C. L. (1981). Sex differences in psychiatric help-seeking: Evidence from four large-scale surveys. *Journal of Health and Social Behavior, 22*, 49-64.

Kim, E. H., Coumar, A., Lober, W. B., & Kim, Y. (2011). Addressing mental health

epidemic among university students via web-based, self-screening, and referral

system: A preliminary study. *IEEE Transactions on Information Technology in*

Biomedicine, 15, 301-307.

Kim, J. E., & Zane, N. (2016). Help-seeking intentions among Asian American and

White American students in psychological distress: Application of the health

belief model. *Cultural Diversity and Ethnic Minority Psychology, 22*, 311-321.

Knapik, M. (2008). Adolescent online trouble-talk: Help-seeking in Cyberspace

(Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses.

Komiya, N., Good, G. E., & Sherrod, N. B. (2000). Emotional openness as a predictor of

college students' attitudes toward seeking psychological help. *Journal of*

Counseling Psychology, 47, 138-143.

Laible, D., & Panfile, T. (2009). Mother-child reminiscing in the context of secure

attachment relationships: Lessons in understanding and coping with negative

emotions. In J. A. Quas, & R. Fivush (Eds.), *Emotion and memory in*

development: Biological, cognitive, and social considerations (pp. 166-194). New

York, NY: Oxford University Press.

Lecce, S. (2008). Attachment and subjective well-being: The mediating role of emotional

processing and regulation (Doctoral dissertation). Retrieved from ProQuest

Dissertations and Theses.

Leong, F. T., & Zachar, P. (1999). Gender and opinions about mental illness as predictors

of attitudes toward seeking professional psychological help. *British Journal of*

Guidance and Counseling, 27, 123-132.

Li, W., Dorstyn, D. S., & Denson, L. A. (2014). Psychosocial correlates of college

students' help-seeking intention: A meta-analysis. *Professional Psychology: Research and Practice, 45*, 163-170.

Livingstone, S., & Gorzig, A. (2014). When adolescents receive sexual messages on the Internet: Explaining experiences of risk and harm. *Computers in Human Behavior, 33*, 8-15.

Madden, M., Lenhart, A., Cortesi, S., Gasser, U., Duggan, M., Smith, A., et al. (2013). Teens, social media, and privacy. PEW Internet.

Madell, D., & Muncer, S. J. (2007). Control over social interactions: An important reason for young people's use of the Internet and mobile phones for communication? *CyberPsychology and Behaviour, 10*, 137-140.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton, & E. Waters (Eds.), Growing points of attachment theory and research. *Monographs of the society for research in child development, 50* (1-2, Serial No. 209), pp. 60-104.

Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized/ disoriented during the Ainsworth Strange Situation. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 121-160). Chicago, IL: University of Chicago Press.

Manago, A. M., Taylor, T., & Greenfield, P. M. (2012). Me and my 400 friends: The anatomy of college students' Facebook networks, their communication patterns, and well-being. *Developmental Psychology, 48*, 369-380.

Marvin, R. S., & Britner, P. A. (2008). Normative development: The ontogeny of

attachment. In J. Cassidy, & P. Shaver (Eds.), *Handbook of attachment: Theory,*

research, and clinical applications (2nd ed.) (pp. 269-294). New York, NY: The

Guilford Press.

Mikulincer, M., & Nachshon, O. (1991). Attachment styles and patterns of self-

disclosure. *Journal of Personality and Social Psychology, 61*, 321-331.

Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood:

Activation, psychodynamics, and interpersonal processes. In M. P. Zanna (Ed.),

Advances in experimental social psychology: Vol. 35. (pp. 53-152). San Diego,

CA: Academic Press.

Mikulincer, M., & Shaver, P. R. (2007a). Measurement of attachment-related constructs

in adulthood. *Attachment in adulthood: Structure, dynamics, and change* (pp. 81-

115). New York, NY: The Guilford Press.

Mikulincer, M., & Shaver, P. R. (2007b). Attachment processes and emotion regulation.

Attachment in adulthood: Structure, dynamics, and change (pp. 188-218). New

York, NY: The Guilford Press.

Mikulincer, M., & Shaver, P. R. (2008). Adult attachment and affect regulation. In J.

Cassidy, & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and*

clinical applications (2nd ed.) (pp. 503-531). New York, NY: The Guilford Press.

Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect

regulation: The dynamics, development, and cognitive consequences of

attachment-related strategies. *Motivation and Emotion, 27*, 77-102,

Mok, K., Jorm, A. F., & Pirkis, J. (2016). Who goes online for suicide-related reasons? A

comparison of suicidal people who use the Internet for suicide-related reasons and

those who do not. *Crisis, 37*, 112-120.

Montazeri, A., Harirchi, A. M., Shariati, M., Garmaroudi, G., Ebadi, M., & Fateh, A. (2003). The 12-item General Health Questionnaire (GHQ-12): Translation and validation study of the Iranian version. *Health and Quality of Life Outcomes, 1*, 1-10.

Moran, P. (2007). Attachment style, ethnicity and help-seeking attitudes among adolescent pupils. *British Journal of Guidance and Counselling, 35*, 205-218.

Nagai, S. (2015). Predictors of help-seeking behavior: Distinction between help-seeking intentions and help-seeking behavior. *Japanese Psychological Research, 57*, 313-322.

Neumann, A., van Lier, P. A. C., Gratz, K. L., & Koot, H. M. (2010). Multidimensional assessment of emotion regulation difficulties in adolescents using the Difficulties in Emotion Regulation Scale. *Assessment, 17*, 138-149.

Norman, J. (2017). Implications of parenting behaviours and adolescent attachment for understanding adolescent sexting (Doctoral dissertation).

Nunes, M., Walker, J. R., Syed, T., De Jong, M., Stewart, D. W., Provencher, M. D., et al. (2014). A national survey of student extended health insurance programs in postsecondary institutions in Canada: Limited support for students with mental health problems. *Canadian Psychology, 55*, 101-109.

Olenick, S. G. (2011). An examination of the relationship between emotional expressivity and attitudes toward and barriers to seeking psychological help (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses.

Oppenheim, D., & Koren-Karie, N. (2009). Mother-child emotion dialogues: A window

into the psychological secure base. In J. A. Quas, & R. Fivush (Eds.), *Emotion and memory in development: Biological, cognitive, and social considerations* (pp. 142-165). New York, NY: Oxford University Press.

Panzarella, C., & Alloy, L. B. (1997, November). *Assessing adaptive feedback with the Social Feedback Questionnaire: A validation study*. Poster session presented at the Association for Advancement of Behavior Therapy, Miami, FL.

Pempek, T. A., Yermolayeva, Y. A., & Calvert, S. L. (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology, 30*, 227-238.

Perrin, A. (2015). Social media usage: 2000-2015. PEW Research Center.

Perrin, A., & Duggan, M. (2015). Americans' Internet access: 2000-2015. PEW Research Center.

PEW Research Center (2017). Internet/broadband fact sheet. http://www.pewinternet.org/fact-sheet/internet-broadband/

PEW Research Center (2017). Social media fact sheet. http://www.pewinternet.org/fact-sheet/social-media/

Piper, F., & MacDonald, B. (2008). 'Sometimes it's harder to speak out things:' How first year New Zealand tertiary students use informal online communication to help solve significant problems. *Australian e-Journal for the Advancement of Mental Health, 7*, 1-8.

Puustinen, M., & Rouet, J. F. (2009). Learning with new technologies: Help seeking and information searching revisited. *Computers and Education, 53*, 1014-1019.

Radmacher, K. & Azmitia, M. (2006). Are there gendered pathways to intimacy in early

adolescents' and emerging adults' friendships? *Journal of Adolescent Research, 21*, 415-448.

Rey, J. J., Abad, F. J., Barrada, J. R., Garrido, L. E., & Ponsoda, V. (2014). The impact of ambiguous response categories on the factor structure of the GHQ-12. *Psychological Assessment, 26*, 1021-1030.

Rice, K. G. (1990). Attachment in adolescence: A narrative and meta-analytic review. *Journal of Youth and Adolescence, 19*, 511-538.

Rickwood, D., & Braithwaite, V. A. (1994). Social-psychological factors affecting help-seeking for emotional problems. *Social Science and Medicine, 39*, 563-572.

Rickwood, D. J., Deane, F. P., & Wilson, C. J. (2007). When and how do young people seek professional help for mental health problems? *Medical Journal of Australia, 187*, 35-39.

Rickwood, D. J., Deane, F. P., Wilson, C. J., & Ciarrochi, J. V. (2005). Young people's help-seeking for mental health problems. *Australian e-Journal for the Advancement of Mental Health, 4*, 1-34.

Rickwood, D. J., Mazzer, K. R., & Telford, N. R. (2015). Social influences on seeking help from mental health services, in-person and online, during adolescence and young adulthood. *BioMed Central Psychiatry, 15*, 1-9.

Romer, D., Bagdasarov, Z., & More, E. (2013). Older versus newer media and the well-being of United States youth: Results from a national longitudinal panel. *Journal of Adolescent Health, 52*, 613-619.

Ryan, M. L., Shochet, I. M., & Stallman, H. M. (2010). Universal online interventions might engage psychologically distressed university students who are unlikely to

seek formal help. *Advances in Mental Health, 9*, 73-83.

Scharfe, E. (2016). Measuring what counts: Development of a new four-category model of adult attachment. *Personal Relationships, 23*, 4-22.

Schouten, A. P., Valkenburg, P. M., & Peter, J. (2007). Precursors and underlying processes of adolescents' online self-disclosure: Developing and testing an "Internet-attribute-perception" model. *Media Psychology, 10*, 292-315.

Seward, A-L., & Harris, K. M. (2016). Offline versus online suicide-related help seeking: Changing domains, changing paradigms. *Journal of Clinical Psychology, 72*, 606-620.

Shaffer, P. A., Vogel, D. L., & Wei, M. (2006). The mediating roles of anticipated risks, anticipated benefits, and attitudes on the decision to seek professional help: An attachment perspective. *Journal of Counseling Psychology, 53*, 442-452.

Shaver, P. S., & Mikulincer, M. (2002). Attachment-related psychodynamics. *Attachment and Human Development, 4*, 133-161.

Sheldon, K. M., Abad, N., & Hinsch, C. (2011). A two-process view of Facebook use and relatedness need-satisfaction: Disconnection drives use, and connection rewards it. *Journal of Personality and Social Psychology, 100*, 766-775.

Slade, T., Johnston, A., Teesson, M., Whiteford, H., Burgess, P., Pirkis, J., et al. (2009). The mental health of Australians 2: Report on the 2007 National Survey of Mental Health and Wellbeing. Canberra: Department of Health and Aging.

Smith, A. (2015). U.S. smartphone use in 2015. PEW Research Center.

Srebnik, D., Cauce, A. M., & Baydar, N. (1996). Help-seeking pathways for children and adolescents. *Journal of Emotional and Behavioral Disorders, 4*, 210-220.

Sroufe, L. A., Egeland, B., Carlson, E. A., & Collins, W. (2005). *The development of the person: The Minnesota study of risk and adaptation from birth to adulthood*. New York, NY: The Guilford Press.

Steeves, V. (2014). Young Canadians in a wired world, phase III: Life online. Ottawa: MediaSmarts. Retrieved from: http://mediasmarts.ca/ycww (July 7, 2014). MediaSmarts. Life online: Young Canadians in a wired world, phase III.

Subrahmanyam, K., & Greenfield, P. (2008). Online communication and adolescent relationships. *The Future of Children, 18*, 119-146.

Subrahmanyam, K., Reich, S., Waechter, N., & Espinoza, G. (2008). Online and offline social networks: Use of social networking sites by emerging adults. *Journal of Applied Developmental Psychology, 29*, 420-433.

Symons, D. K., Adams, S. & Smith, K. H. (2016). Adult attachment style and caregiver attitudes after raising a virtual child. *Journal of Social and Personal Relationships, 33*, 1054-1069.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Upper Saddle River, NJ: Pearson.

Tan, R., Overall, N. C., & Taylor. J. K. (2012). Let's talk about us: Attachment, relationship-focused disclosure, and relationship quality. *Personal Relationships, 19*, 521-534.

Thomas, S. J., Caputi, P., & Wilson, C. J. (2014). Specific attitudes which predict psychology students' intentions to seek help for psychological distress. *Journal of Clinical Psychology, 70*, 273-282.

Tidwell, L. C., & Walther, J. B. (2002). Computer-mediated communication effects on

238

disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time. *Human Communication Research, 28*, 317-348.

Topkaya, N. (2014). Demographic, individual, and environmental factors as predictors of intention to seek psychological help. *Turkish Journal of Psychology, 29*, 12-14.

Utz, S. (2015). The function of self-disclosure on social network sites: Not only intimate, but also positive and entertaining self-disclosures increase the feeling of connection. *Computers in Human Behavior, 45*, 1-10.

Valkenburg, P. M., & Peter, J. (2007a). Preadolescents' and adolescents' online communication and their closeness to friends. *Developmental Psychology, 43*, 267-277.

Valkenburg, P. M., & Peter, J. (2007b). Online communication and adolescent well-being: Testing the stimulation versus the displacement hypothesis. *Journal of Computer-Mediated Communication, 12*, 1169-1182.

Valkenburg, P. M., & Peter, J. (2009). Social consequences of the Internet for adolescents. *Current Directions in Psychological Science, 18*, 1-5.

Valkenburg, P. M., & Peter, J. (2011). Online communication among adolescents: An integrated model of its attraction, opportunities, and risks. *Journal of Adolescent Health, 48*, 121-127.

Vogel, D. L., & Wei, M. (2005). Adult attachment and help-seeking intent: The mediating roles of psychological distress and perceived social support. *Journal of Counseling Psychology, 52*, 347-357.

Vogel, D. L., & Wester, S. R. (2003). To seek help or not to seek help: The risks of self-disclosure. *Journal of Counseling Psychology, 50*, 351-361.

VonDras, D. D., & Madey, S. F. (2004). The attainment of important health goals

    throughout adulthood: An integration of the theory of planned behavior and

    aspects of social support. *International Journal of Aging and Human*

    Development, 59, 207-236.

Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal,

    and hyperpersonal interaction. *Communication Research, 23*, 3-43.

Walther, J. B. (2012). Interaction through technological lenses: Computer-mediated

    communication and language. *Journal of Language and Social Psychology, 31*,

    397-414.

Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. (2007). The Experiences in Close

    Relationship Scale (ECR) – Short Form: Reliability, validity, and factor structure.

    Journal of Personality Assessment, 88, 187-204.

Wei, M., Vogel, D. L., Ku, T.-Y., & Zakalik, R. A. (2005). Adult attachment, affect

    regulation, negative mood, and interpersonal problems: The mediating roles of

    emotional reactivity and emotional cutoff. *Journal of Counseling Psychology, 52*,

    14-24.

Weinberg, A., & Klonsky, E. D. (2009). Measurement of emotion dysregulation in

    adolescents. *Psychological Assessment, 21*, 616-621.

Weinfield, N. S., Sroufe, L. A., Egeland, B., & Carlson, E. (2008). Individual differences

    in infant-caregiver attachment: Conceptual and empirical aspects of security. In J.

    Cassidy, & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and*

    clinical applications (2nd ed.) (pp. 78-101). New York, NY: The Guilford Press.

Wilson, C. J., Bushnell, J. A., & Caputi, P. (2011). Early access and help seeking:

Practice implications and new initiatives. *Early Intervention in Psychiatry, 5*, 34-39.

Wilson, C. J., & Deane, F. P. (2001). Adolescent opinions about reducing help-seeking barriers and increasing appropriate help engagement. *Journal of Educational and Psychological Consultation, 12*, 345-364.

Wilson, C. J., Deane, F. P., Ciarrochi, J., & Rickwood, D. (2005). Measuring help-seeking intentions: Properties of the General Help-Seeking Questionnaire. *Canadian Journal of Counselling, 39*, 15-28.

Wilson, C. J., Rickwood, D. J., Bushnell, J. A., Caputi, P., & Thomas, S. J. (2011). The effects of need for autonomy and preference for seeking help from informal sources on emerging adults' intentions to access mental health services for common mental disorders and suicidal thoughts. *Advances in Mental Health, 10*, 29-38.

Zwaanswijk, M., Van Der Ende, J., Verhaak, P. F. M., Bensing, J. M., & Verhulst, F. C. (2007). The different stages and actors involved in the process leading to the use of adolescent mental health services. *Clinical Child Psychology and Psychiatry, 12*, 567-582.

APPENDIX A

Background Information Questionnaire

Please provide the study ID assigned to you by the researcher: _____

1. What is your age? (e.g., 25) _____

2. What year were you born? (e.g., 1995) _____

3. What is your gender?

☐ Male
☐ Female
☐ Transgender
☐ Genderqueer
☐ None of these options speak to who I am

3. a) I consider myself to be _____.

4. Which ethnic category best describes you?
   (Please choose <u>one</u> response that <u>best</u> captures your ethnicity)

☐ Aboriginal (North American Indian, Metis, or Inuit)
☐ Arab (e.g., Lebanese, Palestinian, Egyptian, Iraqi, etc.)
☐ African
☐ Caribbean
☐ Caucasian
☐ Chinese
☐ Filipino
☐ Korean
☐ Latin American
☐ Mixed/Biracial (please specify) _____
☐ Other (please specify) _____
☐ South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)
☐ Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian, etc.)

5. What is the highest level of education you have completed?

☐ Some University or College, or CEGEP
☐ College Diploma
☐ University Degree
☐ Graduate School

6. In what year are you in your current program?
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ Other, please specify: _____

7. What is your marital status?
- ☐ Single or in a relationship but not living together
- ☐ Married
- ☐ Living together
- ☐ Separated
- ☐ Divorced
- ☐ Other, please specify: _____

8. Growing up, what was your gross annual family income?
- ☐ I don't know. I'd be guessing.
- ☐ Under $30,000
- ☐ $30,000 to $40,000
- ☐ $41,000 to $50,000
- ☐ $51,000 to $60,000
- ☐ $61,000 to $70,000
- ☐ $71,000 to $80,000
- ☐ $81,000 to $90,000
- ☐ $91,000 to $100,000
- ☐ Over $100,000

9. What setting did you grow up in?
- ☐ Urban
- ☐ Rural
- ☐ Suburban

10. Are you currently receiving any counselling services?
- ☐ Yes
- ☐ No

If yes, who currently provides the services?
- ☐ School counsellor
- ☐ Social worker

☐ Psychologist
☐ Psychiatrist
☐ Other (Please specify: _____)

11. Have you ever received any previous counselling services?
☐ Yes
☐ No

If yes, who provided the services?
☐ School counsellor
☐ Social worker
☐ Psychologist
☐ Psychiatrist
☐ Other (Please specify: _____)

APPENDIX B

Summary of Results from the Pilot Study on the Online Help-Seeking Questionnaire

Purpose

The purpose of this study was to test the validity of a newly developed questionnaire, which was designed to assess the online help seeking of emerging adults and was a primary component of a larger doctoral dissertation study. More specifically, the Online Help-Seeking Questionnaire (OHSQ) was created to assess emerging adults' intentions and behaviours of seeking help online for an emotional or personal problem by using different online tools of communication and seeking support from various online sources of help. The objective of this research was to conduct a pilot study in order to assess the validity of the Online Help-Seeking Questionnaire in a sample of young adults.

Method

Participants were 200 undergraduate university students who were enrolled at a university in a midsized city in southwestern Ontario, Canada. Study participants ranged in age from 17 to 25 years old ($M = 19.70$, $SD = 1.64$). The sample was comprised of 165 female emerging adults (82.5%), ranging in age from 17 to 25 years old ($M = 19.79$, $SD = 1.69$), and 35 male emerging adults (17.5%), ranging in age from 17 to 23 years old ($M = 19.26$, $SD = 1.34$). A t-test showed that there was no significant difference in age between male and female emerging adults, $t(198) = -1.77$, $p = .08$. The sample consisted of people who identified as Caucasian (80.0%), South or East Asian (6.5%), Arab (6.0%), Mixed/Biracial (3.5%), African (1.0%), Caribbean (1.0%), Latin American (1.0%), and Indigenous (1.0%). Regarding current year of study, participants identified being in the following year of study in an undergraduate program: 40 (20.0%) in first year, 67

(33.5%) in second year, 50 (25.0%) in third year, 37 (18.5%) in fourth year, and 6 (3.0%)

in fifth year. Concerning relationship status, 190 participants (95.0%) reported being

single or in a relationship but not living together, 9 participants (4.5%) identified being in

a relationship and living together, and one participant (0.5%) reported being married.

Most of the participants identified owning a cell phone ($n = 196$, 98.0%) or a

smartphone ($n = 193$, 96.5%). The majority of emerging adults indicated owning a laptop

or desktop ($n = 190$, 95.0%), although less than half of the sample reported owing a tablet

($n = 80$, 40.0%). Almost all of the participants ($n = 194$, 97.0%) endorsed using the

Internet via a smartphone, cell phone, or tablet.

Research ethics approval was obtained from the research ethics board at the

respective university. Data collection occurred from September to October 2015.

Participants were recruited through an undergraduate psychology participant pool at a

university. After providing informed consent, voluntary participants completed an online

survey of questionnaires, including measures related to their demographic information,

attachment style in close relationships (ECR-RS; Fraley et al., 2011), tendency to

disclose distress to other people (DDI; Kahn & Hessling, 2001), general help-seeking

intentions and behaviours (modified GHSQ; Deane et al., 2001; Wilson et al., 2005), and

intentions and behaviours of seeking help online for an emotional or personal problem.

Participants were compensated for their participation with course credit toward a

psychology course.

Exploratory Factor Analysis

An exploratory factor analysis was completed on items 1 to 19 of the online help-

seeking intentions component of the OHSQ using the model fitting procedure of

maximum likelihood (ML) and the oblique rotation method of direct oblimin rotation (i.e., direct quartimin rotation). The overall Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was found to be acceptable, KMO = .79 ('good' according to Field, 2009), and all KMO values for individual items were ≥ .51 (ranged from .51 to .88), which is above the acceptable limit of .50 (Field, 2009). Bartlett's test of sphericity was shown to be significant, χ^2 (171) = 1910.60, $p < .001$, indicating that the correlation matrix was significantly different from an identity matrix and consequently, correlations between items were sufficiently large for exploratory factor analysis (Field).

Using Kaiser's criterion to retain factors with eigenvalues greater than 1, the exploratory factor analysis solution revealed that four factors contribute to the model (see Table 17 for the eigenvalues of the extracted factors after rotation), with the model accounting for 56.24% of the total variance. Communalities for the items after factor extraction ranged in value from .214 (item 4) to .816 (item 11), signifying that 21.4% of the variance in item 4 and 81.6% of the variance in item 11 is accounted for in the shared variance of the common factors. The average value of communalities after factor extraction was .562. Communalities of .40 to .70 are classified within the range of "moderately good" conditions (Fabrigar & Wegener, 2012, p. 26). Regarding the model fit, the *RMSEA* model fit index for the four-factor solution was found to be a "marginally good fit" (Fabrigar & Wegener, p. 51), such that *RMSEA* was .09. To also assess the model fit, the percentage of non-redundant residuals with absolute values greater than 0.05 can be examined, such that the percentage should be less than 50% and the smaller the percentage, the better the fit of the model (Field, 2009). Concerning these data, only

19.0% of the non-redundant residuals had absolute values greater than 0.05, which is below the cutoff percentage of 50%.

The factor loadings after rotation are presented in Table 17. Based on the factor loadings of the items, factor 1 represents intentions to seek help online by searching for and reading information, factor 2 denotes intentions to seek help online by posting to a large audience (help-seeker identity is known), factor 3 signifies intentions to seek help online by posting to anonymous sources (help-seeker identity is unknown), and factor 4 represents intentions to seek help online by directly messaging close others. With respect to identifying the value cutoff for suitable factor loadings, factor loadings with absolute values greater than .30 are considered to be important (Field, 2009; Tabachnick & Fidell, 2013). All items have factor loadings with values greater than .30 in relation to their respective factors (ranged from .31 to .90).

Reliability analyses of the four factors of online help-seeking intentions revealed Cronbach alphas ranging from satisfactory to excellent: $\alpha = .90$ for intentions to search for and read information; $\alpha = .90$ for intentions to post to anonymous sources; $\alpha = .80$ for intentions to post to a large audience; and $\alpha = .76$ for intentions to directly message close others. As there are fundamental difficulties with conducting exploratory factor analyses on binary data (Fabrigar & Wegener, 2012), it was decided that an EFA would not be an appropriate approach to analyzing the dichotomous data of the OHSQ behaviour items. As a result, the OHSQ behaviour items were grouped together based on the OHSQ intentions four-factor structure solution described above. Given that the study of online help seeking is so exploratory in nature, as well as that a few specific online sources of support were not commonly endorsed (e.g., $n = 10$ for sought help by posting a video to a

social networking site and $n = 6$ for sought help by posting an anonymous blog entry),

but nonetheless, still important to investigate, no items were excluded from the OHSQ.

Table 17

Summary of Exploratory Factor Analysis Results on Online Help-Seeking Intentions from Pilot Study

	Rotated Factor Loadings			
	Search For and Read Information	Post to Large Audience	Post to Anonymous Sources	Directly Message Close Others
Eigenvalues after Extraction	3.83	3.10	3.51	2.91
Cronbach's α	.90	.80	.90	.76
Item				
Read information about my personal or emotional problem on websites with general help	**.90**	-.10	.01	-.01
Read information about my personal/emotional problem on websites with professional help	**.83**	-.09	-.04	-.05
Read the personal stories of other people, who have experienced similar personal or emotional problems, for support or ideas about how to cope with it	**.78**	.08	-.03	-.04
Search for information about my personal or emotional problem	**.77**	-.01	.01	.15
Search for professional mental health services available online	**.63**	.10	-.18	-.01
Post a photo	-.02	**.81**	.13	.08
Update my profile status	-.03	**.80**	.04	.10
Post a video	-.03	**.56**	-.23	-.08
Post a blog entry on a site where people know who I am	.12	**.47**	-.28	.09
Message others in an anonymous chat room	.02	.08	**-.86**	.11
Post an anonymous blog entry	.01	.01	**-.83**	.11
Join an anonymous support group	.11	-.02	**-.79**	-.02
Post an anonymous message on a message board or a support group site	.19	.06	**-.70**	-.09
Send a personal message to my boyfriend/girlfriend on a social networking site	-.13	-.11	-.24	**.88**
Send a personal message to a friend on a social networking site	-.10	.23	-.07	**.68**
Send a personal message to my boyfriend/girlfriend on a smartphone	.13	-.07	.06	**.46**
Send a personal message to my parent(s) on a on a social networking site	.01	.15	-.05	**.44**
Send a personal message to a friend on a smartphone	.14	.13	.16	**.42**
Send a personal message to my parent(s) on a smartphone	.05	.21	.15	**.31**

Note. Factor loadings over .30 appear in bold.

VITA AUCTORIS

NAME: Emily Esther Jensen Romanson (Born: Kear)

PLACE OF BIRTH: Huntsville, ON

YEAR OF BIRTH: 1985

EDUCATION: Huntsville High School, Huntsville, ON, 2004

                             B.A. (Honours), Carleton University, Ottawa, ON, 2008

                             M.Sc., University of Guelph, Guelph, ON, 2011

                             Ph.D., University of Windsor, Windsor, ON, 2018