

2014

Emotional Intelligence, Coping Styles, and Psychopathology

Letizia Boin

Eastern Illinois University

This research is a product of the graduate program in [Psychology](#) at Eastern Illinois University. [Find out more](#) about the program.

Recommended Citation

Boin, Letizia, "Emotional Intelligence, Coping Styles, and Psychopathology" (2014). *Masters Theses*. 1267.
<https://thekeep.eiu.edu/theses/1267>

This is brought to you for free and open access by the Student Theses & Publications at The Keep. It has been accepted for inclusion in Masters Theses by an authorized administrator of The Keep. For more information, please contact tabruns@eiu.edu.

The Graduate School 
EASTERN ILLINOIS UNIVERSITY
Thesis Maintenance and Reproduction Certificate

FOR: Graduate Candidates Completing Theses in Partial Fulfillment of the Degree
Graduate Faculty Advisors Directing the Theses

RE: Preservation, Reproduction, and Distribution of Thesis Research

Preserving, reproducing, and distributing thesis research is an important part of Booth Library's responsibility to provide access to scholarship. In order to further this goal, Booth Library makes all graduate theses completed as part of a degree program at Eastern Illinois University available for personal study, research, and other not-for-profit educational purposes. Under 17 U.S.C. § 108, the library may reproduce and distribute a copy without infringing on copyright; however, professional courtesy dictates that permission be requested from the author before doing so.

Your signatures affirm the following:

- The graduate candidate is the author of this thesis.
- The graduate candidate retains the copyright and intellectual property rights associated with the original research, creative activity, and intellectual or artistic content of the thesis.
- The graduate candidate certifies her/his compliance with federal copyright law (Title 17 of the U. S. Code) and her/his right to authorize reproduction and distribution of all copyrighted materials included in this thesis.
- The graduate candidate in consultation with the faculty advisor grants Booth Library the non-exclusive, perpetual right to make copies of the thesis freely and publicly available without restriction, by means of any current or successive technology, including by not limited to photocopying, microfilm, digitization, or internet.
- The graduate candidate acknowledges that by depositing her/his thesis with Booth Library, her/his work is available for viewing by the public and may be borrowed through the library's circulation and interlibrary loan departments, or accessed electronically.
- The graduate candidate waives the confidentiality provisions of the Family Educational Rights and Privacy Act (FERPA) (20 U. S. C. § 1232g; 34 CFR Part 99) with respect to the contents of the thesis and with respect to information concerning authorship of the thesis, including name and status as a student at Eastern Illinois University.

I have conferred with my graduate faculty advisor. My signature below indicates that I have read and agree with the above statements, and hereby give my permission to allow Booth Library to reproduce and distribute my thesis. My adviser's signature indicates concurrence to reproduce and distribute the thesis.




Graduate Candidate Signature

LETIZIA BOIN

Printed Name

Clinical Psychology

Graduate Degree Program



Faculty Adviser Signature

RUSSELL GRUBER

Printed Name

8-7-2014

Date

Please submit in duplicate.

Emotional Intelligence, Coping Styles, and Psychopathology

(TITLE)

BY

Letizia Boin

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

Master of Arts in Clinical Psychology

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

2014

YEAR

I HEREBY RECOMMEND THAT THIS THESIS BE ACCEPTED AS FULFILLING
THIS PART OF THE GRADUATE DEGREE CITED ABOVE

[REDACTED]

THESIS COMMITTEE CHAIR

8-6-14

DATE

[REDACTED]

DEPARTMENT/SCHOOL CHAIR
OR CHAIR'S DESIGNEE

8-6-14

DATE

[REDACTED]

THESIS COMMITTEE MEMBER

8/6/14

DATE

THESIS COMMITTEE MEMBER DATE

[REDACTED]

THESIS COMMITTEE MEMBER

8/6/14

DATE

THESIS COMMITTEE MEMBER DATE

Emotional Intelligence, Coping Styles, and Psychopathology

Letizia Boin

Eastern Illinois University

Department of Psychology

Acknowledgments

I would like to thank

- My chair, Dr. Gruber for the constant support and guidance throughout this thesis process. Thank you for the time and effort put in to ensure I would complete this thesis
- Dr. Allan for his support over the course of this process and instilling in me the importance of detail
- Dr. Bernas for making complicated statistical methods as simple as they can possibly be and for answering all my statistical questions over the past 2 years to make this thesis possible
- My family for providing support from the other side of the world

Abstract

Despite its relatively recent origins, Emotional Intelligence (EI), which is the ability to perceive, understand, and manage one's emotions, has been shown to contribute to a variety of outcomes, including academic achievement and relationship satisfaction. Considerable support has been gathered to implicate EI in the development of mental illness such as depression and social anxiety. It has been theorized that a potential pathway in which EI affects mental health is by contributing to the development of coping styles. Stress and coping literature reports enough empirical evidence to suggest that broadly speaking, problem-focused coping is 'adaptive' while avoidant coping is 'maladaptive.' Despite theoretical and empirical links between EI, coping styles, and mental illness, very few studies have examined this relationship empirically. This study examined the literature connecting EI, coping styles and psychopathology, and used mediated models to study the relationship between EI and depressive and social anxiety symptoms (Figure 1). Coping style partially mediated 5 of the 6 models although they were not all in the hypothesized direction. These results along with possible explanations for these findings, suggestions for future research, and clinical implications are presented.

Table of Contents

| | |
|--|----|
| Title Page | 1 |
| Acknowledgements | 2 |
| Abstract | 3 |
| Table of contents | 4 |
| List of Tables..... | 6 |
| List of Figures | 7 |
| Introduction | 8 |
| Emotional Intelligence and its measurement | 9 |
| Emotional Intelligence and psychopathology..... | 11 |
| Coping..... | 14 |
| Coping and Emotional Intelligence | 20 |
| Present Study..... | 21 |
| Method..... | 23 |
| Participants | 23 |
| Measures | 23 |
| Procedure..... | 26 |
| Results | 26 |
| Descriptive Statistics | 27 |
| Hypothesis 1 and 2..... | 28 |
| Main Hypothesis | 28 |
| Discussion | 33 |
| Coping and Psychopathology | 33 |

| | |
|--|----|
| Emotional Intelligence and Psychopathology | 34 |
| Coping Style as a Mediator | 36 |
| Clinical Implications | 37 |
| Limitations | 39 |
| Suggestions for Future Research | 40 |
| Conclusion | 40 |
| References | 42 |
| Tables. | 58 |
| Figures | 60 |
| Appendix A: Demographic Form | 68 |

List of Tables

Table 1: Descriptive Statistics and Internal Consistency of various measures58

Table 2: Zero-order Correlations among main variables59

List of Figures

| | |
|---|----|
| Figure 1: Hypothesized mediated model between emotional intelligence, symptoms of psychopathology, and coping styles..... | 60 |
| Figure 2: Hypothesized mediated model between emotional intelligence, problem-focused coping, and symptoms of psychopathology | 61 |
| Figure 3: Hypothesized mediated model between emotional intelligence, problem-focused coping, and symptoms of psychopathology..... | 62 |
| Figure 4: Mediated model between emotional intelligence and depression, as mediated by avoidant coping..... | 63 |
| Figure 5: Mediated model between emotional intelligence and social anxiety, as mediated by avoidant coping..... | 64 |
| Figure 6: Mediated model between emotional intelligence and depression, as mediated by problem-focused coping..... | 65 |
| Figure 7: Mediated model between emotional intelligence and social anxiety, as mediated by emotion-focused coping..... | 66 |
| Figure 8: Mediated model between emotional intelligence and depression, as mediated by emotion-focused coping..... | 67 |

Examining the Relationship between Emotional Intelligence, Coping Styles, and Psychopathology

Emotional intelligence (EI) is commonly referred to as an individual's ability to perceive, understand, and manage one's emotions (Salovey & Mayer, 1990). Emotional intelligence is a relatively new field of study in comparison to the more conventional intelligence that emphasizes verbal and performance abilities that laypersons are familiar with; however, research is rapidly providing evidence of its adaptive value. It has been shown that EI is relevant in predicting a variety of outcomes including leadership effectiveness (Kotzé & Venter, 2010), academic achievement (Fernandez, Salamonson, & Griffiths, 2012), and relationship satisfaction (Malouff, Schutte, & Thorsteinsson, 2014). EI has also been related to stress and coping.

Literature on stress and coping presents evidence that life stressors are moderately associated with a variety of disorders. Billings, Cronkite, & Moos (1983) have shown that persons with depression are exposed to more stressful life events prior to the onset of their depression compared with a nonclinical sample. However, they found that it is the way that people cope with the stress and not the severity of the stressor that accounts for the severity of depression. This seems to support other research which argues that the manner in which individuals deal with stressful life events can reduce or amplify their effect; coping resources facilitate the maintenance of health by buffering the effect of stress. When stress is inadequately dealt with, it can ultimately lead to mental disorders (Skinner, Edge, Altman, & Sherwood, 2003). The literature review that follows presents a case for the role of Emotional Intelligence in the development and selection of coping

styles which may in turn affect the development of symptoms of depression and social anxiety.

Emotional Intelligence and its measurement

The concept of emotional intelligence has been around for decades (Gardener, 1983), however, it was not until the publication of Goleman's (1995) book, "Emotional Intelligence" that this concept gained widespread popularity amongst researchers as a domain of intelligence. Goleman conceptualized Emotional Intelligence (EI) as consisting of self-awareness, self-regulation, motivation, empathy, and social skills. Goleman's perspective of EI essentially appears to include all positive qualities that are *not* cognitive intelligence (Matthews, Zeidner, & Roberts, 2002). Some of Goleman's successors did not agree that cognitive ability should be excluded from qualities that constitute emotional intelligence. As such, other conceptualizations of this construct have emerged that emphasize individual differences in cognitive processing of affective information such as Salovey and Mayer's (1990) conceptualization (Bastian, Burns, & Nettlebeck, 2005). These models are referred to as ability models. Salovey and Mayer's (1990) model of EI emphasizes that EI is composed of conceptually related mental processes: appraisal and expression of emotions, regulation of emotions, and utilization of emotion. The alternative models, such as Goleman's are known as mixed models of EI (Bar-On, 1997; Goleman, 1995) because they combine emotional abilities with motivation, personality, and affective dispositions. Although these conceptions are not necessarily contradictory of one another, they offer alternative theoretical perspectives on the nature of emotional intelligence (Schutte, et al., 1988). It is important to note that self-report measures of ability and of mixed EI models tend to correlate, which indicates

that they do share common elements and are not altogether mutually exclusive (Perez, Petrides, & Furnham, 2005; Petrides, Furnham, & Mavroveli, 2007). Specifically, common elements that tend to emerge in both the ability and mixed EI models are the abilities to recognize and express emotion, to perceive emotions in others, and to manage and control emotions (Hansen, Lloyd, & Stough, 2009).

Although conceptualizations of EI tend to agree at some level about the basic components of EI, the measurement of this construct has presented further complications. As researchers began to develop measures of EI, some relied on self-report, while others were based on correct or incorrect responses. This difference in operationalization had a significant impact on assimilating findings. The use of typical (self-report) versus maximum performance (ability) tests presented real psychometric distinctions between the data collected from these measures that became apparent in the results (Petrides, 2011). This psychometric difference was considered problematic because different measurement approaches (i.e. tests vs questionnaires) would produce different results even if the measures were conceptualized using the ability model (Petrides & Furnham, 2001). Consequently, two frameworks of EI emerged that are differentiated based on psychometric properties; they are known as ability and trait emotional intelligence. Ability EI is based on the original conceptualization of EI by Mayer and Salovey (1990), and views EI as “the ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought” (Mayer, Roberts, & Barsade, 2008, p. 511). As such, ability EI has a strong relationship with cognitive ability and its measurement is comparable to those measuring cognitive intelligence such as the WAIS-IV. Unlike ability EI which uses maximum-performance tests, trait EI is measured

using self-perceived emotional competencies and self-reported behavioral dispositions (Schutte, Malouff, & Hine, 2001). This psychometric distinction may be the reason why these two models are modestly associated despite both models alleging to represent the construct of EI (Brackett & Mayer, 2003). It may be that these two models are representative of two different construct that need to be renamed to avoid semantic confusion. As such, it is critical that the model that will be utilized in any study be made clear at the outset, as the term EI on its own is essentially undefined.

This study will utilize a self-report measure of EI (i.e. trait EI) based on Mayer and Salovey's (1990) conceptualization. Although both trait and ability EI have been shown to be associated with mental health, research has demonstrated that EI measured as a trait is more strongly associated with mental health than ability EI (Martins, Ramalho, & Morin, 2010; Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007). In addition, self-report measures have an advantage over skill-based measures in that they do not contradict the subjective nature of emotions by forcing a correct response (Petrides, Niven, & Mouskounti, 2006). Furthermore, because people are inclined to act in accordance with their beliefs, if their self-concept is accurate, perceived emotional skills collected through self-report data may be predictive of actual skills and performance (Brackett & Geher, 2006; Bandura, 1997). Therefore, for the purpose of this study, using a trait-based approach is considered most suitable. From here on, the use of the term 'Emotional Intelligence' will refer to trait EI.

Emotional Intelligence and psychopathology

In general terms, EI represents a global ability to recognize and manage emotions and emotional information. When an individual lacks these skills, the results can be

functionally impairing in the form of mental illness. The majority of clinical disorders involve emotional disturbances (Hansen, Lloyd, & Stough, 2009), which highlights the importance of EI in the understanding of mental disorders. For instance, internalizing disorders such as major depressive disorder and generalized anxiety disorder are marked by an increase in negative affect which the individual is unable to regulate. It is easy to see how EI may be related to these disorders. On the other hand, externalizing disorders are not based on dysregulated affective states, but rather on qualities related to the awareness and management of emotions. A lack of emotional awareness and management can result in impairment of self-control or lack of emotional insight which is central to disorders such as borderline personality and intermittent explosive disorder (Matthews et al., 2002). Regardless of whether they are internalized or externalized, EI appears to be related to a wide variety of mental disorders. Therefore, it is expected that low EI would be associated with the majority of DSM disorders.

Researchers appear to agree with this deduction, repeatedly demonstrating that a general link exists between EI and mental health (Martins, Ramalho, & Morin, 2010). Higher levels of EI have been shown to be related to subjective wellbeing (Austin, Saklofske, & Mastoras, 2010), and that the ability to regulate emotions, which is a component of EI, is associated with greater well-being, income, and socioeconomic status (Cote, Gyurak, & Levenson, 2010). Higher EI is also related to increased positive mood and self-esteem, and individuals with high EI show less fluctuation in their positive mood and self-esteem after a negative mood induction (Schutte, Malouff, Simunek, McKenley, & Hollander, 2002). In relation to mental disorders, Lizeretti, Extremera, and Rodriguez (2012) used a clinical sample comprising of individuals diagnosed with a mood disorder,

anxiety disorder, substance abuse disorder, psychotic disorder, or borderline personality disorder, to show that EI is related to the presence and severity of clinical symptoms in a wide variety of mental disorders. In addition, other studies have demonstrated that low levels of EI are related to depression (Batool & Khalid, 2009; Fernández-Berrocal, Alcaide, Extremera, & Pizarro, 2006; Downey, et al., 2008), and anxiety disorders (Summerfeldt, Kloosterman, Antony, McCabe, & Parker, 2001; Onur, Alkin, Sheridan, & Wise, 2013).

These studies appear to support the hypothesis that EI levels can be used to differentiate between individuals with psychopathologies from those without. In addition, evidence from these studies suggest that low levels of EI may be a vulnerability factor for the development of a variety of mental illnesses (Lizeretti, Extremera, & Rodriguez, 2012), or a protective factor in the case of high levels of competency. While individuals with higher levels of EI are better equipped to tackle day-to-day challenges and manage their emotions in an adaptive and healthy way, those with low levels of EI are left susceptible to developing psychopathologies (Taylor, 2001). This rationalization is in line with the diathesis-stress model theory. According to this theory, the development of a disorder is an interaction between a predisposed vulnerability and stress from the environment. The theory postulates that the presence of protective factors can counteract the effects of the stressor and prevent the development of the disorder. As such, EI can be viewed as either a vulnerability or protective factor.

The question remains as to why levels of EI have the potential to affect an individual's mental health. Due to the complex etiology of mental illnesses, it is unlikely that a deficit in EI is the underlying factor responsible for the development of all

disorders (Salovey, Bedell, Detweiler, & Mayer, 1999). However, it has been suggested that perhaps it serves an indirect role by buffering stress through the selection of adaptive coping styles, which in turn, lead to healthy adaptation and the prevention of mental distress (Keefer, Parker, & Saklofske, 2009). Therefore, information from the coping literature, which will be discussed below, may provide useful links to this relationship and offer an explanation to further our understanding of the potential risk or protective potential of EI in the development of psychopathology.

Coping

There appears to be a consensus among researchers in the field of coping that attributes its origin to Richard Lazarus, whose conceptual analysis of stress and coping in 1966 provided subsequent researchers the foundation in which to explore ways people cope under stress (Carver, Scheier, & Weintraub, 1989). The most prominent theory to date is that of Lazarus and Folkman (1984), who defined coping as the “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p. 141). This definition underlines three crucial processes of coping: perceiving a threat, developing a response to that threat, and executing that response. If the individual is able to constructively think, manage emotions, control their physiological reactions, and direct their behavior, then they will be able to adaptively cope with the situation and the threat of the stress can be neutralized (Compas, Connor-Smith, Saltzman, Harding-Thomsen, & Wadsworth, 2001). However, if the individual is unable to draw from their resources to deal with the stressful situation, then the individual is faced with deleterious consequences. This implies that adaptive coping includes

management of emotional experiences that surfaces as a result of stressful situations. To do this, the individual must be able to understand their emotions, accurately process emotional information, and possess the skills to manage these emotions; all considered to be components of EI (Mayer & Salovey, 1997). These skills are thought to increase capacities for coping by reducing the duration, frequency and intensity of negative emotions (Campbell & Ntobedzi, 2007). In fact, when an individual is coping with an 'event', they are actually coping with the negative emotions that the event elicits (Salovey, Bedell, Detweiler, & Mayer, 1999). Therefore, the ability to respond to these affective experiences adaptively is expected to vary with degree of EI.

The final step to the coping process is the implementation of coping strategies or responses which are defined as "some of the things that people *do*, their concrete efforts to deal with the life-strains they encounter in their different roles" (Pearlin & Schooler, 1978, p. 5). In the development of The Ways of Coping Scale, Folkman and Lazarus (1980) identified strategies used to cope, such as problem solving or denial, and dichotomized these categories into broader families of either *problem-focused* (attempts to directly change the stress-inducing situation) or *emotion-focused coping* (attempts to reduce the distressing emotions caused by the stressful situation) based on the function of these strategies.

Discontented with the measures available to assess coping, Carver, Scheier, and Weintraub (1989) developed a new measure of coping styles by adding specificity and including a larger number of domains. Factor analysis of this scale extracted the often cited *problem* and *emotion-focused coping* factors along with what they called *dysfunctional coping*. This category of coping is commonly referred to as *avoidant*

coping and includes strategies that attempt to drive attention away from the stressor (Suls & Fletcher, 1985). Avoidant coping involves either cognitive avoidance, such as assuming the situation as unchangeable or minimizing the seriousness of the problem, or behavioral avoidance such as drug use, venting, or seeking alternative rewards (Moos & Schaefer, 1993). Although other authors have listed as many as 12 ‘families’ of coping (Skinner & Zimmer-Gembeck, 2007), the focus of this study will be on three broad categories that have been accepted in most studies (Gutiérrez, Peri, Torres, Caseras, & Valdés, 2007; Parker & Endler, 1992): problem-focused, emotion-focused, and avoidant coping.

Early on, it was emphasized that coping strategies should not be classified as either inherently good or bad as the context in which they occur must be considered (Lazarus & Folkman, 1984). However, it has been consistently reported in the literature that broadly speaking, problem-focused coping leads to more adaptive outcomes (Compas, Connor-Smith, Saltzman, Harding-Thomsen, & Wadsworth, 2001). Students who used problem-focused coping strategies were more likely to seek help from student services when faced with personal difficulties, while those who used less problem-focused strategies reported greater psychological distress (Julal, 2013). Engaging in an activity targeted at reducing the stressor during stressful situations rather than remaining passive is a powerful and adaptive coping tool (Gal & Lazarus, 1875). Chao (2011) found that students using problem-focused strategies during stressful situations had significantly higher well-being (measured as perceived stress) than those who used less problem-focused coping. In that study, problem-focused coping was found to buffer the relationship between stress and well-being. In a group of individuals receiving treatment for depression, those who used more problem-focused strategies experienced less severe dysfunction than those using emotion-focused coping (Billings & Moos, 1984)

Conversely, there is considerable evidence to suggest that the use of avoidant coping strategies lead to distress in both community (Penland, Masten, Zelhart, Fournet, & Callahan, 2000) and clinical samples (Sherbourne, Hays, & Wells, 1995). A 10-year study showed that the use of avoidant coping, which fails to directly address the stressor, generated a greater number of life stressors which subsequently increased depressive symptoms (Holahan, Olahan, Brennan, & Schutte, 2005). Using a college sample, Chao (2011) demonstrated that the use of avoidant coping negatively affected well-being, while Aldwin & Revenson (1987) showed that escapism was used more frequently by those in poorer mental health, and Thomasson & Psouni (2010) showed that individuals suffering from social anxiety tended to rely on dysfunctional coping strategies such as denial, mental and behavioral disengagement, and alcohol and drug use. Although it has been suggested that avoidant coping may be beneficial at times as it allows the individual to take a step back from the psychological distress arising from the threat of the stressor (Carver, Scheier, & Pozo, 1992; Repetti, 1992), evidence on the positive effects of avoidant coping is sparse, while literature supporting the associations between avoidant coping and distress is abundant (Carver & Scheier, 1994). As a whole, the use of avoidant strategies such as wishful thinking, self-blame, self-distraction, escapism, and denying the stressor's reality have been found to be disadvantageous to the individual (Carver & Scheier, 1994).

Research on emotion-focused coping has generally produced negative associations with mental health. Korean immigrants who used emotion-focused strategies to cope with racial discrimination were more likely to experience depression than those who used more problem-focused strategies (Noh & Kaspar, 2003). In adolescents, the use of emotion-focused coping strategies was related to greater problem behaviors (Downey, Johnston, Hansen, Birney, & Stough, 2010). However, in a meta-analytic study, the

copied strategy of positive reappraisal was associated with overall mental health (Penley, Tomaka, & Wiebe, 2002). Mixed results were found for the strategy of seeking social support with some studies positively relating it to good mental health (Goplerud, 1980) and others finding a negative association (Aldwin & Revenson, 1987). This inconsistency in results may be explained by the difficulty in disentangling problem-focused and emotion-focused coping. It has been argued that that they typically co-occur and strategies in either category can serve multiple functions (Carver & Scheier, 1994). Emotion-focused coping can aid problem-focused coping by removing some of the emotional distress, thus allowing for better problem solving. On the other hand, problem-focused coping, by removing the threat of the stressor, may reduce distressing emotions (Carver & Scheier, 1994). Therefore, although they may be qualitatively distinct, the effects of the strategies are not always mutually exclusive and thus, should not be pitted against one another (Lazarus, 1996).

While both emotion-focused and avoidant coping may ameliorate the stressful situation by maintaining emotional balance, successful coping should lead to the resolution of the problem with no residual negative affective states (Zeidner & Saklofske, 1996). This requisite for 'successful coping' further supports the adaptive function of problem-focused strategies, which directly attempt to manage the threat. Individuals who deal with the stress rather than avoid it are more likely to experience better psychological adjustment. Therefore, based on this review, it appears that in the case of mental health, problem-focused coping is more adaptive while avoidant coping is more maladaptive. Based on the mixed and unclear results reported for the adaptive function of emotion-focused coping, I will not draw a conclusion thus far.

Coping and social anxiety. Individuals with social anxiety are burdened with a fear of social interactions and performance situations which often results in avoidance of those situations (Aderka, Haker, Marom, Hermesh, & Gilboa-Schechtman, 2013). These individuals often engage in ‘safety behaviors’ – “actions intended to detect, avoid, and escape a feared outcome” - in an effort to manage the perception of threats (Deacon & Maack, 2008, p. 537). Individuals suffering from social anxiety engage in safety behaviors such as avoiding situations or avoiding eye contact (Wells & Clark, 1997). Safety behaviors serve an adaptive function by enabling individuals to escape a dangerous situation. However, when individuals have a distorted belief about a perceived threat, safety behaviors prevent individuals from benefitting from the disconfirmation of these inaccurate beliefs (Salkovskis, Clark, Hackmann, Wells, & Gelder, 1999). Due to this avoidance, they continue experiencing social anxiety. According to Carver and colleagues (1989), escaping from the situation and the emotions associated with it, is a form of dysfunctional coping. Safety behaviors prevent the client from dealing with the feared situation or reduces the negative emotions experienced when the situation must be endured (Helbig-Lang & Petermann, 2010). Thus, it can be considered a form of avoidant or emotion-focused coping.

In addition, the inclination of social anxiety patients to use avoidant strategies may be intensified as a result of a lack of self-efficacy – the belief in oneself to be successful. According to Antonovsky (1991; in Thomasson & Psouni, 2010), the use of problem-focused coping is dependent on the perception of self-control over the situation. If an individual believes that s/he is capable of exerting some control to ameliorate the situation, then problem-focused coping is more likely to be used. However, social anxiety individuals lack self-efficacy in social situations. As a result, they are less likely to use problem-focused coping and would rather engage in avoidant coping. Thomasson &

Psouni (2010) found that individuals with a low sense of social control and low self-efficacy reported more severe symptoms of social anxiety, and this relationship was partly mediated by dysfunctional coping strategies such as denial, mental disengagement, and drug use.

Coping and depression. Depressed individuals are less likely to use problem-focused coping strategies than individuals without symptoms of depression. Emotion-focused and avoidant coping are the preferred coping styles of people with depression (Kolenc & And, 1990). There is overwhelming evidence in support of this finding (Aldwin & Revenson, 1987; Billings & Moos, 1984; Carver, Scheier, & Weintraub, 1989; McWilliams, Cox, & Enns, 2003; Rosenberg, Peterson, & Hayes, 1987). The use of avoidant coping is not only detrimental to the individual by ignoring the current stressor, but it also creates a route for the maintenance of depressive symptoms by failing to remove the stressor. (Brennan, & Schutte, 2005; Holahan, Olahan).

Coping and Emotional intelligence

Theoretically, it is not difficult to deduce that a link between EI and coping exists. Salovey and colleagues (1999) posit that what sets a resilient person apart from one who copes inefficiently are the emotional competencies of the person - that is, the way people perceive, express, understand, and manage their emotions. If they are deficient in basic emotional skills such as perceiving, appraising, and expressing emotions, they will have difficulty analyzing and understanding their feelings. This disconnection with their emotions results in difficulties regulating these emotions which stalls the coping process. Similarly, Matthews and Zeidner (2000) state that “adaptive coping might be considered as EI in action, supporting mastery of emotions, emotional growth, and both cognitive and emotional differentiation, allowing us to evolve in an ever-changing world” (p.460).

According to these authors, EI influences the selection and control of coping strategies during demanding situations. An emotionally competent individual will select coping strategies that will lead to adaptational outcomes such as goal attainment, subjective wellbeing, learning, and health.

This link between EI and coping that appears to be theoretically justified has been supported by research. Empirical data supports that EI promotes the choice of coping strategy, associating higher EI with more 'adaptive' coping styles such as problem solving, and preventing the use of more 'maladaptive' coping styles such as self-blame and catastrophization (Mikolajczak, Nelis, Hansenne, & Quoidbach, 2008). In a middle school sample, high scores on the emotion management scale were positively associated with problem-focused coping (MacCann, Fogarty, Zeidner, & Roberts, 2011). These results are consistent with those reported by Petrides and colleagues (2007).

Present study

Few studies have looked at the relationship between EI, coping and mental health, and most of these studies have targeted youth instead of adult populations. Downey and colleagues (2010) reported that in a group of adolescents, the ability to manage and control emotions was negatively associated with the use of non-productive coping strategies (strategies that do not solve the problem) which sequentially predicted behavioral problems. Mikolajczak and colleagues (2008) discovered that high EI predicted the use of adaptive coping styles during the experiences of not only stress but sadness, anger, fear, shame, and jealousy, while maintaining the experience of joy. These results have important implications in the mental health field where emotions play a crucial role in the development and maintenance of disorders.

Of interest in the present study is the extent to which levels of EI may affect the selection and use of coping styles which in turn potentially impact mental health. In 2006, Zeidner, Matthews, and Roberts claimed that it was yet to be empirically demonstrated whether the coping styles of high EI individuals presented real benefits in terms of adaptation, including health outcomes. Eight years on, there is still a dearth of studies examining this relationship. The present study examines the possibility that EI may facilitate the development of a coping style that affects the individual's psychological well-being. In other words, do coping styles mediate the relationship between EI and mental health?

It is hypothesized, based on previous findings that avoidant coping will be positively correlated with symptoms of depression and social anxiety (Hypothesis 1(a)), whereas problem-focused coping will be negatively correlated with symptoms of depression and social anxiety (Hypothesis 1 (b)). Similarly, it is hypothesized that EI will be negatively correlated with symptoms of depression and social anxiety (Hypothesis 2). No predictions will be made on the direction of the relationship between emotion focused coping and EI, symptoms of depression, and symptoms of social anxiety. Nevertheless, these relationships will also be evaluated.

The main hypothesis predicts that the relationship between EI and symptoms of social anxiety and depression will be mediated by type of coping: (a) avoidant, (b) problem-focused, and (c) emotion-focused.

Avoidant coping is predicted to negatively correlate with emotional intelligence, and positively correlate with symptoms of depression and social anxiety (Figure 2).

Problem-focused coping is predicted to positively correlate with emotional intelligence, and negatively correlate with symptoms of depression and social anxiety (Figure 3).

Method

Participants

A total of 177 participants were recruited from the Introduction to Psychology class pool at Eastern Illinois University. Participants received course credit for their participation in this study. Participants who completed the study in less than 10 minutes were excluded from the study due to the likelihood that this data did not accurately represent the constructs being measured. Fifty-seven participants were excluded for completing the study in less than 10 minutes; leaving a final sample of 120 participants.

The sample consisted of 36 males (30%), 83 females (69.2%) and 1 participant did not specify gender (0.8%). There were 67 participants who were Caucasian (55.8%), 37 Black (30.8%), 13 Hispanic (10.8%), 2 Asian (1.7%), and 1 participant belonging to a different racial background (.8%).

Measures

Demographics form. A demographic form was used to assess age, ethnic background, educational level, sex and so forth (see Appendix A).

Emotion Intelligence Scale (EIS). The EIS (Schutte et al., 1988) is a 33-item self-report questionnaire, based on Salovey and Mayer's (1990) conceptualization of Emotional Intelligence. The scale uses a 5-point scale, in which a "1" represents "strongly disagree" and a "5" represents "strongly agree". A total score is obtained by summing the total responses and may range from 33-165 (higher scores represent higher emotional intelligence). The one factor structure reported by the authors is representative

of the individual's perception of the extent to which s/he can appraise, express and regulate emotions in the self and others, and utilize emotions in solving problems. Schutte et al (1988) reported good internal consistency with Cronbach's alpha ranging from .90 to .87. Twenty-eight students completed the test again after a two week interval, and an acceptable test-retest reliability was obtained ($r = .78$). In addition, measures of EI have often been criticized as being confounded by personality factors and cognitive abilities; the authors reported that the EIS was found to be distinct from personality measures and cognitive ability as not to make it redundant with those constructs.

COPE. The COPE (Carver, Scheier, & Weintraub, 1989) is an instrument designed to measure the different ways in which people respond to stress. The 60-item scale is comprised of 15 subscales: positive reinterpretation and growth, mental disengagement, focus on and venting of emotions, use of instrumental social support, active coping, denial, turning to religion, humor, behavioral disengagement, restraint, use of emotional social support, substance use, acceptance, suppression of competing activities and planning. Participants are asked to think about the way they generally cope with stressful situations and responses are recorded on a 4-point Likert scale with 1 being "*I usually don't do this at all*" and 4 being "*I usually do this a lot*".

A factor- analytic study on the second-order structure of the COPE grouped these subscales into conceptually distinct aspects of problem-focused coping, emotion-focused coping, and avoidant coping (Lyne & Roger, 2000). Lyne and Roger's (2000) factor structure will be used in this study. Subscales that loaded on the problem-focused coping factors were planning, active coping, positive re-interpretation and growth, suppression of competing activities, restraint coping, and acceptance; emotion-focused coping include

seeking emotional support, seeking instrumental social support; and avoidant coping include mental disengagement, behavioral disengagement, denial, and alcohol and drug use. Venting was excluded from the analysis due to resembling emotion too closely, and humor and turning to religion did not load on any of the three second-order factors and will therefore not be used. Cronbach's alpha for the subscales ranges from .45 to .92 and test-retest reliability is acceptable at .46 to .86 (Carver, Scheier, & Weintraub, 1989).

Center for Epidemiologic Studies Depression Scale (CES-D). The CES-D (Radloff, 1977) is a 20-item scale used to measure depressive symptomatology in the general population. Respondents are asked about depressive symptoms experienced over the past week, and responses range from "0" (rarely) to 3 (most of the time). Possible scores range from 0 to 60, with higher scores indicating higher symptoms of depression. The scale includes items that correspond to the major components of depressive symptomatology (depressed mood, feelings of guilt and worthlessness, feelings of helplessness and hopelessness, psychomotor retardation, loss of appetite, and sleep disturbances). Internal consistency was found to be high with $r = .85$ in a general sample and $r = .90$ in a clinical sample (Radloff, 1977). Test-retest reliability was acceptable, ranging from $r = .45$ to $.70$ (Radloff, 1977).

Social Phobia Scale (SPS)/ Social Interaction Anxiety Scale (SIAS). The SPS and SIAS (Mattick & Clarke, 1998) are two separate measures commonly used together to assess related facets of social anxiety. The SPS assesses fears of scrutinization when engaged in routine activities such as eating or drinking in public. The scale has 20-item and rated on a 5-point Likert-scale ranging from 0 ("not at all characteristic of me") to 4 ("extremely characteristic of me"). The authors reported high internal reliability with

Cronbach's alpha ranging from .89 - .94. Test-retest reliability was found to be acceptable after participants completed the scale after a period of 4 weeks and 12 weeks elapsed. Cronbach's alphas were .91 and .93 respectively.

The SIAS is a 20-item self-report measure based on the DSM-III-R description of social phobia and assesses general social interaction fears. Respondents rate each item on a 5-point Likert scale from zero ("not at all characteristic of me") to four ("extremely characteristic of me"). The authors reported high internal reliability with Cronbach's alpha ranging from .88 - .94. Test-retest reliability was found to be acceptable after participants completed the scale after a period of 4 weeks and 12 weeks elapsed. Cronbach's alpha was .92 at both times.

Scores for both scales range from 0 to 80 and are obtained by adding each item; higher score are reflective of greater social anxiety. Adequate psychometric properties of both scales have been supported by Heimberg and colleagues (1992).

Procedure

Participants were introduction to psychology students at Eastern Illinois University. They were provided with a link to the online survey through SONA and awarded class credit for their participation. The survey was created using Qualtrics and items were counterbalanced.

Results

Descriptive statistics, including means and standard deviations of scales used were calculated. Correlations were computed to observe relationships between the main study variables and to answer hypothesis 1 and 2. Regression equations were used to study the main hypothesis.

Descriptive Statistics

The internal consistency of the scales was calculated using Cronbach's alpha. Alphas were found to be excellent with the exception of some of the COPE sub-scales. The values obtained for the EIS ($\alpha = .90$), CES-D ($\alpha = .90$), SIAS ($\alpha = .93$), and SPS ($\alpha = .93$) are consistent with current literature. With regard to the COPE scales, the internal consistency of the "Suppression of Competing activities" subscale ($\alpha = .49$) was found to be much lower than that reported by Carver et al (1989). Similarly, although the "Mental Disengagement" subscale had the lowest alpha in the original study by Carver et al, (1989) the present study had an even lower alpha ($\alpha = .4$). Skewness and Kurtosis values were computed for all the scales; values were found to be in the acceptable range. A summary of descriptive statistics can be found in Table 1.

To examine the degree of depression and social anxiety in the sample, cut-off scores were used for the CES-D and SAIS/SPS. The authors of the CES-D recommend using a score 16 or higher to detect those experiencing significant symptoms of depression. However, this cutoff score has been criticized for yielding a greater occurrence of depression than the actual frequency. Therefore, it has been suggested that to avoid obtaining a large number of false-positives, a score of 27 would be more appropriate (Zich, Attkisson & Greenfield, 1990). Using this more stringent cut-off score of 27, 18% of participants reached significant levels of depression. In comparison, a cutoff of 16 indicated that 49% of participants are high on depression.

To determine the level of social anxiety reported by this sample, a cutoff score of 36 was used for the SIAS and 26 for the SPS (Peters, 2000). On the SIAS, 23% of participants scored over 36, whereas on the SPS 29% scored over 26. These percentages

indicate that this sample contains a wide range of scores and there is evidence for symptoms of psychopathology.

Zero-order correlations among the main variables were computed and are reported in Table 2. Significant positive correlations are observed between Emotional Intelligence and problem-focused coping ($r = .42, p < .001$) and emotion-focused coping ($r = .27, p < .001$). Significant negative correlations are observed between Emotional Intelligence and the scores for depression ($r = -.27, p < .001$), social anxiety ($r = -.29, p < .001$), and avoidant coping ($r = -.26, p < .001$).

Hypothesis 1 and 2

Hypothesis 1(a) was supported as a significant positive correlation was obtained between avoidant coping and symptoms of social anxiety ($r = .47, p < .001$), and between avoidant coping and symptoms of depression ($r = .59, p < .001$) (see Table 1).

Hypothesis 1(b) was not supported as the correlations between problem-focused coping and symptoms of social anxiety ($r = -.02, p = .40$), and between problem-focused coping and symptoms of depression ($r = .06, p = .25$) are not significant. Correlations between emotion-focused coping and social anxiety ($r = .12, p = .09$) and depression ($r = .10, p = .14$) were also found to be not significant.

Hypothesis 2 was supported as a significant negative correlation was obtained between Emotional Intelligence and symptoms of social anxiety ($r = -.29, p = .001$) and depression ($r = -.27, p = .001$).

Main Hypothesis: (a) Avoidant coping

A Baron and Kenny test of mediation (1986) was conducted to examine if avoidant coping mediated the relationship between Emotional Intelligence (causal

variable) and depression (outcome variable). Step 1 examined if there is a relationship between the causal variable and the outcome variable. Results indicate that as EI increased depression decreased, $\beta = -.27, p < .05$. Step 2 tested if there is a relationship between the causal variable and the potential mediator. Results show that as EI increased the use of avoidant coping decreased, $\beta = -.27, p < .05$. Step 3 then examined if there is a relationship between the potential mediator and the outcome variable while controlling the causal variable. Results show that the relationship between avoidant coping and depression was statistically significant while controlling for EI, $\beta = .56, p < .001$. As avoidant coping increased, depression increased (Figure 4).

Finally, Step 4 tested whether the relationship between the causal variable and the outcome variable while controlling the mediator is zero (Kenny, 2014). Results indicate that the relationship between EI and depression while controlling for avoidant coping was not zero, $\beta = -.12, p = .11$. Thus, avoidant coping partially mediated the relationship between EI and depression. The amount of mediation is $\beta_{Indirect\ Effect} = -.10$. According to a Sobel's test, this partially mediated effect was statistically significant ($z = -2.74, p = .003$ (one-tailed)).

A Baron and Kenny test of mediation (1986) was conducted to examine if avoidant coping mediated the relationship between Emotional Intelligence (causal variable) and social anxiety (outcome variable). Step 1 examined if there is a relationship between the causal variable and the outcome variable. Results indicate that as EI increased social anxiety decreased, $\beta = -.29, p = .001$. Step 2 tested if there is a relationship between the causal and the potential mediator. Results show that as EI increased the use of avoidant coping decreased, $\beta = -.26, p < .05$. Step 3 then examined if

there is a relationship between the potential mediator and the outcome variable while controlling the causal variable. Results show that the relationship between avoidant coping and social anxiety was statistically significant while controlling for EI, $\beta = .42$, $p < .001$. As avoidant coping increased, social anxiety increased (Figure 5).

Finally, Step 4 tested whether the relationship between the causal variable and the outcome variable while controlling the mediator is zero (Kenny, 2014). Results indicate that the relationship between EI and social anxiety while controlling for avoidant coping was not zero, $\beta = -.18$, $p < .05$. Thus, avoidant coping partially mediated the relationship between EI and social anxiety. The amount of mediation is $\beta_{Indirect\ Effect} = -.20$. According to a Sobel's test, this partially mediated effect was statistically significant ($z = -2.55$, $p = .005$ (one-tailed)).

(b) Problem-focused coping

A Baron and Kenny test of mediation (1986) was conducted to examine if problem-focused coping mediated the relationship between Emotional Intelligence (causal variable) and depression (outcome variable). Step 1 examined if there is a relationship between the causal variable and the outcome variable. Results indicate that as EI increased depression decreased, $\beta = -.27$, $p < .05$. Step 2 tested if there is a relationship between the causal and the potential mediator. Results show that as EI increased so did the use of problem-focused coping, $\beta = .42$, $p < .001$. Step 3 then examined if there is a relationship between the potential mediator and the outcome variable while controlling the causal variable. Results show that the relationship between problem-focused coping and depression was statistically significant while controlling for

EI, $\beta = .21, p < .05$. As problem-focused coping increased, depression increased (Figure 6).

Finally, Step 4 tested whether the relationship between the causal variable and the outcome variable while controlling the mediator is zero (Kenny, 2014). Results indicate that the relationship between EI and depression while controlling for problem-focused coping was not zero, $\beta = -.36, p < .001$. Thus, problem-focused coping partially mediated the relationship between EI and depression. The amount of mediation is $\beta_{Indirect\ Effect} = .06$. According to a Sobel's test, this partially mediated effect was statistically significant ($z = 2.02, p = .02$ (one-tailed)).

(c) Emotion-focused coping

A Baron and Kenny test of mediation (1986) was conducted to examine if emotion-focused coping mediated the relationship between Emotional Intelligence (causal variable) and social anxiety (outcome variable). Step 1 examined if there is a relationship between the causal variable and the outcome variable. Results indicate that as EI increased social anxiety decreased, $\beta = -.29, p = .001$. Step 2 tested if there is a relationship between the causal and the potential mediator. Results show that as EI increased so did the use of emotion-focused coping, $\beta = .27, p < .05$. Step 3 then examined if there is a relationship between the potential mediator and the outcome variable while controlling the causal variable. Results show that the relationship between emotion-focused coping and social anxiety was statistically significant while controlling for EI, $\beta = .21, p < .05$. As emotion-focused coping increased, social anxiety increased (Figure 7).

Finally, Step 4 tested whether the relationship between the causal variable and the outcome variable while controlling the mediator is zero (Kenny, 2014). Results indicate that the relationship between EI and social anxiety while controlling for emotion-focused coping was not zero, $\beta = -.35, p < .001$. Thus, emotion-focused coping partially mediated the relationship between EI and social anxiety. The amount of mediation is $\beta_{Indirect\ Effect} = .10$. According to a Sobel's test, this partially mediated effect was statistically significant ($z = 1.85, p = .03$ (one-tailed)).

A Baron and Kenny test of mediation (1986) was conducted to examine if emotion-focused coping mediated the relationship between Emotional Intelligence (causal variable) and depression (outcome variable). Step 1 examined if there is a relationship between the causal variable and the outcome variable. Results indicate that as EI increased depression decreased, $\beta = -.27, p < .05$. Step 2 tested if there is a relationship between the causal and the potential mediator. Results show that as EI increased so did the use of emotion-focused coping, $\beta = .27, p < .05$. Step 3 then examined if there is a relationship between the potential mediator and the outcome variable while controlling the causal variable. Results show that the relationship between emotion-focused coping and depression was statistically significant while controlling for EI, $\beta = .19, p < .05$. As emotion-focused coping increased, depression increased (Figure 8).

Finally, Step 4 tested whether the relationship between the causal variable and the outcome variable while controlling the mediator is zero (Kenny, 2014). Results indicate that the relationship between EI and depression while controlling for emotion-focused coping was not zero, $\beta = -.33, p = .001$. Thus, emotion-focused coping partially mediated

the relationship between EI and depression. The amount of mediation is $\beta_{Indirect\ Effect} = .03$. According to a Sobel's test, this partially mediated effect was statistically significant ($z = 1.69, p = .05$ (one-tailed)).

Discussion

This paper examined the relationship between coping styles (problem-focused, emotion-focused, and avoidant coping), emotional intelligence and symptoms of depression and social anxiety. Models of mediation were used to examine coping styles as a potential mediator of the relationship between emotional intelligence and symptoms of psychopathology (depression and social anxiety). The following discussion is based on these findings.

Coping and psychopathology

It was predicted that avoidant coping would be positively correlated with symptoms of both depression and social anxiety. This claim was based on numerous studies that found significant relationships between the use of avoidant coping strategies and symptoms of depression and social anxiety (Holahan et al., 2005; Penland et al, 2000; Sherbourne, Hays, & Wells, 1995; Thomasson & Psouni, 2010). Results from this study further support this relationship. Positive correlations were obtained between avoidant coping and symptoms of social anxiety and depression. Individuals with social anxiety often avoid social situations which prevent them from dealing with their fears and disconfirming their belief about the feared situation (Salkovskis, Clark, Hackmann, Wells, & Gelder, 1999). Similarly, individuals with depression use more avoidant coping strategies which may maintain their depression (Holahan, Olan, Brennan, & Schutte, 2005). By avoiding the source of stress, individuals may receive temporary relief; however, the individual's situation remains unchanged as the source of stress is still present.

Conversely, problem-focused coping has been associated with well-being and fewer symptoms of depression and social anxiety (Chao, 2011; Gal & Lazarus, 1975; Julal, 2013). However, results from this study do not support previous findings. Correlations between problem-focused coping and symptoms of both depression and social anxiety were not found to be significant. We can speculate that this failure to achieve significance may be related to the type of stressors faced by this college student sample. Problem-focused coping has generally been considered to be the more effective way to cope; however, the effectiveness of these strategies may be dependent on the potential changeability of the stressor. This type of coping involves the individual taking control of the situation and modifying or removing the stressor to improve the situation. However, if the source of the stressor is beyond the control of the individual, problem-focused coping may not be an effective way to manage the stressor (Caver, 2011). For example, the rising cost of education or the death of a family member are unchangeable stressors. In addition, attempting to utilize problem-focused strategies to solve problems that are beyond the control of the individual may increase time spent thinking about the stressor, which in turn can be detrimental to the individual's mental health.

Emotional intelligence and psychopathology

Previous research has demonstrated a link between low levels of emotional intelligence and psychopathology (Batool & Khalid, 2009; Downey, et al., 2008; Fernández-Berrocal et al., 2006; Summerfeldt, et al., 2001; Onur, Alkın, Sheridan, & Wise, 2013). Findings from this study are consistent with previous studies. Emotional intelligence was correlated negatively with depression and social anxiety. Therefore, results seem to support the hypothesis that higher levels of emotional intelligence protect

the individual from developing problems with well-being. It becomes apparent that emotional competencies are crucial to mental health when you observe such a prominence of emotional disturbances in a majority of mental disorders (Kring & Bachorowski, 1999).

The direction of the relationship between emotional intelligence and symptoms of depression and social anxiety cannot be verified due to the correlational nature of the study. Therefore, there is a possibility that the direction of the relationship is the reverse of what was hypothesized and it is symptoms of psychopathology that affect the person's emotional intelligence. For example, in depressed patients a negativity bias has been found (Ridout, Astell, Reid, Glan, & O'Carroll, 2003). This bias to focus on negative information may inhibit depressed individuals from perceiving and understanding the full range of their emotions, which in turn is reflected in their emotional intelligence scores. On the other hand, this negativity bias may be the result of poor emotional intelligence skills which prevents the individual from perceiving, understanding, and managing their positive emotions adaptively. Positive emotions are necessary to broaden habitual ways of thinking and acting which can be used in future threatening situations, whereas negative emotions foster action tendencies that promote survival such as escape or attack (Fredrickson, 2001). In the context of the present study, this excess of negative emotions may lead to a coping style that promotes avoidance and prevents the development of more adaptive coping styles due to the absence of positive emotions. Consequently, this coping style may contribute to symptoms of psychopathology.

Coping style as a mediator

The purpose of this study was to determine whether coping styles served as a mediator for the relationship between emotional intelligence and psychopathology. Literature pointed to a possible mediating effect of coping styles in the relationship between EI and psychopathology (Matthews and Zeidner, 2000; Keefer, Parker, & Saklofske, 2009). To some extent, results support this assertion.

The use of avoidant coping strategies partially mediated the relationship between emotional intelligence and symptoms of depression and social anxiety. This sequence of events is consistent with Matthews and Zeidner's (2000) postulation that emotional intelligence influences the selection of coping strategies. An individual who has difficulty understanding and analyzing their emotions is more likely to select a maladaptive coping strategy such as denial and alcohol or other drug use which in turn may negatively affect their emotional well-being.

The use of problem-focused coping was hypothesized to mediate the relationship between emotional intelligence and symptoms of depression and social anxiety by positively correlating with emotional intelligence and negatively correlating with symptoms of psychopathology. Problem-focused coping partially mediated the relationship between emotional intelligence and symptoms of depression, but not social anxiety. However, these results should be considered with caution as the relationship between problem-focused coping and symptoms of depression and social anxiety was not consistent with current literature. This relationship is difficult to interpret because problem-focused coping was found to be positively related to depression, while it mediates a negative relationship between emotional intelligence and depression. Perhaps

the current sample did not use sufficient problem-focused coping strategies to produce associations seen in the literature. It is also possible that the significant positive correlation between avoidant coping and problem-focused coping confounded the results. That means that a significant number of participants endorsed both avoidant coping and problem-focused coping as characteristic ways that they cope. However, it is likely that these results are indicative of possible suppression and the existence of other variables influencing the relationship that were not included in the mediation model. Future research should also test the model in reverse which may offer a better fit for the mediated model.

Similar mediating results were observed with emotion-focused coping. The similar pattern of results observed between problem-focused and emotion-focused coping provides support for the notion that the two coping styles are intertwined and typically co-occur (Carver & Scheier, 1994).

Therefore, although the results regarding adaptive coping are inconclusive, the link between emotional intelligence, maladaptive coping, and psychopathology is apparent. Lower emotional intelligence is associated with the use of maladaptive coping, which is linked to an increase in symptoms of social anxiety and depression.

Clinical Implications

Though the results obtained are not definitive due to the correlational research design, there are several implications that can be drawn from this study. This study supports current literature proposing emotional intelligence as a protective factor against psychopathology. From a functionalist perspective this relationship makes sense. Emotions guide behavior and they are used as information to help the individual achieve

goals (Brenner & Salovey, 1997). Therefore, deficits in emotional intelligence would have a negative effect on the individual's ability to make goal-directed decisions.

Although it has not been confirmed that this relationship is causal, interventions aimed at improving emotional intelligence can be used to further prevent and treat mental illness. Training to improve emotional intelligence has already been encouraged in the fields of education and business (Cobb & Mayer, 2000; Kunnanatt, 2004; Massari, 2011). These activities should be improved and supported given the benefits reported.

In addition, the current study provides support for the notion that poor emotional intelligence skills affect the development or selection of adaptive coping strategies. While not conclusive, the results obtained in this study offer a more concrete understanding of how emotional intelligence and coping styles are related to the development or maintenance of mental illness. Thus, rather than focus on improving either emotional intelligence or coping skills, interventions should be developed that improve both skills. In doing so, the individual can increase their emotional intelligence while learning adaptive ways to cope.

In addition, if deficits in emotional intelligence are a risk factor for the development of mental illness by preventing the development of adaptive coping strategies as results from this study suggest, then low emotional intelligence scores can be used to identify individuals at risk. Identifying these individuals early can allow for targeted interventions that improve their emotional intelligence and coping styles before they develop a maladaptive style of coping that may continue into adulthood (Compas et al., 2001).

Limitations

The current study has some limitations worth mentioning. The study uses self-report scales which rely on recollection which is not always accurate due to factors such as lack of motivation and social desirability bias. In addition, the response time documented was highly variable; while it took some participants 10 minutes to complete all the scales, others took 3 hours. Although anyone completing the scales in less than 10 minutes was removed from analyses, there was still a wide range of times recorded which raises the question of the accuracy of the responses.

Due to the design limitations of this study, results can only be used as an illustration that a relationship exists between the three constructs (emotional intelligence, coping styles, symptoms of psychopathology) rather than to demonstrate a causal relationships between the variables. The cross-sectional design used in the study does not allow for a definitive understanding of the nature of this relationship. It is possible that causality is reversed and it is psychopathology that effects the coping style used by the individual instead of emotional intelligence. The current study was exploratory and further research should use an experimental approach to further understand this relationship.

In addition, due to the discrepancy of a portion of the results with previous research, replication is necessary to determine whether the discrepancy was a result of the sample used or whether this study has uncovered a previously undiscovered relationship that requires further attention.

Suggestions for future research

Due to the large number of available scales for emotional intelligence, coping, and psychopathology based on different theoretical conceptualizations, it is recommended that future research use different measures to compare results. In particular, the current study focuses on trait EI, however there is a separate body of literature on ability EI that could be explored in relation to coping and psychopathology. In addition, EI was measured by a global score. This global score was appropriate for the present study which aimed to examine whether a general mediating relationship existed between coping styles, EI, and psychopathology. However, now that it has been shown that a mediating effect exists, future research should focus on specific domains of EI and their relationship with coping and psychopathology. This specificity will increase understanding of this relationship and create more focused interventions.

Conclusion

Emotional problems are a core symptom of various mental illnesses. It is therefore not surprising that a construct that deals with competencies related to perceiving, understanding, and managing one's emotions is related to mental illness. This study aimed to further understand the relationship between emotional intelligence and symptoms of psychopathology by introducing coping as a potential mediator. Results from this study seem to suggest that maladaptive coping strategies such as denial mediate this relationship. It is likely that an individual who has low emotional intelligence uses avoidant coping and experiences either depressive or social anxiety symptoms. Although results are preliminary due to the design method, it is suggested that educational programs and psychotherapy incorporate interventions aimed at improving emotional

intelligence competencies and coping strategies during childhood or adolescence to protect the individual from developing maladaptive coping styles which may follow them into adulthood.

References

- Aderka, I. M., Haker, A., Marom, S., Hermesh, H., & Gilboa-Schechtman, E. (2013). Information-seeking bias in social anxiety disorder. *Journal of Abnormal Psychology, 122*(1), 7-12. doi:10.1037/a0029555
- Aldwin, C. M., & Revenson, T. A. (1987). Does coping help? A reexamination of the relation between coping and mental health. *Journal of Personality and Social Psychology, 53*(2), 337-348. doi:10.1037/0022-3514.53.2.337
- Austin, E. J., Saklofske, D. H., & Mastoras, S. M. (2010). Emotional Intelligence, coping, and exam-related stress in Canadian undergraduate students. *Australian Journal of Psychology, 62*(1), 42-50. doi:10.1080/00049530903312899
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory (EQ-i): A test of emotional intelligence*. Toronto, Ontario, Canada: Multi-Health Systems.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173-1182. doi:10.1037/0022-3514.51.6.1173
- Bastian, V., Burns, N. R., & Nettlebeck, T. (2005). Emotional Intelligence predicts life skills, but not as well as personality and cognitive abilities. *Personality and Individual Differences, 39*, 1135-1145. doi:10.1016/j.paid.2005.04.006

- Batool, S. S., & Khalid, R. (2009). Low emotional intelligence: A risk factor for depression. *Journal of Pakistan Psychiatric Society*, 6(2), 65-72.
- Billings, A. G., & Moos, R. H. (1984). Coping, stress, and social resources among adults with unipolar depression. *Journal of Personality and Social Psychology*, 46(4), 877-891. doi:10.1037/0022-3514.46.4.877
- Billings, A. G., Cronkite, R. C., & Moos, R. H. (1983). Social-environmental factors in unipolar depression: Comparisons of depressed patients and nondepressed controls. *Journal of Abnormal Psychology*, 92(2), 119-133. doi:10.1037/0021-843X.92.2.119
- Brackett, M. A., & Geher, G. (2006). Measuring emotional intelligence: Paradigmatic diversity and common ground. In Ciarrochi, P. Forgas, & D. Mayer (Eds.), *Emotional Intelligence in Everyday Life* (pp. 27-50). New York: Psychology Press.
- Brackett, M., & Mayer, J. D. (2003). Convergent, discriminant and incremental validity of competing measures of emotional intelligence. *Personality and Social Psychology*, 1147-1158. doi:10.1177/0146167203254596
- Brenner, E. S., & Salovey, P. (1997). Emotion regulation during childhood: Developmental, interpersonal, and individual considerations. In J. P. Salovey, & D. J. Sluyter (Eds.), *Emotional Development and Emotional Intelligence: Educational implications* (pp. 186-192). New York: Basic.

- Campbell, A., & Ntobedzi, A. (2007). Emotional Intelligence, Coping and Psychological Distress: A Partial Least Squares Approach to Developing a Predictive Model. *Electronic Journal of Applied Psychology*, 3(1), 39-54.
doi:10.1080/13598130600617589
- Carver, C. C., Scheier, M. F., & Pozo, C. (1992). Conceptualizing the Process of Coping With Health Problems. In H. S. Friedman (Ed.), *Hostility, Coping, and Health* (pp. 167-187). Washington, DC: American Psychological Association.
doi:10.1037/10105-012
- Carver, C. S. (2011). Coping. In R. J. Contrada, & A. Baum (Eds.), *The handbook of stress science: Biology, psychology, and health* (pp. 221-229). New York: Springer Publishing Company.
- Carver, C. S., & Scheier, M. F. (1994). Situational coping and coping dispositions in a stressful transaction. *Journal of Personality and Social Psychology*, 66(1), 184-195. doi:10.1037/0022-3514.66.1.184
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing Coping Strategies: A Theoretical Based Approach. *Journal of Personality and Social Psychology*, 56(2), 267-283. doi:10.1037/0022-3514.56.2.267
- Chao, R. C.-L. (2011). Managing Stress and Maintaining Well-Being: Social Support, Problem-Focused Coping, and Avoidant Coping. *Journal of Counseling & Development*, 89(3), 338-348.

Cobb, C., & Mayer, J. D. (2000). Emotional Intelligence What the Research Says.

Educational Leadership, 58(3), 14-18.

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Harding-Thomsen, A., & Wadsworth,

M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, 127, 87-127. doi:10.1037/0033-2909.127.1.87

Cote, S., Gyurak, A., & Levenson, R. W. (2010). The ability to regulate emotion is

associated with greater well-being, income, and socioeconomic status. *Emotion*, 10(6), 923-933. doi:10.1037/a0021156

Deacon, B., & Maack, D. J. (2008). The effects of safety behaviors on the fear of

contamination: An experimental investigation. *Behaviour Research and Therapy*, 46(4), 537-547. doi:10.1016/j.brat.2008.01.010

Downey, L. A., Johnston, P. J., Hansen, K., Birney, J., & Stough, C. (2010). Investigating

the mediating effects of emotional intelligence and coping on problem behaviours in adolescents. *Australian Journal of Psychology*, 62(1), 20-29. doi:10.1080/00049530903312873

Downey, L. A., Johnston, P. J., Hansen, K., Schembri, R., Stough, C., Tuckwell, V., &

Schweitzer, I. (2008). The relationship between emotional intelligence and depression in a clinical sample. *The European Journal of Psychiatry*, 22(2), 93-98. doi:10.4321/S0213-61632008000200005

- Fernandez, R., Salamonson, Y., & Griffiths, R. (2012). Emotional intelligence as a predictor of academic performance in first-year accelerated graduate entry nursing students. *Journal of Clinical Nursing, 21*(23/24), 3485-3492.
doi:doi:10.1111/j.1365-2702.2012.04199.x
- Fernández-Berrocal, P., Alcaide, R., Extremera, N., & Pizarro, D. (2006). The Role of Emotional Intelligence in Anxiety and Depression among Adolescents. *Individual Differences Research, 4*, 16-27.
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*, 219-239.
doi:10.2307/2136617
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218-226. doi:10.1037/0003-066X.56.3.218
- Gal, R., & Lazarus, R. S. (1975). The role of activity in anticipating and confronting stressful situations. *Journal of Human Stress, 1*(4), 4-20.
doi:10.1080/0097840X.1975.9939548
- Gardener, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Geher, G. (Ed.). (2004). *Measuring Emotional Intelligence*. New York: Nova Science Publishers.
- Goleman, D. (1995). *Emotional Intelligence*. New York: Bantam.

Goplerud, E. N. (1980). Social support and stress during the first year of graduate school.

Professional Psychology, 11(2), 283-290. doi:10.1037/0735-7028.11.2.283

Gutiérrez, F., Peri, J. M., Torres, X., Caseras, X., & Valdés, M. (2007). Three dimensions of coping and a look at their evolutionary origin. *Journal of Research in Personality, 41*(5), 1032-1053. doi:10.1016/j.jrp.2007.01.006

Personality, 41(5), 1032-1053. doi:10.1016/j.jrp.2007.01.006

Hansen, K., Lloyd, J., & Stough, C. (2009). Emotional Intelligence and clinical disorders.

In C. Stough, D. H. Saklofske, & J. D. Parker (Eds.), *Assessing Emotional Intelligence* (pp. 219-237). New York: Springer.

Heimberg, R. G., Mueller, G. P., Holt, C. S., Hope, D. A., & Liebowitz, M. R. (1992).

Assessment of anxiety in social interaction and being observed by others: The Social Interaction Anxiety Scale and the Social Phobia Scale. *Behavior Therapy, 23*(1), 53-73. doi:10.1016/S0005-7894(05)80308-9

Helbig-Lang, S., & Petermann, F. (2010). Tolerate or Eliminate? A Systematic Review on the Effects of Safety Behavior Across Anxiety Disorders. *Clinical Psychology: Science & Practice, 17*(3), 218-233. doi: doi:10.1111/j.1468-2850.2010.01213.x

Science & Practice, 17(3), 218-233. doi: doi:10.1111/j.1468-2850.2010.01213.x

Holahan, C. J., Olan, C. K., Brennan, P. L., & Schutte, K. K. (2005). Stress Generation,

Avoidance Coping, and Depressive Symptoms: A 10-Year Model. *Journal of Consulting and Clinical Psychology, 73*(4), 658-666. doi:10.1037/0022-

006X.73.4.658

006X.73.4.658

Julal, F. S. (2013). Use of student support services among university students:

associations with problem-focused coping, experience of personal difficulty and

psychological distress. *British Journal of Guidance & Counselling*, 41(4), 414-425. doi:10.1080/03069885.2012.741680

Keefer, K. V., Parker, J. D., & Saklofske, D. H. (2009). Emotional intelligence and physical health. In C. Stough, D. H. Saklofske, & J. D. Parker (Eds.), *Assessing emotional intelligence: Theory, research, applications* (pp. 191-218). New York: Springer.

Kenny, D. A. (2014). *Mediation*. Retrieved from <http://davidakenny.net/cm/mediate.htm>

Kolenc, K. M., & And, O. (1990). The Relationship of Mild Depression to Stress and Coping. *Journal of Mental Health Counseling*, 12(1), 76-92. doi:10.1080/10439892.1990.10558281

Kotzé, M., & Venter, I. (2010). Emotional Intelligence as a Predictor of Leadership Effectiveness in the Work Place: An Empirical Study. *International Journal of the Humanities*, 8(2), 31-49.

Kring, A., & Bachorowski, J. (1999). Emotions and Psychopathology. *Cognition & Emotion*, 15(5), 575-599. doi:10.1080/026999399379195

Kunnanatt, J. (2004). Emotional Intelligence: The New Science of Interpersonal Effectiveness. *Human Resource Development Quarterly*, 14(4), 489-495.

Lazarus, R. S. (1996). The role of coping in the emotions and how coping changes over the life course. In C. Maletesta-Magni, & S. H. McFadden (Eds.), *Handbook of emotion, adult development, and aging* (pp. 289-306). New York: Academic Press.

Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer.

Lizeretti, N. P., Extremera, N., & Rodriguez, A. (2012). Perceived Emotional Intelligence and Clinical Symptoms in Mental Disorders. *The Psychiatric Quarterly*, 83, 407-418. doi:10.1007/s11126-012-9211-9

Lyne, K., & Roger, D. (2000). A psychometric re-assessment of the COPE questionnaire. *Personality and Individual Differences*, 29(2), 321-335. doi:doi:10.1016/S0191-8869(99)00196-8

MacCann, C., Fogarty, G. J., Zeidner, M., & Roberts, R. D. (2011). Coping mediates the relationship between emotional intelligence (EI) and academic achievement. *Contemporary Educational Psychology*, 36(1), 60-70. doi:doi:10.1016/j.cedpsych.2010.11.002

Malouff, J. M., Schutte, N. S., & Thorsteinsson, E. B. (2014). Trait Emotional Intelligence and Romantic Relationship Satisfaction: A Meta-Analysis. *American Journal of Family Therapy*, 42(1), 53-66. doi:doi:10.1080/01926187.2012.748549

Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between emotional intelligence and health. *Personality and Individual Differences*, 49(6), 554-564. doi:10.1016/j.paid.2010.05.029

Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between Emotional Intelligence and health. *Personality & Individual Differences*, 49(6), 554-564. doi:10.1016/j.paid.2010.05.029

Massari, L. (2011). Teaching Emotional Intelligence. *Leadership*, 4(5), 8-12.

Matthews, G., & Zeidner, M. (2000). Emotional Intelligence, adaptation to stressful encounters, and health outcomes. In R. Bar-On, & J. M. Parker (Eds.), *Handbook of Emotional Intelligence* (pp. 459-489). New York: Jossey-Bass.

Matthews, G., Zeidner, M., & Roberts, R. D. (2002). *Emotional Intelligence: Science and Myth*. Cambridge, MA: MIT Press.

Mattick, R. P., & Clarke, J. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. *Behaviour Research and Therapy*, 36(4), 455-470. doi:10.1016/S0005-7967(97)10031-6

Mayer, J. D., & Salovey, P. (1997). What is Emotional Intelligence. In P. Salovey, & D. J. Sluyter (Eds.), *Emotional Development and Emotional Intelligence* (pp. 3-31). New York : Basic Books.

Mayer, J. D., Roberts, R. D., & Barsade, S. G. (2008). Human abilities: Emotional Intelligence. *Annual Review of Psychology*, 59, 507-536.
doi:10.1146/annurev.psych.59.103006.093646

Mayer, J. D., Salovey, P., & Caruso, D. R. (2000). Models of emotional intelligence. In R. J. Sternberg, *Handbook of Intelligence* (pp. 392-420). Cambridge, England: Cambridge University Press.

McWilliams, L. A., Cox, B. J., & Enns, M. W. (2003). Use of the Coping Inventory for Stressful Situations in a clinically depressed sample: Factor structure, personality

correlates, and prediction of distress. *Journal of Clinical Psychology*, 59(4), 423-437.

Mikolajczak, M., Nelis, D., Hansenne, M., & Quoidbach, J. (2008). If you can regulate sadness, you can probably regulate shame: Associations between trait emotional intelligence, emotion regulation and coping efficiency across discrete emotions. *Personality & Individual Differences*, 44(6), 1356-1368.
doi:doi:10.1016/j.paid.2007.12.004

Moos, R. H., & Schaefer, J. A. (1993). Coping resources and processes: Current concepts and measures. In L. Goldberger, & S. Breznitz (Eds.), *Handbook of stress: Theoretical and clinical aspects. 2nd edition* (pp. 234–257). New York: Free Press.

Noh, S., & Kaspar, V. (2003). Perceived Discrimination and Depression: Moderating Effects of Coping, Acculturation, and Ethnic Support. *American Journal of Public Health*, 93(2), 232-238.

Onur, E., Alkin, T., Sheridan, M., & Wise, T. (2013). Alexithymia and Emotional Intelligence in Patients with Panic Disorder, Generalized Anxiety Disorder and Major Depressive Disorder. *Psychiatric Quarterly*, 83(3), 303-311.
doi:10.1007/s11126-012-9246-y

Parker, J. A., & Endler, N. S. (1992). Coping with coping assessment: a critical review. *European Journal of Personality*, 6(5), 321-344.

Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior*, *19*, 2-21. doi:10.2307/2136319

Penland, E. A., Masten, W. G., Zelhart, P., Fournet, G. P., & Callahan, T. A. (2000). Possible selves, depression and coping skills in university students. *Personality and Individual Differences*, *29*(5), 963-969. doi:10.1016/S0191-8869(99)00247-0

Penley, J. A., Tomaka, J., & Wiebe, J. S. (2002). The Association of Coping to Physical and Psychological Health Outcomes: A Meta-Analytic Review. *Journal of Behavioral Medicine*, *25*(6), 551-603.

Perez, J. C., Petrides, K. V., & Furnham, A. (2005). Measuring Trait Emotional Intelligence. In R. Schulze, & R. DRoberts (Eds.), *Emotional intelligence: An international handbook* (pp. 181-201). Ashland, OH, US: Hogrefe & Huber Publishers.

Peters, L. (2000). Discriminant validity of the Social Phobia and Anxiety Inventory (SPAI), the Social Phobia Scale (SPS) and the Social Interaction Anxiety Scale (SIAS). *Behaviour Research & Therapy*, *38*(1), 943-950. doi:10.1016/S0005-7967(99)00131-X

Petrides, K. V. (2011). Ability and trait emotional intelligence. In T. Chamorro-Premuzic, A. Furnham, & S. von Stumm (Eds.), *The Blackwell-Wiley Handbook of Individual Differences* (pp. 656-678). New York: Wiley.

- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality, 15*, 425-448. doi:10.1002/per.416
- Petrides, K. V., Furnham, A., & Mavroveli, S. (2007). Trait Emotional Intelligence: Moving forward in the Field of EI. In G. Matthews, M. Zidner, & R. D. Roberts (Eds.), *The Science of Emotioanl Intelligence: Knowns and Unknowns* (pp. 151-166). New York: Oxford University Press.
- Petrides, K. V., Niven, L., & Mouskounti, T. (2006). The trait emotional intelligence of ballet dancers and musicians. *Psicothema, 18*, 101-107.
- Petrides, K. V., Pérez-González, J., & Furnham, A. (2007). On the criterion and incremental validity of trait emotional intelligence. *Cognition & Emotion, 21*(1), 26-55. doi:10.1080/02699930601038912
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*(3), 385-401. doi:10.1177/014662167700100306
- Repetti, R. L. (1992). Social Withdrawal as a Short-Term Coping Response to Daily Stressors. In H. S. Friedman (Ed.), *Hostility, Coping, and Health* (pp. 151-165). Washington, DC: American Psychological Association.
- Ridout, N., Astell, A. J., Reid, I. C., Glen, T., & O'Carroll, R. E. (2003). Memory bias for emotional facial expressions in major depression. *Cognition & Emotion, 17*(1), 101-122.

- Rosenberg, S. J., P. R., & Hayes, J. R. (1987). Coping behaviors among depressed and nondepressed medical inpatients. *Journal of Psychosomatic Research*, *31*(5), 653-658. doi:10.1016/0022-3999(87)90045-6
- Salkovskis, P. M., Clark, D. M., Hackmann, A., Wells, A., & Gelder, M. G. (1999). An experimental investigation of the role of safety-seeking behaviours in the maintenance of panic disorder with agoraphobia. *Behaviour Research And Therapy*, *37*(6), 559-574. doi:10.1016/S0005-7967(98)00153-3
- Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition, and Personality*, *9*, 185-211.
- Salovey, P., Bedell, B. T., Detweiler, J. B., & Mayer, J. D. (1999). Coping Intelligently: Emotional Intelligence and the Coping Process. In C. R. Snyder (Ed.), *Coping: The psychology of what works* (pp. 141-164). New York: Oxford University Press.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1988). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, *25*, 167-177. doi:10.1111/j.1752-0606.2011.00233.x.
- Schutte, N. S., Malouff, J. M., Simunek, M., McKenley, J., & Hollander, S. (2002). Characteristic emotional intelligence and emotional well-being. *Cognition & Emotion*, *16*(6), 769-785. doi: 10.1080/02699930143000482.

Schutte, N. S., Malouff, J. M., Thorsteinsson, E. B., Bhullar, N., & Rooke, S. E. (2007).

A meta-analytic investigation of the relationship between emotional intelligence and health. *Personality and Individual Differences*, *42*, 921-933.

doi:10.1016/j.paid.2006.09.003

Schutte, N., Malouff, J. M., & Hine, D. W. (2001). The association of ability and trait

emotional intelligence with alcohol problems. *Addiction Research and Theory*, *19*(3), 260-265. doi:10.3109/16066359.2010.512108.

Sherbourne, C., Hays, R. D., & Wells, K. B. (1995). Personal and psychosocial risk

factors for physical and mental health outcomes and course of depression among depressed patients. *Journal Of Consulting and Clinical Psychology*, *63*, 345-355.

doi:10.1037/0022-006X.63.3.345

Skinner, E. A., & Zimmer-Gembeck, M. J. (2007). The development of coping. *Annual*

Review, *58*, 119-144. doi:10.1186/1472-6874-14-1

Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure

of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin*, *129*(2), 216-269. doi:10.1037/0033-

2909.129.2.216

Suls, J., & Fletcher, B. (1985). The relative efficacy of avoidant and nonavoidant coping

strategies: A meta-analysis. *Health Psychology*, *4*(3), 249-288. doi:10.1037/0278-6133.4.3.249

- Summerfeldt, L. J., Kloosterman, P. H., Antony, M. M., McCabe, R. E., & Parker, J. A. (2001). Emotional Intelligence in Social Phobia and Other Anxiety Disorders. *Journal of Psychopathology & Behavioral Assessment*, 33(1), 69-78. doi:10.1007/s10862-010-9199-0
- Taylor, G. (2001). Low Emotional Intelligence and Mental Illness. In J. P. Joseph Ciarrochi (Ed.), *Emotional Intelligence in Everyday Life: A Scientific Inquiry* (pp. 67-81). New York: Psychology Press.
- Thomasson, P., & Psouni, E. (2010). Social anxiety and related social impairment are linked to self-efficacy and dysfunctional coping. *Scandinavian Journal of Psychology*, 51(2), 171-178. doi:10.1111/j.1467-9450.2009.00731.x
- Wells, A., & Clark, D. M. (1997). Social Phobia: a Cognitive Approach. In G. C. Davey (Ed.), *Phobias: A handbook of Theory, Research, and Treatment* (pp. 3-26). New York: John Wiley & Sons.
- Zeidner, M., & Saklofske, D. (1996). Adaptive and Maladaptive coping. In M. Z. Endler, M. Zeidner, & N. S. Endler (Eds.), *Handbook of coping: Theory, research, application* (pp. 505-531). John Wiley & Sons.
- Zeidner, M., Matthews, G., & Roberts, R. D. (2006). Emotional intelligence, coping and stress, and adaptation . In J. Ciarrochi, J. Forgas, & J. D. Mayer (Eds.), *Emotional intelligence in everyday life* (pp. 100-125). Philadelphia, PA: Psychology Press.
- Zich, J. M., Attkisson, C., & Greenfield, T. K. (1990). Screening for depression in primary care clinics: The CES-D and the BDI. *International Journal Of*

Psychiatry In Medicine, 20(3), 259-277. doi:10.2190/LYKR-7VHP-YJEM-

MKM2

Table 1

Descriptive Statistics and Internal Consistency of various measures

| Measure | <i>M</i> | <i>SD</i> | Chronbach's α | Skewness | Kurtosis |
|---------------------------------------|----------|-----------|----------------------|----------|----------|
| SIAS | 24.38 | 14.26 | 0.93 | .49 | -.42 |
| SPS | 18.91 | 14.17 | 0.932 | .67 | -.25 |
| CES-D | 17.25 | 10.06 | 0.90 | .50 | -.52 |
| EIS | 127.2 | 14.88 | 0.90 | -.07 | -.25 |
| COPE | | | | | |
| Acceptance | 11.27 | 2.68 | 0.76 | .12 | -.85 |
| Active coping | 10.45 | 5.7 | 0.71 | -.08 | .18 |
| Behavioral disengagement | 6.93 | 2.33 | 0.71 | .75 | -.19 |
| Denial | 7.21 | 2.99 | 0.84 | .90 | .35 |
| Emotional Social Support | 9.94 | 3.06 | 0.80 | .10 | -.64 |
| Instrumental support | 10.4 | 2.88 | 0.76 | .05 | -.52 |
| Mental disengagement | 10.26 | 2.28 | 0.40 | -.21 | .16 |
| Planning | 11.23 | 2.25 | 0.63 | .09 | -.24 |
| Positive re-interpretation and growth | 12.01 | 2.44 | 0.70 | -.346 | -.52 |
| Restraint coping | 9.98 | 2.22 | 0.60 | .19 | .59 |
| Substance use | 6.53 | 10.71 | 0.91 | 1.32 | .95 |
| Suppression of competing activities | 9.73 | 1.99 | 0.49 | -.138 | -.21 |
| Problem-focused coping | 64.67 | 9.83 | 0.89 | .10 | -.43 |
| Avoidant coping | 30.93 | 7.7 | 0.84 | .63 | .48 |
| Emotion-focused coping | 20.34 | 5.5 | 0.87 | .13 | -.50 |

Note. CES-D = Center for Epidemiological Studies Depression Scale; SIAS = Social Interaction Anxiety Scale; SPS = Social Phobia Scale; EIS = Emotional Intelligence Scale

Table 2

Zero-order Correlations among main variables

| | CES-D | SIAS/SPS | EIS | Problem | Emotion | Avoidant |
|----------|--------|----------|--------|---------|---------|----------|
| CES-D | - | | | | | |
| SIAS/SPS | .53** | - | | | | |
| EIS | -.27** | -.29** | - | | | |
| Problem | .06 | -.02 | .42** | - | | |
| Emotion | .10 | .16 | .27** | .34** | - | |
| Avoidant | .59** | .47** | -.26** | .21* | .12 | - |

* $p < .05$ (2-tailed); ** $p < .001$ (2-tailed)

Note. CES-D = Center for Epidemiologic Studies Depression Scale; SIAS = Social Interaction Anxiety Scale; SPS = Social Phobia Scale; Problem = Problem-focused coping; Emotion = Emotion-focused coping; Avoidant = Avoidant coping

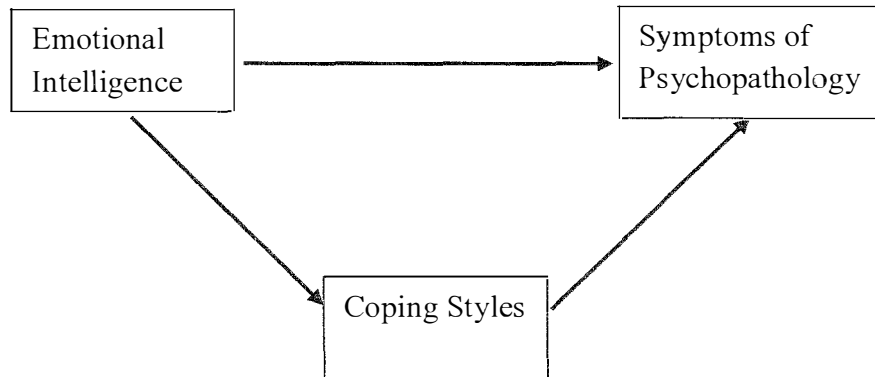


Figure 1. Hypothesized mediated model between emotional intelligence, symptoms of psychopathology, and coping styles.

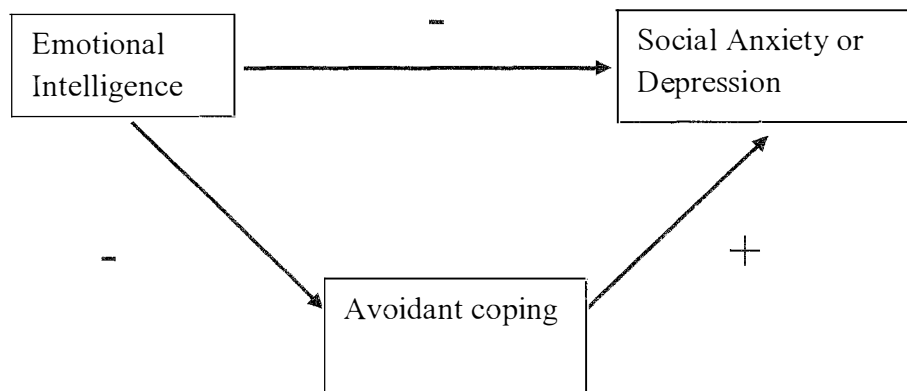


Figure 2. Hypothesized mediated model between emotional intelligence, avoidant coping, and symptoms of psychopathology

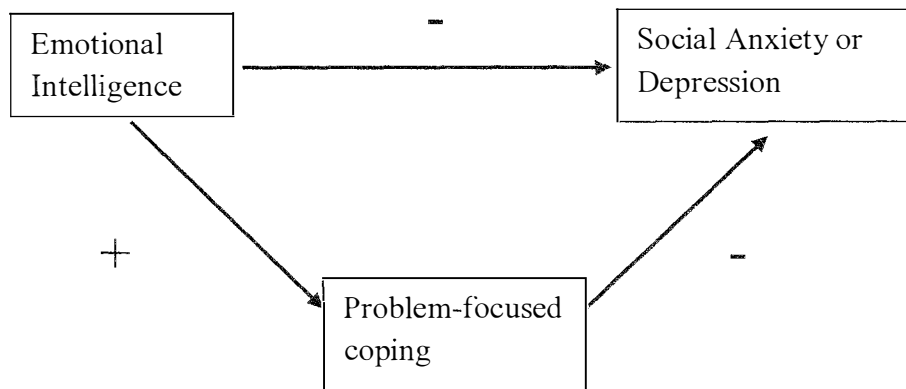


Figure 3. Hypothesized mediated model between emotional intelligence, problem-focused coping, and symptoms of psychopathology

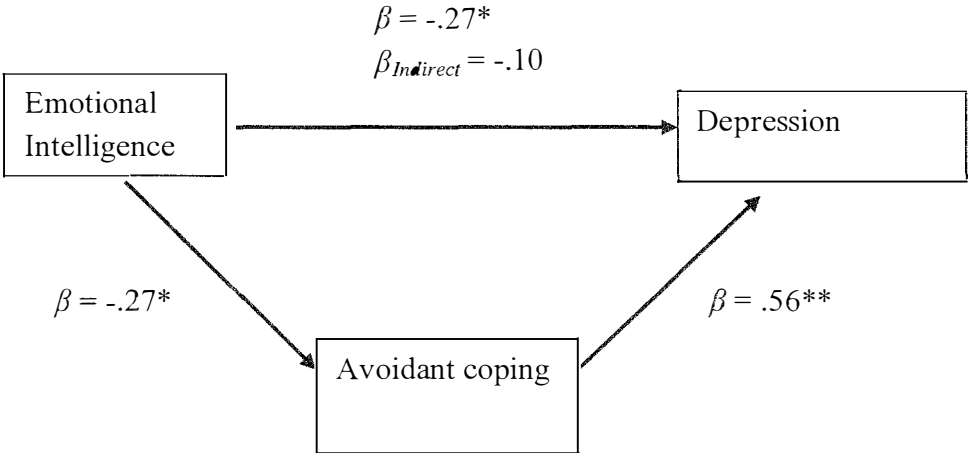


Figure 4. Mediated model between emotional intelligence and depression, as mediated by avoidant coping.

* $p < .05$; ** $p < .001$

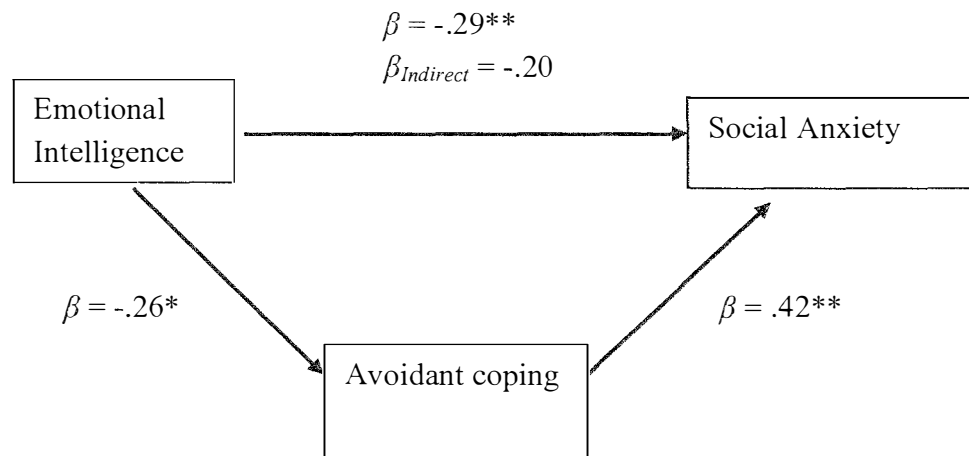


Figure 5. Mediated model between emotional intelligence and social anxiety, as mediated by avoidant coping.

* $p < .05$; ** $p < .001$

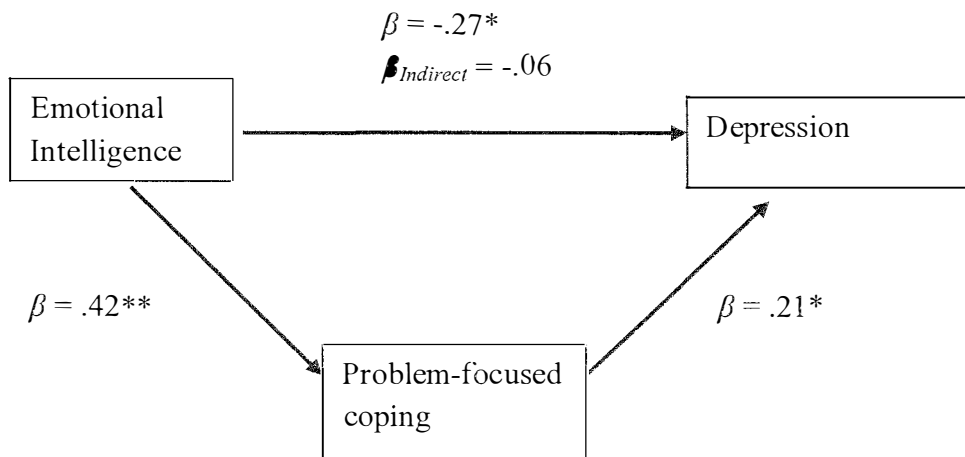


Figure 6. Mediated model between emotional intelligence and depression, as mediated by problem-focused coping.

* $p < .05$; ** $p < .001$

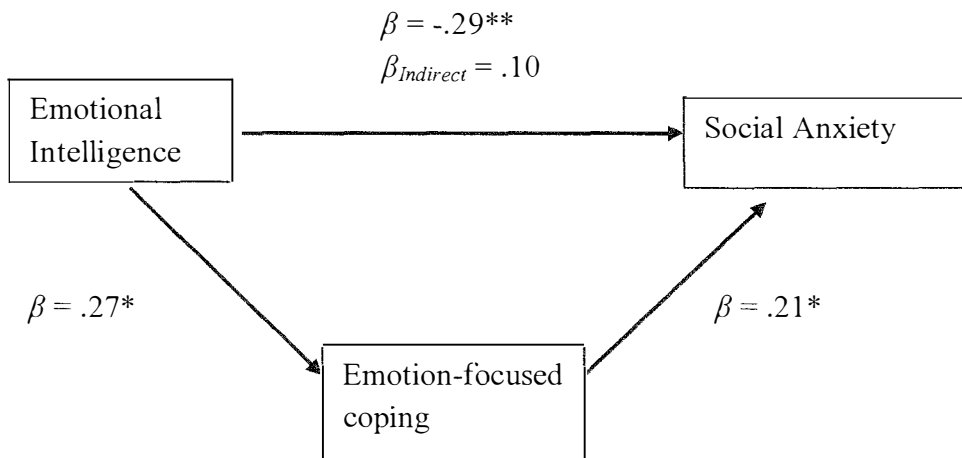


Figure 7. Mediated model between emotional intelligence and social anxiety, as mediated by emotion-focused coping.

* $p < .05$; ** $p < .001$

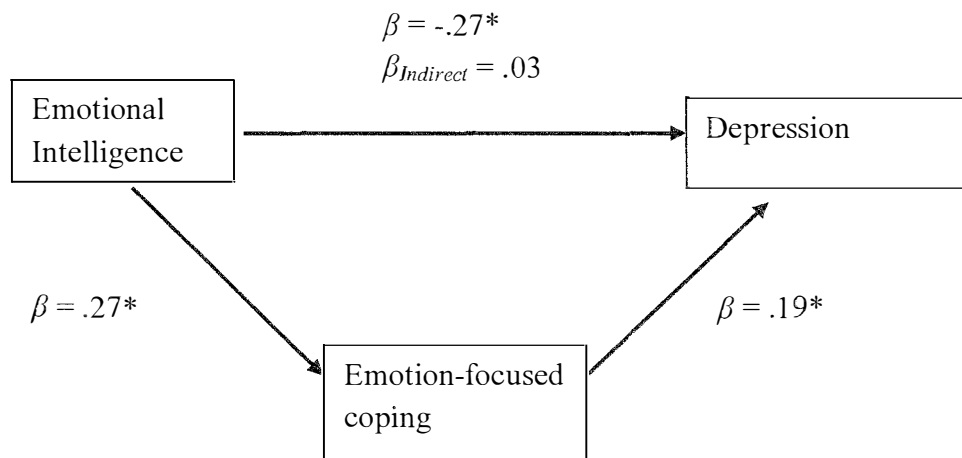


Figure 8. Mediated model between emotional intelligence and depression, as mediated by emotion-focused coping.

* $p < .05$; ** $p < .001$

Appendix A

Demographic Form

Please answer each question below. Some items require a written response while others require you to select one of the options provided.

Enter your age in years

- _____

What is your gender?

- Male
- Female

What is your racial background?

- White
- Black
- Hispanic
- Asian
- Other _____

What is your marital status

- Single
- Married
- Divorced
- Widowed
- Other _____

What year are you in?

- Freshman
- Sophomore
- Junior
- Senior
- Other _____

Are you employed (in addition to being a student)?

- Yes
- No

Have you ever received mental health treatment?

- Yes
- No