

**Managing Anxiety and Stress:
Yoga, Mindfulness and ACT Strategies and Techniques**

by

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Abstract

Stress and anxiety are two common experiences which can hinder and disrupt individuals lives. The purpose of this paper is to highlight effective psychotherapeutic techniques, such as yoga, mindfulness meditation (MM) and Acceptance and Commitment Therapy (ACT), that enable individuals to reduce the frequency and intensity of the experience of both stress and anxiety. Through investigative research of current data, this paper outlines the use of yoga, mindfulness and ACT on presenting symptoms of stress and anxiety in clients. This paper highlights techniques both in and out of the counseling room that can be utilized and practiced, which aid in the reduction of stress and anxiety symptoms. The research compiled in this paper is significant for counsellors, as well as individuals, as it highlights effective daily techniques and strategies, as well as therapeutic frameworks that are effective for those struggling with anxiety and stress in their daily life. The results of this research concluded that yoga, MM and ACT are all effective ways to treat and reduce the experience of both stress and anxiety.

Keywords: Anxiety, stress, yoga, mindfulness, ACT.

Contents

| | |
|---|-----|
| Acknowledgement | ii |
| Abstract | iii |
| Chapter 1: Introduction | 1 |
| Introduction..... | 1 |
| Statement of the Problem..... | 1 |
| Purpose of the Paper | 3 |
| Thesis Statement | 3 |
| Significance of the Study | 3 |
| Reflectivity and Positionality Statement..... | 4 |
| Definition of Terms..... | 5 |
| Acceptance and Commitment Therapy..... | 5 |
| Anxiety..... | 5 |
| Mindfulness..... | 6 |
| Stress | 6 |
| Yoga..... | 7 |
| Outline of the Remainder of the Paper | 8 |
| Chapter 2: Literature Review | 9 |
| Introduction..... | 9 |
| Yoga for Stress and Anxiety | 9 |
| What is Yoga?..... | 10 |

| | |
|---|----|
| Types of Yoga..... | 11 |
| Delivery Format | 12 |
| Effects of Yoga on Stress..... | 12 |
| Effects of Yoga on Anxiety | 14 |
| Relevance and Implications to Counselling..... | 15 |
| Y-CBT..... | 15 |
| Mindful Meditation and Mindfulness-Based Stress Reduction | 16 |
| What is Mindfulness? | 16 |
| Forms of Mindfulness | 17 |
| Effect of Mindfulness Meditation on Anxiety | 17 |
| Effect of MM on Stress..... | 19 |
| Effect of MBSR on Anxiety and Stress | 19 |
| Acceptance and Commitment Therapy for Stress and Anxiety..... | 20 |
| What is ACT? | 20 |
| Effectiveness of ACT on Anxiety..... | 22 |
| Alternative Formats of ACT | 23 |
| ACT Group Therapy..... | 23 |
| How ACT Helps to Reduce Stress Symptoms..... | 23 |
| Summary | 25 |
| Chapter 3: Summary, Recommendations and Conclusions..... | 25 |
| Summary | 26 |
| Problem and Purpose Statement Restated..... | 26 |
| Literature Review Findings..... | 26 |

| | |
|--|----|
| Recommendations | 28 |
| Workshop Outline | 28 |
| Psychoeducation Component | 29 |
| Experiential Component | 32 |
| Centering and grounding mindfulness exercise done as a large group | 32 |
| ACT component | 32 |
| Conclusion | 34 |

Managing Anxiety and Stress: Yoga, Mindfulness and ACT Strategies and Techniques

Chapter 1: Introduction

Introduction

Stress and anxiety are two widely experienced emotions that individuals manage on a daily basis. These emotions can range in severity from casual and infrequent experiences to frequent and extremely debilitating. This research highlights three strategies and therapeutic techniques that are effective in the reduction of stress and anxiety symptoms. The purpose of this section is to assess the research for the effectiveness of yoga, Mindfulness Meditation (MM), and Acceptance and Commitment Therapy (ACT) on stress and anxiety symptoms. This paper will conclude with an in-depth workshop for clients struggling with feelings of stress and anxiety. This workshop aims to equip individuals with the tools they need to begin reducing their experience of anxiety and stress, both with a counsellor in session, as well as in their everyday life.

Statement of the Problem

Anxiety and stress are two feelings that most people can relate to some degree. Stress and anxiety are experienced throughout the multiple facets of a person's life, work, relationships, and more. In a Canadian study, about 25% of the population said they "felt quite a bit stressed or extremely stressed most days" (CMHA, 2014). As well, around 12% of people in Canada have a diagnosis of an anxiety disorder, which does not account for the people who report feeling anxiety regularly (Government of Canada, 2014, para. 1). In the current global context of the

COVID-19 pandemic, these numbers are increasing as people are dealing with more uncertainty than ever before. The problems of stress and anxiety have and continue to plague the lives of individuals. Currently, these emotions are heightened and expanded due to the context of our global health circumstances. So, what are stress and anxiety and what effect do these two emotions have on a person? Anxiety is the feeling of excessive and irrational fear that is disproportionate to the situation. This can lead to an individual avoiding situations or causing the individual a lot of worry leading up to an event or situation. Anxiety can affect an individual's ability to do all daily tasks and routines, including work and social activities (CAMH, n.d.). Anxiety is highly comorbid with depression, stress, and substance use (Pollack, 2005; Myrick & Brady, 2003). Anxiety can be caused by a traumatic, stressful, or unpredictable life event, a family history of anxiety or anxiety disorders, substance use, and other medical or psychiatric problems. Stress, while healthy and necessary in some situations, can become a problem when experienced too frequently. Too much stress can contribute to negative health effects and is an unpleasant sensation and experience for an individual. Stress symptoms include headaches, stomach aches, fatigue, decreased sex drive, increased heartbeat, high blood pressure, insomnia, tensed muscles and a weakened immune system (CMHA, 2014). These physical symptoms can have further and more serious health outcomes such as an increased risk of heart attack, fertility issues and others. Stress can be triggered in many ways including, response to work and family responsibilities, a sudden change, the death of a loved one, financial situations and many others. The body responds to stress by releasing stress hormones that allow your body to respond to the stressor (CMHA, 2014). The problem arises when the body does not stop producing and firing these stress hormones and thus the body stays in a state of stress. Chronic stress can lead to feelings of anxiety and depression. Stress can have negative impacts on an individual's

relationships, ability to carry out tasks, respond to new stressors in more appropriate and healthy ways. Anxiety and stress are two emotions or feelings that can have harsh negative effects on both the mental and physical health of an individual.

Purpose of the Paper

The purpose of this study is to review a variety of treatment and relaxation practices for individuals struggling with anxiety and stress. This research aims to provide insight into the use of yoga, Mindfulness Meditation (MM) and ACT. The goal is to create accessible and useful treatment options and routine practices for individuals' daily routines. As well this research may be helpful for mental health professionals working with clients who experience stress and anxiety regularly. The overall goal of this paper is to highlight the usefulness of alternative practices, such as yoga, mindfulness, and ACT exercises for the reduction of stress and anxiety.

Thesis Statement

This research explores the effect that yoga practice, MM and ACT have on stress and anxiety symptoms across a diverse population. Using current research literature, this study highlights the effectiveness of these three techniques and therapeutic practices have on the experienced symptoms of stress and anxiety.

Significance of the Study

About 25% of the Canadian population report that they feel quite a bit stressed or extremely stressed most days. As well, roughly 12% of Canadians reported that they had or have an anxiety disorder (Government of Canada, 2014, para. 1). In the year 2020, amidst the global pandemic, Mental Health Research Canada (MHRC) (2021) reported that self-reported measures of anxiety and depression were at an all-time high. MHRC (2021) reported that 25% of people reported experiences with anxiety, both self-reported and diagnosed. This study holds immense

significance to not only individuals struggling with experiences of stress and anxiety but also for mental health professionals working with clients. Anxiety and stress have a significant impact on an individual's life, especially with the growing rate of mental health issues in the current global situation. The information presented in this study is valuable for the effective and efficient treatment of individuals both within a therapeutic setting, as well as their everyday routines. I have an interest in yoga and meditation and thus chose to focus on these two topics in relation to their effect on anxiety and stress. I am curious about therapeutic techniques and everyday practices that clients could incorporate and implement into their lives to reduce unwanted and uncomfortable feelings of stress and anxiety.

Reflectivity and Positionality Statement

As the author of this paper, it is important that I situate myself in order to bring context, acknowledgment and awareness to what I contribute to the research. I write this paper from the social location of a young, educated, white woman. I acknowledge that my position of education and class provides me with a level of power and authority that it portrayed through this opportunity to write a capstone paper. I strive to be objective with the portrayal of the research, yet I acknowledge that my location as a Master of Counselling Student may cause tension in the ways I understand and portray the research.

I conceptualize the topic of stress and anxiety from a personal perspective, as well as an informed perspective through client stories and research. Growing up mental health conversations or support were not often acknowledged or taught in school or social settings. As I moved through university and in work experiences, I saw the huge role that mental health support plays in a person's life. I have noticed more emphasis being placed on supporting individual's mental health and I feel there are still many things we can learn and implement to

normalize and support everyone with their mental health practices. My passion for this topic comes from witnessing many clients, friends and family struggle to discuss, manage or seek help for stress and anxiety symptoms in their everyday life. My hope with this research is that it contributes to continuing the conversation on effective research and methods for managing stress and anxiety. Specifically, I hope this research provides insight into some effective and useful techniques that individuals can utilize in everyday life.

Definition of Terms

Acceptance and Commitment Therapy

ACT is a form of behavioural psychology created by Hayes (1982) which applies mindfulness and acceptance processes with the goal of creating psychological flexibility. This form of therapy teaches clients to acknowledge and accept human suffering as an unavoidable part of life and thus encourages the client to decrease the behaviour of avoiding the events that cause discomfort. ACT is made up of six processes: acceptance of the flow of thoughts, cognitive defusion meaning the changing the way one interacts with the thoughts, being present and in the moment of one's own experiences, self as context which centers the client's values in the process and values and committed action, referring to the connection between the development and the individual's values (Hayes et al., 2006). These processes are further explained and defined in chapter two. The main goal of ACT is not to alter the frequency or form of thoughts, but rather to be aware of and embrace thoughts and feelings. This process changes the way an individual engages and interacts with their thoughts. ACT aims to build flexibility in the interaction and perception of thoughts and feelings. As well, it aims to decrease the attachment to the messaging the individual draws from these thoughts.

Anxiety

Anxiety is an emotion that is experienced by everyone but is generally infrequent and short-lived. Anxiety helps humans prepare for certain outcomes and helps keeps us safe. The CAMH (n.d.) describes anxiety symptoms as feelings of “irrational and excessive fear, apprehensiveness, tense feelings, and often a difficulty managing daily tasks” (para. 4). Anxiety becomes a concern when it consists of a long period of intense feelings of fear or distress which are not proportional to real-life events. Anxiety occurs when the brain interprets real or imagined events to be much more risky or dangerous than they truly are (Government of Canada, 2014). Anxiety is a broad term encompassing multiple specific anxiety disorders, such as Generalized Anxiety Disorder (GAD), Social Anxiety Disorder (SAD), as well as the term for a general emotion felt by individuals in certain, occasional circumstances. For the purposes of this research, anxiety is referred to in both the context of anxiety disorders, as well as occasional, short-lived anxiety that individuals feel in various situations and contexts.

Mindfulness

Mindfulness is defined by the Oxford dictionary as “the quality or state of being conscious or aware of something”. More specifically, they define mindfulness as “a mental state achieved by focusing one’s awareness on the present moment, while calmly acknowledging and accepting one’s feelings, thoughts, and bodily sensations”. Mindfulness is often explained as being comprised of three components, to cultivate an awareness of self, to attend to the present moment, and to have a non-judgmental attitude to thoughts and experiences. For the context of this research, mindfulness is thought of in these terms and is incorporated into multiple practices that are explained in depth in future sections, such as meditation, Mindfulness-Based Stress Reduction and, some aspects of ACT.

Stress

Stress is the body's response to pressure and is the result of feeling overwhelmed or unable to cope with the pressure (Mental Health Foundation, 2021). Stress is often experienced in new, unexpected, uncontrollable, or threatening situations. Stress alone is not a mental illness or necessarily a negative response however when stress is prolonged or begins limiting someone's function instead of motivating them, it then may be harmful to one's mental health and wellbeing. Mental Health Organization explains that when the body encounters stress, it produces stress hormones that trigger fight or flight response which helps us to respond quickly to danger, then return to baseline. These responses are generally useful and needed for individuals to complete daily tasks however when an individual encounters too much stress they may remain in a permanent state of fight or flight which results in feelings of overwhelm or inability to cope with stressors in their life. For the purpose of this study, the definition of stress does not include stress disorders, such as post-traumatic stress disorder (PTSD).

Yoga

In the context of this paper, yoga is defined as a practice of breath and controlled postures for the purpose of calming and focusing the busyness of the mind. Yoga originated as an Indian traditional practice that dates to before 3000 BCE (Pandurangi, 2017, p.16). As explained more thoroughly in later sections, yoga is made up of eight components which are outlined by Sage Patanjali. These components are “mental discipline and restraint (*Yama*, *Niyama*), controlled postures (*Asanas*), conscious breathing (*Pranayama*), detachment (*Pratyahara*), and meditation (*Dharana*, *Dhyana*, and *Samadhi*)” (Pandurangi, 2017, p. 16). These components contribute to the deeper formation of connection with oneself. The research examined in the rest of this paper highlights findings from predominantly *hatha* yoga as well as an assortment of other types and forms of yoga that specifically fit the demographic of the

research population, such as medical yoga for multiple sclerosis patients (Janalipour et al., 2017). Hatha is the practice of deliberate breathing and movement to allow those who practice, to become more aware of the sensations in their body and build their mindfulness of their bodily and mental states. For the research findings of this section, yoga will be referred to as any form of movement and posture cycle that focuses on the breath and mindfulness.

Outline of the Remainder of the Paper

This research aims to answer the question of how individuals can effectively reduce anxiety and stress in their daily lives. Chapter two will outline research on effective tools and therapeutic practices for targeting stress and anxiety. The methods researched are yoga, mindfulness, including MBSR, and ACT. The research highlighted in the literature review section, emphasizes the effectiveness of these three techniques and practices and the specific forms and components of each practice that are useful and effective for clients and counsellors to utilize. Lastly, chapter three outlines a workshop for individuals seeking support with managing their anxiety. This workshop aims to teach clients techniques and strategies from ACT that have been helpful and effective in the reduction of symptoms of anxiety and stress. As well, the workshop will incorporate ideas and practices from yoga and mindfulness which are shown in the literature to be useful.

Chapter 2: Literature Review

Introduction

Stress and anxiety are two extremely common experiences in the life of many individuals. This section aims to provide some insight into possible solutions for these disruptive emotions. This section highlights three techniques, which are shown by the literature to be effective in reducing the sensations of stress and anxiety (Kohn et al., 2013; Duraimani, 2019; Dalrymple & Herbert, 2007; Brinkborg et al., 2011). Yoga, MM, and ACT are each researched with applications to counselling therapy. As well, each of these techniques highlights strategies that clients can utilize in their everyday lives to help to reduce stress and anxiety.

Yoga for Stress and Anxiety

Iyengar (1966) stated that yoga is the Sanskrit word that means to “attach and yoke, to direct and cocreate one’s attention on” the present moment and one’s own present experience (p.1). Throughout this section, the historical significance of yoga is highlighted and analyzed and the types of yoga that are highly researched and most effective for anxiety and stress management. Research findings from many studies have supported the idea that yoga can be used as a tool for decreasing symptoms of anxiety and stress (Kohn et al., 2013; Lemay, Hoolahan and Buchanan, 2019; Maddux, Daukantaité and Tellhed, 2018). Further, evidence for the effectiveness of yoga on stress and anxiety is presented and compared. The relevance of yoga in the counselling setting is assessed and understood through the discussion of the ethics of incorporating yoga in counselling. Lastly, this section aims to explain the ways in which yoga can be utilized to help clients who seek support with the management of their stress and/or anxiety symptoms, including specific strategies or frameworks for counselling such as, Yoga Enhanced Cognitive Behavioural Therapy (Y-CBT).

What is Yoga?

Yoga is historically an Indian traditional practice, which dates to before 3000 BCE (Pandurangi, 2017, p.16). The term “yoga” is a Sanskrit term that means to “yoke or unite with concentration and discipline” (Iyengar, 1966, p. 1). The Hindu scripture called the Bhagavad Gita, in the book of Mahabharata, stated “the yogi turns his mind inward, detaching from the material world to realize the true nature of the self”. Sage Patanjali is considered the author of defining yoga’s eight components: “mental discipline and restraint (*Yama, Niyama*), controlled postures (*Asanas*), conscious breathing (*Pranayama*), detachment (*Pratyahara*), and meditation (*Dharana, Dhyana, and Samadhi*)” (Pandurangi, 2017, p. 16). *Yama* or mental discipline and restraint or “moral vow” is the reminder to yogi to practice morals such as to be truthful, non-harming, giving, and generous. (Newlyn, n.d.) Similarly, *Niyama* translates to “positive duties or observances”. Newlyn (n.d.) describes this as a recommended habit for healthy living, such as cleanliness, contentment, discipline or austerity, contemplation of a higher power and, self-reflection. Iyengar (1966) explains that these components of yoga are important as they help to transform each action into “one that originates from a deeper and more connected place within oneself” (p.2). Controlled postures or *Asana* is the physical movement, stretching and, bending of the body for the purpose of calming the mind, exploring the strength, balance and flexibility of the body. Conscious breathing or *Pranayama* can be done in a variety of forms. Patanjali proposed that control of the mind (*prana*) is made possible through the regulation of breath. This idea is expanded on in future sections of this chapter. *Pranayama* practice is helpful and beneficial for the mental and physical health of those who practice. One interpretation of the concept of detachment is Bhagavad Gita’s notion that yoga helps the yogi to “detach from the material world to realize the true nature of the self” (cited by Pandurangi 2017, p. 17). This is

helpful for the individual as it provides an opportunity to focus internally. Meditation, as explained by Sage Patanjali, is made up of three components “*Dharana*, *Dhyana*, and *Samadhi*”. *Dharana* is the idea of focused concentration on one point or on the breath. This is often the beginning stage of meditation. *Dhyana* means “meditative absorption” which is the state of being completely absorbed in the focus of meditation without cognitive awareness of the meditative state. Lastly, is *Samadhi* or Bliss and Enlightenment. Bliss is described as realizing the life that we have and having the ability to see our life without “disturbances from the mind” and “without experience of being conditioned by likes, dislikes, habits, judgment or attachment” (Newlyn, n.d.). Each of these components is used to make up many types of yoga that have become popularized today in the Western world. Yoga has been co-opted and adjusted in the Western world to be understood as a series of poses, breathing and mindfulness practice which people practice for exercise and relaxation purposes.

Types of Yoga

As explained above, there are multiple components that make up the practice of yoga. There are multiple practices of yoga that focus on specific components that Sage Patanjali highlighted. For example, Adams and Puig (2008), explain that *hatha* yoga is focused specifically on *asanas* and *pranayama* aspects of yoga in its intent to “free the self from its attachments to the body and mind” (p.359). Hatha is the Sanskrit word meaning “force” and in the context of yoga is defined as “the yoga of force”. As well, the word Hatha can be broke into “ha” which represents the sun, and “tha” the moon. Hatha yoga aims to balance, join or yoke the two energies together (Newlyn, n.d.). Hatha yoga focuses on the deliberate action of breathing and the movement of the body. These focuses encourage those who practice to be aware of the sensations in their body and the state of relaxation. Adams and Puig (2008) also highlighted the *karma* (action), and *bhakti* (worship) practice, which focus predominantly on “selfless action and

service to others” (p. 366). *Karma* yoga upholds that “rather than being active or working for external rewards, people should do good for its own sake” because it can begin to foster inner harmony. *Bhakti* yoga acknowledged anxiety and depression as a result of isolation and disconnection and posits that “selfless involvement with others promotes connectedness and develops a sense of community” (Adams & Puig, 2008, p. 366).

Delivery Format

As mentioned previously, this section of the paper is interested in the effect that yoga has on stress and anxiety. One thing to be curious about is if the delivery of yoga is important to the outcome and reduction of stress and anxiety. Research showed that yoga in a gym setting and an online format for yoga practice were as effective in reducing stress and anxiety symptoms as compared to formal yoga classes and yoga therapy (Kohn et al., 2013; Martini et al., 2017). Martini et al. (2017) findings showed that there are benefits of “implementing either an in-person or online yoga program for anxiety reduction in patients” (p.301). As well Maddux, Daukantaitė and Tellhed (2018) found that participants of a gym yoga class “reported less stress, anxiety, depression, insomnia, and distress avoidance behaviors and significant improvement” than participants who were in the no yoga group (p.129). Similarly, Benvenuti (2017) delivered yoga in a video format and achieved results that suggested that the “benefits of a yoga intervention on stress reactivity and recovery extend beyond a traditional instructor-based class” (p. 123).

Effects of Yoga on Stress

The effect that yoga has on stress symptoms has been extensively researched. Much of the research findings support the idea that yoga is beneficial in the reduction of reported symptoms of stress. Stress is often measured using the Perceived Stress Scale (PSS) which “measures the degree to which an individual experiences their life as unpredictable, uncontrollable, and overloaded” (Kohn et al., 2013, p.6). The research findings from the study by

Kohn et al. (2013) highlighted that “yoga provides the patients with strategies to deal with stress-related symptoms and to be in better control of their life, which resulted in reduced levels of stress” (p.6). They found that participants from the yoga group showed a significant improvement in perceived stress scale scores after a twelve-week period of weekly yoga classes, compared with the control group. Maddux, Daukantaité and Tellhed (2016) showed that individuals who participated in sixteen consecutive weeks of yoga in a gym setting, showed significantly lower scores on the perceived stress scale (PSS) compared to those on the waitlist for yoga classes. The researchers of this study concluded that through the use of yoga, participants were able to tolerate stress instead of using avoidance tactics. To further confirm these findings, Erdoğan-Yüce and Muz (2019) reported a “significant difference between the PSS mean scores before and after intervention in the yoga group” (p.701). They ultimately suggested based on their findings that yoga had positive effects on stress, meaning that perceived stress decreased. Shohani et al. (2018), concluded similarly that the mean score of stress decreased after a twelve-week period of hatha yoga. Studies by Shohani et al. (2018), Erdoğan Yüce and Muz (2019), Maddux, Daukantaité and Tellhed (2016) and Kohn et al. (2013) came to similar conclusions that practicing yoga for multiple weeks had positive effects in reducing self-reported stress symptoms.

Examining this from a physiological perspective Benvenuti (2017) reported that a “single yoga session led to decreased salivary cortisol reactivity to a psychological stressor” (p.124) meaning that yoga prior to stressful events encouraged the body to decrease cortisol level which contributes to the symptoms of stress in the body.

Effects of Yoga on Anxiety

As explained by Kohn et al. (2013), stress and anxiety are highly linked and therefore often researched at the same time. Kohn et al. (2013) findings showed a significant decrease in yoga participant anxiety symptoms compared with the control group who did not participate in yoga classes. As well, they suggested that yoga acts as an effective tool for those who deal with anxiety, which may allow them to feel more “secure... which may decrease stress” (p.6).

Maddux, Daukantaité and Tellhed’s (2016) reported the yoga participants scored lower on the Hospital Anxiety and Depression scale (HADS) and significantly higher on the Kentucky inventory of mindfulness skills. Interestingly, study results by both Lemay, Hoolahan and Buchanan (2019) and Maddux, Daukantaité and Tellhed (2016) showed that as anxiety decreased, mindfulness scores increased. Additionally, Lemay, Hoolahan and Buchanan (2019) showed that participant “awareness, nonreactivity to inner experiences... and non-judging of inner experiences” also increased significantly among participants in the yoga experimental group (p.749).

Janalipour et al. (2017) study outcomes showed again that yoga was effective in reducing anxiety symptoms in patients with Multiple Sclerosis (MS) when compared to the control group. They stated that the comparison between pretest and post-test confirmed the effectiveness of yoga for the reduction of stress and anxiety. These results were attributed to the use of breathing exercises (*pranayama*), which help to improve “blood and oxygen supply to the brain cells”, while Asana contributed to muscle relaxation and flexibility (p.156). Janalipour et al. (2017), suggest that these elements of yoga contribute to overall relaxation, comfort, and concentration in participants, which resulted in “improved psychological and physical well-being” (p.156).

Relevance and Implications to Counselling

Uebelacker et al. (2010) suggests that yoga and therapy can be easily linked together as there “are many similarities between psychotherapy and yoga” (p.259) Uebelacker et al. (2010) continues to explain that yoga and psychotherapy are similar in that they are generally conceptualized as “multifaceted behavioural intervention that can be taught in many different ways” (p. 259). As well, yoga instructors can use psychotherapy literature to enhance their yoga to suit the needs of clients with specific conditions, and vice versa, psychotherapists can use components of yoga in session to benefit the client. Though it may be beneficial and straightforward to incorporate ideas from yoga into therapy, Forfylow (2011) highlights the importance of considering the ethical concerns around integrating yoga strategies and therapy. She emphasizes the need for in-depth research, certifications, and careful consideration of outcomes. While yoga has been shown to produce a multitude of benefits for individuals dealing with stress and anxiety, Forfylow (2011) suggests that it may be wise for therapists to “collaborate with yoga therapists to co-manage clients or become [certified] themselves” (p. 143). Having said that, there are aspects and strategies from yoga practice that have been effectively incorporated into therapy. For example, researchers found a significant reduction of anxiety symptoms in sessions where breathwork was highlighted and practiced significantly (Descilo et al., 2010; Khalsa et al., 2009; Kozasa et al., 2008; Telles et al., 2010).

Y-CBT

Another way yoga techniques and strategies have been introduced into counselling therapy is Yoga-enhanced CBT (Y-CBT). Y-CBT uses yoga and meditation and combines with techniques of cognitive behaviour therapy. As described by Khalsa et al. (2014), the “goal is to restructure destructive cognitive and emotional patterns” often associated with symptoms of anxiety (p. 366). Khalsa et al. (2014) findings showed that “treatment-resistant outpatient mental

health clients” showed “significant improvements in their anxiety level (trait and state) following 6 weeks of Y-CBT” (p. 368). The conclusion of the results suggested that yoga and meditation can produce changes in the perception of both the internal and external events of the client, which can decrease the number of events that may provoke anxiety symptoms.

Mindful Meditation and Mindfulness-Based Stress Reduction

What is Mindfulness?

Kabat-Zinn (2001) highlights that mindfulness meditation originated as a Buddhist practice that is greatly relevant to our lives in the present day. Mindfulness is defined as “paying attention in a particular way: on purpose, in the present moment and nonjudgmentally (Kabat-Zinn et al., 2001, p.23). As well, he claims that mindfulness makes it possible for us to “live our lives with access to the full spectrum of our conscious and unconscious possibilities” (p.22) which allows us to live in “harmony with oneself and the world” (p.21). Bishop et al. (2004) described mindfulness techniques as “a form of mental training to reduce cognitive vulnerability to a reactive mode of mind that might otherwise heighten stress and emotional distress or that may... perpetuate psychopathology” (p.231). Sawyer (2018) emphasizes the traditional Buddhist perspective of mindfulness meditation which encourages practitioners to “cultivate... *samadhi* (concentration) and *sati* (mindfulness)” (p.67). Similarly, Keng, Smoski, and Robins (2011) cite Bishop et al. (2004) who state that mindfulness is comprised of “self-regulation of attention and adoption of a particular orientation towards one’s experiences (p.2). Macdonald and Olsen (2020) describe five components to mindfulness practice: observing, describing, acting with awareness, nonjudging of inner experiences and nonreactivity to inner experiences. Observing is described as the process of recognizing and /or attending to one’s “emotions and cognitive experiences and sensations” (p.760). Describing focuses on the use of language to express feelings and thoughts. Acting with awareness is explained as “the ability to be attentive

to what one is experiencing in the moment” (p.760). Being non-judging of inner experiences is the ability to refrain from assessing thoughts and feelings. Lastly, non-reactivity to inner experiences refers to the ability to “let thoughts and feelings pass through one’s mind without responding or elaborating” (p.760)

Forms of Mindfulness

Mindfulness is achieved through various forms of practice with the goal of “being present with one’s current experiences” and to tame the “monkey mind” which is a mind that wonders, loses focus and experiences random thoughts (Sawyer, 2018, p. 71). Often mindfulness practices are tied into mediative practices which are often linked to breathwork, yoga practice, and concentrated focus on an object or mantra. Duraimani (2019) highlights that there are many types of meditative practices and mindfulness meditation is at the forefront as it is “increasingly being incorporated into psychotherapeutic interventions” (p. 226). Specifically, Duraimani’s (2019) research was interested in “guided mindfulness meditations” accessed through a smartphone app. As well, there are many forms in which mindfulness meditation is incorporated into frameworks of therapy. These forms include Mindfulness-Based Cognitive Therapy, Group Mindfulness Therapy (GMT), Mindfulness and Acceptance-Based Interventions (MABIs), and Mindfulness-Based Stress Reduction (MBSR). MBSR is a highly researched eight-week program, which has shown to decrease symptoms of stress and anxiety (references here). Specifically, this section is interested in the effects that practicing mindfulness through mindfulness meditation practice and MBSR has on stress and anxiety in various populations of people.

Effect of Mindfulness Meditation on Anxiety

As described above, informal MM can happen in a variety of ways. Duraimani (2019) studied the effect that “guided mindfulness meditation” through Mindfulness Meditation apps

have on stress and anxiety. The findings concluded that there was a significant decrease in perceived anxiety in the meditators compared to nonmeditators (Duraimani, 2019). A similar study of Mindfulness Meditation through app format delivery by Bostock et al. (2018), found that “practicing short, guided MM sessions improved global well-being, daily positive affect, anxiety and depressive symptoms, job strain, and workplace social support compared with the effects of having access to minimal education about stress reduction” (p.133). Duraimani (2019) explained that the practice of MM increases an individual’s cognitive ability to regulate their emotions. This is done through a shift away from a “judgmental thought process to a nonjudgment awareness” which lowers the anxiety level and allows the individual to handle anxiety-provoking situations in a more regulated and calm manner (p.230). Similarly, Pincock and Terill (2020) explained that the mindfulness skills described above, such as nonjudgment, awareness of emotions, and nonreactivity, were related to higher scores of resilience in participants and traits of resilience were protective against the development of anxiety and depression (p.4). Macdonald and Olsen’s (2020) research findings showed that mindfulness skills predicted fewer anxiety symptoms in the sample of college students. Specifically, the skills that involved “labeling one’s cognitions and emotions without elaboration or reaction” were linked with the ability for one to focus their attention and develop the capacity to “flexibly focus one’s attention on what is happening in the present moment” (p.774). Macdonald and Olsen (2020) highlighted that the ability to focus on the present moment means the capability to have a greater awareness of how thoughts and feelings are temporary which builds the ability to “create distance between oneself and one’s anxious thoughts” (p.774). Similarly, Keng et al.’s (2011) findings highlight that trait mindfulness is associated with overall higher life satisfaction, and is negatively correlated with anxiety, difficulties in emotional regulation, and general psychological

symptoms. These findings suggest that mindfulness meditation in a multitude of forms reduces anxiety symptoms (Keng et al., 2011; Macdonald & Olsen, 2020; Pincock & Terill, 2020)

Effect of MM on Stress

Mindfulness Meditation is a practice utilized not only to combat anxiety symptoms but also stress. Duraimani (2019) explains that stress responses can become “overused when the mind indulges in a constant flow of thoughts” which can cause a chemical imbalance such as an increase in cortisol (p.229). The study showed a significant decrease in the perceived stress score in the meditation group and a decrease in the stress responses in the brain compared to the nonmeditation group (Duraimani, 2019, p. 229). Burger and Lockhart (2017), significant differences in perceived stress in groups of nurses in the meditation group compared to the control group. These studies highlight the effect that mindfulness meditation, via app delivery and group format, has on perceived levels of stress and the benefits that mindfulness skills have on overall psychological wellbeing (Duraimani, 2019; Burger & Lockhart, 2017).

Effect of MBSR on Anxiety and Stress

MBSR is a highly studied form of mindfulness training that was developed by Kabat-Zinn (1990). Kang et al. (2020) explain that MBSR has “evolved into a proactive method that aims to improve people’s quality of life by having a desirable effect on mental health” (p.53). MBSR is a practice in mindfulness that incorporates formal and informal practice. The formal consists of “breath-focused attention, body scan-based attention to the transient nature of sensory experience, shifting attention across sensory modalities, open monitoring of moment-to-moment experience, walking meditation, and eating meditation” (Goldin & Gross, 2010, p.83). The informal practice is made up of “brief pauses involving volitionally shifting attention to present moment awareness” (Goldin & Gross, 2010, p.83). Combined, the goals of these pieces are to increase the ability to observe the content of one’s experience, in particular the “thoughts,

emotion, memories, mental images, and physical sensations” (Goldin & Gross, 2010, p.83). This section will highlight the effectiveness of MBSR and what the “desirable effects” of this program or technique are. MBSR programs are generally an eight-week group program that formally practices the mindfulness techniques. MBSR has been shown to reduce levels of anxiety as well as perceived stress in participants (Kang et al., 2020). Furthermore, Gold and Gross (2010), found that MBSR reduced symptoms of not only state anxiety but also social anxiety, depression, and rumination. Similarly, Hjeltnes et al. (2017) found that “the reductions in social anxiety symptoms after the MBSR program were correlated with increases in mindfulness, self-compassion, and self-esteem” (p.85). Hofmann et al. (2010) found a similar result for MSBR on a population with social anxiety disorder (SAD) symptoms. They stated that they “support the use of mindfulness-based therapies (such as MSBR) for anxiety... in clinical populations” (p.180).

MBSR is traditionally an eight-week, intensive program to which participants need to dedicate large amounts of time and energy. The time commitment can be a deterrent for many people so Klatt et al. (2009) designed a variation of MBSR called Mindfulness-based stress reduction- low dose (MBSR-ld) which was designed to be a less time-intensive version of the traditional MBSR program. Although this program reduced the time commitment significantly, the results showed that weekly 1-hour meetings and daily 20-minute meditation significantly reduced perceived stress in the MBSR-ld group. These results were of the “same magnitude as traditional MBSR interventions” (Klatt et al., 2009, p.610).

Acceptance and Commitment Therapy for Stress and Anxiety

What is ACT?

ACT was created by Hayes in 1982. ACT is a form of behavioural psychology that applies mindfulness and acceptance processes to create psychological flexibility. Hayes (2012)

explains that ACT is based on a “pragmatic philosophy of science called *functional contextualism*” (p. 30). This is explained as “ongoing act-in-context”, which people do in all situations they find themselves in. (Hayes, 2012, p.31). ACT acknowledges that human suffering is an unavoidable part of life and therefore ACT works to help the client react to their suffering in more flexible and accepting ways instead of “avoiding things that cause us discomfort” (Guijarro, Cerviño & Castriollo, 2017, p. 410). ACT also believes that “psychopathology is due in part to “fusion with distressing thoughts and feelings” and that the goal of ACT is not to control or eliminate those experiences but rather to learn how to interact in less distressing ways with those thoughts and emotions. (Dalrymple & Herbert, 2007, p. 545). Dalrymple and Herbert (2007) state that symptom reduction is not the main focus or goal of ACT and yet it is generally expected to occur as a result of the treatment.

There are six core processes of ACT according to Hayes et al. (2006). These six processes are acceptance, cognitive defusion, being present, self as context, values, and committed action. Hayes et al. (2006) explain that these six processes are linked and build on each other. As explained by Hayes et al (2006), “acceptance is taught as an alternative to experiential avoidance” (p.7). The goal of ACT is not to change the frequency or form of thoughts but rather to be aware of and embrace thoughts and feelings. Cognitive defusion is thought of as changing the way in which the individuals “interacts with or relates to thoughts by creating a context in which their unhelpful functions are diminished” (p.8). For example, the client may work to externalize their thought by giving it a “shapes, size, colour” or the client may label their process of negative thoughts as thinking and not as a factual statement (Hayes et al., 2006, p.8). The process of being present is meant to promote a level of non-judgmental contact with psychological events. The goal of this process is to have the client “experience the

world more directly so that their behaviour is more flexible” and aligned with their values (p. 8). The next process is the “self as context”. This process is important to the functioning of the ACT framework as it provides the client with a standpoint from where one can be aware of their own “flow of experiences” without attachment or investment in the outcome (p.8). The process of values is an important component to help the client decide which domains of life which are of importance, while “undermining verbal processes that might lead to choices based on avoidance, social compliance, or fusion” (p.8). Lastly, it is a “committed action” which outlines the fact that ACT invites the development of large patterns of action, linked to the client’s personal values. Hayes et al. (2006) highlight that ACT procedure generally includes “therapy-work and homework linked to short, medium and long-term behaviour change goals” which help clients work through psychological barriers.

Effectiveness of ACT on Anxiety

ACT is often used to treat anxiety and anxiety disorders because of its effectiveness in helping clients decrease their avoidance-based coping that is a common factor of anxiety. (Dalrymple & Herbert, 2007; Guijarro, Cerviño & Castrillo, 2017). Roemer (2008) found that participation in ACT resulted in significant reductions in clinician-rated and self-reported generalized anxiety disorder (GAD) symptoms which were maintained at 3- and 9-month follow-up assessments (p.1083). It was also stated that the reduction in GAD symptoms was linked with the effect that ACT treatment had on experiential avoidance and mindfulness. These findings showed that experiential avoidance behaviours were decreased while mindfulness experiences increased. Wicaksana et al. (2018) state that ACT helped individuals reduce their levels of anxiety through the ability to accept the unwanted experiences in their life without eliminating them but instead deciding how to choose the best next step that fits with their desired outcome,

values, or goals. Wicaksana et al. (2018) attribute the reduction of anxiety symptoms to the ACT protocol of not altering cognitive content but instead focusing on behaviour and context (p. 88).

Alternative Formats of ACT

Ritzert (2016) also found that ACT is overall an effective and efficient treatment option for anxiety disorders. As well, Ritzert (2016) looked at the effectiveness of an ACT self-help workbook and found that clients had improved in all areas of the ACT processes (p.456).

Ivanova et al. (2016) addressed the issue of lack of practitioner availability for the number of people struggling with anxiety symptoms, by looking at guided vs unguided intervention. The results of this study showed that guided treatment was not superior to unguided interventions across the outcome of reduction of anxiety symptoms of participants in this study. Similarly, they found that the “ACT-based Internet-delivered treatment program was also effective in reducing general anxiety and social anxiety symptoms across their participants” (Ivanova, 2016, p. 33).

ACT Group Therapy

Another form of ACT that was shown to be effective in the reduction of anxiety symptoms is ACT group therapy. Eilenberg, Kronstrand, and Frostholm (2013) studied the effect that ACT group therapy had on self-reports of severe health-related anxiety. The results showed that ACT group therapy reduced self-reported symptoms of anxiety and thus the study concluded that the delivery of ACT in a group format is an “acceptable and feasible treatment for patients with health-related anxiety” (Eilenberg, Kronstrand, and Frostholm, 2013, p. 466).

How ACT Helps to Reduce Stress Symptoms

ACT is a therapeutic framework that has been shown to be effective for treating stress symptoms in individuals (Butts & Gutierrez, 2018; Brinkborg et al., 2011; Pakenham, 2014). Brinkborg et al. (2011) highlight that ACT is an appropriate therapy for stress symptoms as it focuses on the individual’s experiential avoidance. The behaviour of avoidance increases the risk

for “prolonged stress reactions and the development of negative effects over time” (Brinkborg et al., 2011, p, 390). Similarly, Butts and Gutierrez (2018) explained that ACT is useful for helping individuals “(re)conceptualize stress appraisal” in two different ways. The first being that ACT helps individuals relate to their stress with acceptance and relinquishing of control and defusion, in order to create distance between the person and their thoughts. And secondly, ACT creates mindfulness and acceptance skills that help the client to view their stressful situation as an aspect of the human experience rather than something that should be avoided (p. 99).

As a result of the study Brinkborg, et al. (2011) found that ACT intervention showed a significant effect for participants with high levels of stress (p. 396). A study conducted by Datta et al. (2015) found significant results for the argument that ACT leads to increased psychological flexibility which resulted in an improvement of stress-related symptoms in the participant population. (p.726). Similar to these findings, Pakenham (2014) stated significant improvement in psychological distress for clinical psychology trainees who participated in ACT. Interestingly, Pakenham (2014) compared the effect of ACT stress management and ACT training courses and found similar improvements of skills and attributes (p.652). The results of this study highlighted that there is a strong positive link between the ACT processes and lower work stress and psychological distress in clinical psychology trainees, as well as increased self-kindness, counseling self-efficacy and client-therapist alliance (p.653). As well, Rowman et al. (2017) researched the effect that ACT has on stress in patients with Inflammatory bowel disease (IBD). The results of the study showed similar effects of ACT on stress, with lasting significant reduction of stress symptoms at the 8- and 20-week follow-ups when compared with the control group (p.138). The study concluded with the report that ACT is an effective treatment for reducing stress in IBD patients (Rowan et al., 2017).

Summary

In conclusion, the literature review section highlighted many ways to reduce and support clients who are struggling with symptoms of stress and anxiety. The research highlighted in this section showed that yoga, mindfulness, and ACT had significant effects on stress and anxiety symptoms (Kohn et al., 2013; Duraimani, 2019; Dalrymple & Herbert, 2007; Brinkborg et al., 2011). Specifically, yoga practice in a variety of delivery formats was shown to reduce the experience of stress and anxiety. This section highlighted how yoga can be incorporated in counselling sessions, including the importance and relevance of breathwork, as well as formal incorporation such as Y-CBT. As well, the research outlined in this section showed that Mindfulness Meditation and MBSR components helps clients to change their “judgmental thought process to a nonjudgment awareness”, which lowers the anxiety levels and helps clients regulate themselves more effectively when they are in anxiety or stress-provoking situations (Duraimani, 2019, p.229). Lastly, ACT research has shown to have a significant impact on stress and anxiety in individuals across a variety of circumstances. ACT helps by enabling the client to accept difficult areas of their life rather than avoiding them, which allows the client to view their struggles with psychological flexibility. The skill of limiting experiential avoidance and alternatively responding in a mindful way helped clients to reduce stress and anxiety in their lives (Datta et al., 2015; Dalrymple & Herbert, 2007). Finally, this section has shown the effectiveness of three types of stress and anxiety treatments and skills that can be utilized by counsellors with clients in session, as well as for clients to utilize and practice through their daily lives.

Chapter 3: Summary, Recommendations and Conclusions

Summary

Problem and Purpose Statement Restated

Stress and anxiety are both common emotions that are experienced by individuals in varying degrees of intensity and severity. Roughly one-quarter of the Canadian population identified as feeling a bit of stress to extremely stressed daily (CMHA, 2014). As well, anxiety disorders were experienced by more than 12% of the Canadian population, which does not account for those who feel anxiety symptoms and have not pursued a diagnosis or feel their anxiety symptoms meet the criteria for a diagnosis. These statistics have increased and intensified through the COVID-19 pandemic, as a result of the growing uncertainty and isolation. These two states of being are comorbid with depression and various other mental illnesses. The problem of stress and anxiety extends to many areas of a person's life and can decrease their quality of life and their overall health. The main purpose of this research was to consider a variety of treatment options and strategies. These options include daily techniques one could use to manage their symptoms and live in a healthier and more functional way, as well as techniques and benefits of therapy with yoga, meditation, and ACT as the guiding approaches.

Literature Review Findings

The literature reviewed focused on three techniques to assist clients to alleviate anxiety and stress: yoga, mindfulness, and ACT, below is a summary of the findings.

Yoga

The main findings from the literature review on the effectiveness of yoga on the reduction of stress and anxiety include mindfulness and breathing strategies, as well as a feeling of control and awareness that comes from the values of yoga practice. Yoga practice showed to increase mindfulness awareness, which resulted in decreased feelings of anxiety (Maddux,

Daukantaité, and Tellhed, 2016). This overall theme of mindfulness in yoga practice was done through connection to breath and body posture. Janalipour et al. (2017) found that muscle relaxation through posture and focus on breath increased blood supply to the brain which aided in decreased response to stress. Overall, yoga was shown to manage stress and anxiety symptoms through the creation of awareness and ultimately control of one's actions and responses to stressful and anxiety-inducing situations and events.

Mindful Meditation

Mindful meditation and MBSR were shown to significantly reduce the experiences of anxiety and stress. The main findings in the research were the ability to regulate emotions, shifting away from the judgment of thoughts, and increasing awareness of one's own thought processes. These main findings in the process of mindfulness were linked with the significant findings that the shift away from judgment and toward awareness allowed individuals to view anxiety-inducing situations in a calmer, more regulated state. As well, the process of focusing on the present enabled one to conceptualize thoughts as temporary, which created distance between the self and the anxious thoughts or stressful events.

ACT

The focus of ACT is to accept that suffering is a part of life and teaches individuals how to respond to their suffering in flexible ways rather than attempting to avoid unpleasant or unwanted experiences. One of the main themes in the research on ACT's effect on stress and anxiety was that when one can interact with their negative thoughts, feelings, or emotions in less distressing and more accepting ways, they can defuse from their thoughts and create distance between themselves and the temporary thought. Wicaksana et al. (2018) found that anxiety was reduced due to the ability to accept unwanted experiences without eliminating them, but instead

feeling empowered to choose how to move forward and respond to the unwanted experience in ways that aligned with their desired outcomes, values, and goals. This process of defusion resulted in increased feelings of control and decreased stress (Pakenham, 2014).

Recommendations

This is a half-day workshop that incorporates yoga, mindfulness, and ACT components. This workshop aims to educate the participant on anxiety and how to manage anxious thoughts using yoga, Mindfulness Meditation, and ACT. Using psychoeducation and exercises drawn from Forsyth and Eifert (2016), participants will learn the first steps to acceptance and recognition of their anxious thoughts. As well, this workshop provides a simple grounding meditation and brief yoga breathing practice that can be used by participants on a daily basis.

The workshop includes the following goals:

- Learn basic format and framework of ACT.
- Create an understanding of how ACT works with anxiety.
- Introduce the idea of accepting and reframing relationships with anxious thoughts, feelings, and emotions.
- Develop go-to strategies that can be implemented into daily life for participants.
- Explore activities and exercises which help to reframe ideas around anxious thoughts and build acceptance skills.

The next section will provide an outline of the workshop, the psycho-education component and the experiential component.

Workshop Outline

- What is ACT and why is ACT effective?
- How is yoga effective?

- How is Mindfulness Meditation Effective?
- What is Anxiety?
- How does ACT view and treat anxiety?
- Interactive components
 - Simple Mindfulness Exercise
 - Fear vs anxiety?
 - Defusion Activity
 - Brief yoga and breathing session

Psychoeducation Component

The psychoeducation component will inform participants on how ACT, yoga and mindfulness might be helpful techniques to work through anxiety.

What is Anxiety?

It is crucial that humans experience some level of anxiety. Anxiety keeps us safe from danger and helps to motivate us to get tasks completed. The problem occurs when one might feel they have too much anxiety which may lead to avoidance of certain situations or extreme discomfort for days, weeks, or years at a time. Anxiety can be conceptualized as the “future-oriented emotion” or thinking about something that hasn’t happened. This may feel like worry, muscle tension, feeling on edge, or feeling apprehensive. Compared with fear, anxiety is fueled more by the mind than by imminent threats or danger.

What is Acceptance and Commitment Therapy?

ACT is pronounced like the word “act”, as in the word action. ACT highlights an individual’s power to choose how to respond to anxious thoughts, feelings, and emotions. ACT acknowledges that while one cannot choose to have anxiety or to feel scared, one can choose

how to approach, respond, and interact with their anxiety to get a preferred outcome that aligns with one's values. ACT helps individuals to learn to Accept, Choose and Take Action. Simply put, ACT aims to change the relationship one has to their anxious thoughts to a relationship of acceptance and mindfulness so that one can “defuse” (this concept will be discussed further) and make decisions based on their values, rather than their anxious thoughts and feelings.

Why is ACT effective?

ACT highlights the fact that trying to change anxious thoughts doesn't work and instead offers resources and tools which allow individuals to approach their anxious thoughts differently and respond to them in less distressing and more useful ways. Forsyth and Eifert (2016), explain that when acceptance of anxious feelings is engaged and “you drop the rope in your tug-of-war with your anxiety monsters, you notice [you] will be freed up to be put to use for things in your life that you truly care about” (p.19). Acceptance of anxious emotions can help to make anxiety a part of your larger life but not your entire life.

How Does ACT Work with Anxiety?

ACT follows the three steps that the letters represent: Accept, Choose, Take action. The acceptance piece is a skill that this workshop will help to build, nurture, and maintain for years to come. This skill helps you to respond to your anxieties with compassion, kindness, gentleness, and with less engagement. The main goal of this step is to accept what you are experiencing and learn to let go of the need to change any of the thoughts or feelings that you may have.

Next is to choose. This step allows you to choose the direction and the values you want to stand for in your life. This step is the time to identify what is truly important to you and what you value. During this step we contemplate how we want to live our lives; what kind of person, friend, partner, parent do we want to be? What activities do we value doing? When we have

those answers, we can choose to go forward in ways that are unique to ourselves and accepting of the struggles we might face along the way. In this step, it is important to understand that when we can hold onto the acceptance of our experience while continuing to choose to follow our values without avoiding the challenging times, we can grow ourselves and our lives into the person we strive to be.

And lastly, take action. This step involves a commitment to learning new behaviours in ways that align with the chosen values and taking action to change the parts of your experience that you can change, such as the way you act on your anxious thoughts. As explained by Forsyth and Eifert (2016) the goal here is the “foster your willingness to take your inner emotional discomfort along with you in service of your life goals and dreams” (p.20).

Why is Yoga Effective?

Research by Maddux, Daukantaité, and Tellhed (2016) shows that the combination of breathing and body postures in yoga work to alleviate anxiety for many people who practice. Yoga is a tool that increases mindful awareness of thoughts, which resulted in a decrease in perceived anxiety symptoms (Maddux, Daukantaité, and Tellhed, 2016). The mindfulness that is experienced in yoga is due to the focus on the present moment of the body and the mind which results in decreased anxiety symptoms.

Why is Mindfulness Meditation Effective?

Similarly, to the mindfulness aspects of yoga, mindfulness meditation helps individuals to focus on the present moment in the body and mind. MM supports individuals to shift away from the judgment of their thoughts and into an awareness state. This process showed to decrease anxiety and individuals reported feeling calmer and more regulated. Similarly, the process of focusing on the present enables one to conceptualize thoughts as temporary and fleeting.

Experiential Component

This section is guiding the participants through the experiential component of the workshop.

First, we will start with a mindfulness exercise to bring our minds into the present moment. This is an exercise you can come back to at any point in time to help ground yourself and calm your mind. This exercise focuses on breathing and recognizing thoughts as they pass through you through. Try to notice your thoughts without attaching meaning or judgment to them, notice time where your thoughts flow if you let them, notice how your body feels, simply notice and let pass.

Centering and grounding mindfulness exercise done as a large group

Next, we are going to reflect on the mindfulness activity. We will split into small groups for this second. Please share what you feel comfortable with and reflect on the experience of drawing your attention to the present moment.

- Notice what was present in your mind when you think about your intentions to do this work?
- What sensations, if any, did you notice in your body?
- Were there any thoughts that showed up that made you want to stop doing this exercise (e.g. This is boring, this won't be helpful, I am not doing this correctly)
- While doing this exercise did you notice any attachment to a particular result (e.g. Feeling more relaxed, anxiety thoughts going away)

ACT component

Next, let us notice the human ability to become tangled or fused with our thoughts. Forsyth and Eifert (2016), state that the act of fusing with a thought means that we tend to “treat them as

if they were the same thing as the experiences or event they describe” (p. 81). This means, when we go beyond seeing words as just a word, we buy into the “illusion your mind creates” about that word. (Forsyth and Eifert, 2016, p. 81). This pattern of fusion begins to trap oneself in a pattern of behaviour that is not helpful nor in the best interest of the person. Forsyth and Eifert (2016), call this a “mind trap”. Fusion can also give the thought more importance or weight than they deserve and require.

This exercise aims to create “defusion” from thoughts and experiences. And to look at how you respond to thoughts and feelings which feel hugely important and overwhelming. The act of defusion helps to externalize the event or thought and bring some choice and control back to the individual when they feel these thoughts or feelings emerging.

Getting Tangled up with Anxiety (Forsyth & Eifert, 2016, p.82)

| My Experience | What comes to mind? |
|----------------------|---|
| Example: Panic | -shakiness -fear -difficult breathing -heart racing -sweaty |
| | |
| | |

Please take 10 minutes to fill out the chart and evaluate, then return to small groups and reflect and share for 15 minutes.

Yoga

The next activity of this workshop is a large group yoga session. For this session, we are focusing on breathing and awareness of breath. This yoga will incorporate body movement and posture holding, to shift awareness to the body and the mind (25-minute group yoga practice).

Group reflection

Lastly, I encourage us to reflect on what we have experienced here together. This reflection will help you integrate some to the material you have learnt today. Below is a list of questions to guide our conversation. Please feel free to take these questions with you to continue to reflect on in the future.

- What is something that surprised you from your learning today?
- How do you see yourself fitting what you learned into your daily life?
- What felt the most challenging for you?
- Are there any aspects of this workshop that you are curious to learn more about?

At the end of the workshop, I would like to hear what you take with you in your life.

Conclusion

In conclusion, the research cited throughout the course of this section highlights the main themes that were presented in the literature review on yoga, Mindfulness Meditation, and ACT. Yoga, Mindfulness Meditation, and ACT all show strong evidence for decreasing the perceived symptoms of stress and anxiety. The research on yoga showed that the combination of mindful focus on breath, as well as the focus on body posture and relaxation, were important components

of the decrease in stress and anxiety for individuals. In the research on Mindfulness Meditation, the points that were highlighted as useful for decreasing stress and anxiety were the ability to regulate emotions, shifting away from the judgment of thoughts, and increasing awareness of one's own thought processes. And lastly, ACT found a decrease in stress and anxiety symptoms were attributed to defusion from thoughts, which creates distance between oneself and the negative thought or emotion. Based on the workbook by Forsyth and Eifert (2016), I created a workshop that educates the participant on the usefulness of ACT and highlights ACT activities and exercises which aim to encourage mindfulness as well, it aims to help reframe interaction with anxious thoughts. This workshop aims to support individuals dealing with anxiety and teach them tools and strategies to defuse their anxious thoughts, reshape their interactions with their emotions and learn a mindful, nonjudgmental way of noticing thoughts and emotions.

References

- Adams, C. M., & Puig, A. (2008). Incorporating yoga into college counseling. *Journal of Creativity in Mental Health, 3*(4), 357-372.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., ... & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical psychology: Science and practice, 11*(3), 230-241.
- Brinkborg, H., Michanek, J., Hesser, H., & Berglund, G. (2011). Acceptance and commitment therapy for the treatment of stress among social workers: A randomized controlled trial. *Behaviour research and therapy, 49*(6-7), 389-398.
- Butts, C. M., & Gutierrez, D. (2018). Using acceptance and commitment therapy to (re) conceptualize stress appraisal. *Journal of Mental Health Counseling, 40*(2), 95-112.
- Canada Mental Health Association. (2014). *Stress*.
<https://cmha.bc.ca/documents/stress/#:~:text=In%20a%20recent%20Canadian%20poll,to%20different%20kinds%20of%20stress>.
- Centre for Addictions and Mental Health. (n.d.). *Anxiety Disorders*.
<https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/anxiety-disorders>
- Dalrymple, K. L., & Herbert, J. D. (2007). Acceptance and commitment therapy for generalized social anxiety disorder: A pilot study. *Behavior modification, 31*(5), 543-568.
- Datta, A., Aditya, C., Chakraborty, A., Das, P., & Mukhopadhyay, A. (2016). The potential utility of acceptance and commitment therapy (ACT) for reducing stress and improving wellbeing in cancer patients in Kolkata. *Journal of Cancer Education, 31*(4), 721-729
- Descilo, T., Vedamurtachar, A., Gerbarg, P. L., Nagaraja, D., Gangadhar, B. N., Damodaran, B., & Brown, R. P. (2010). Effects of a yoga breath intervention alone and in combination

- with an exposure therapy for post-traumatic stress disorder and depression in survivors of the 2004 South-East Asia tsunami. *Acta Psychiatrica Scandinavica*, *121*(4), 289-300.
- Duraimani, S. L. (2019). A cross-sectional and longitudinal study of the effects of a mindfulness meditation mobile application platform on reducing stress and anxiety. *International journal of yoga*, *12*(3), 226.
- Eilenberg, T., Kronstrand, L., Fink, P., & Frosthalm, L. (2013). Acceptance and commitment group therapy for health anxiety—Results from a pilot study. *Journal of anxiety disorders*, *27*(5), 461-468.
- Erdoğan Yüce, G., & Muz, G. (2020). Effect of yoga-based physical activity on perceived stress, anxiety, and quality of life in young adults. *Perspectives in psychiatric care*, *56*(3), 697-704.
- Forsyth, J. P., Eifert, G. H. (2016). *The mindfulness and acceptance workbook for anxiety*. New Harbinger Publications, Inc.
- Government of Canada. (2014). *Mood and Anxiety Disorders in Canada*.
<https://www.canada.ca/en/public-health/services/publications/diseases-conditions/mood-anxiety-disorders-canada.html>
- Guijarro, R., Cerviño, M., & Castrillo, P. (2017). Acceptance and commitment therapy and anxiety disorders: Clinical case. *European Psychiatry*, *41*(S1), S410-S410.
- Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes and outcomes. *Behaviour research and therapy*, *44*(1), 1-25.

- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2011). *Acceptance and commitment therapy: The process and practice of mindful change*. Guilford Press.
- Hjeltnes, A., Molde, H., Schanche, E., Vøllestad, J., Lillebostad Svendsen, J., Moltu, C., & Binder, P. E. (2017). An open trial of mindfulness-based stress reduction for young adults with social anxiety disorder. *Scandinavian journal of psychology*, 58(1), 80-90.
- Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of consulting and clinical psychology*, 78(2), 169.
- Ivanova, E., Lindner, P., Ly, K. H., Dahlin, M., Vernmark, K., Andersson, G., & Carlbring, P. (2016). Guided and unguided acceptance and commitment therapy for social anxiety disorder and/or panic disorder provided via the Internet and a smartphone application: A randomized controlled trial. *Journal of anxiety disorders*, 44, 27-35.
- Iyengar, B. K. S. (1966). *Light on yoga*. New York: Shocken Publishing.
- Janalipour, K., Kafi, M., Hatamian, H., & Rezapour, P. (2017). The effectiveness of yoga therapy in reducing anxiety, stress and depression in women with multiple sclerosis. *Caspian Journal of Neurological Sciences*, 3(10), 151-158.
- Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York: Dell Publishing.
- Kabat-Zinn, J., & Zinn, J. K. (2013). *Mindfulness meditation in everyday life*. BetterListen! LLC.
- Kang, H., bok Seo, J., & Hwang, I. Y. (2020). Mindfulness-based stress reduction for stress, anxiety, and psychological well-being: effects in a republic of korea navy fleet crew. *Journal of Psychosocial Nursing and Mental Health Services*, 58(11), 48-55.

- Keng, S. L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical psychology review, 31*(6), 1041-1056.
- Khalsa, S. B. S., Shorter, S. M., Cope, S., Wyshak, G., & Sklar, E. (2009). Yoga ameliorates performance anxiety and mood disturbance in young professional musicians. *Applied psychophysiology and biofeedback, 34*(4), 279.
- Klatt, M. D., Buckworth, J., & Malarkey, W. B. (2009). Effects of low-dose mindfulness-based stress reduction (MBSR-ld) on working adults. *Health Education & Behavior, 36*(3), 601-614.
- Köhn, M., Persson Lundholm, U., Bryngelsson, I. L., Anderzén-Carlsson, A., & Westerdahl, E. (2013). Medical yoga for patients with stress-related symptoms and diagnoses in primary health care: A randomized controlled trial. *Evidence-Based Complementary and Alternative Medicine.*
- Kozasa, E. H., Santos, R. F., Rueda, A. D., Benedito-Silva, A. A., De Moraes Ornellas, F. L., & Leite, J. R. (2008). Evaluation of siddha samadhi yoga for anxiety and depression symptoms: a preliminary study. *Psychological Reports, 103*(1), 271-274.
- Lemay, V., Hoolahan, J., & Buchanan, A. (2019). Impact of a yoga and meditation intervention on students' stress and anxiety levels. *American journal of pharmaceutical education, 83*(5).
- MacDonald, H. Z., & Olsen, A. (2020). The role of attentional control in the relationship between mindfulness and anxiety. *Psychological reports, 123*(3), 759-780.
- Maddux, R. E., Daukantaitė, D., & Tellhed, U. (2018). The effects of yoga on stress and psychological health among employees: An 8-and 16-week intervention study. *Anxiety, Stress, & Coping, 31*(2), 121-134.

- Martini, A. E., Hammer, K., Heller, B., & Hirshfeld-Cytron, J. E. (2017). The impact of in-person and online structured yoga programs on anxiety levels in patients after in vitro fertilization (IVF) failure: a preliminary analysis. *Fertility and Sterility*, *108*(3), 301.
- Mental Health Foundation. (2021, March). *Stress*. <https://www.mentalhealth.org.uk/a-to-z/s/stress#:~:text=Stress%20is%20the%20feeling%20of,with%20mental%20or%20emotional%20pressure>
- Mental Health Research Canada. (2021, February). *Mental Health During COVID-19 Outbreak: Poll #5 of 13 in Series*. <https://www.mhrc.ca/national-poll-covid/findings-of-poll-5>
- Myrick, H., & Brady, K. (2003). Current review of the comorbidity of affective, anxiety, and substance use disorders. *Current Opinion in Psychiatry*, *16*(3), 261-270.
- Newlyn, E. (n.d.). *The yamas and niyamas*. Ekhart Yoga. <https://www.ekhart yoga.com/articles/philosophy/the-yamas-and-niyamas>
- Newlyn, E. (n.d.). *What is hatha yoga?* <https://www.ekhart yoga.com/articles/philosophy/what-is-hatha-yoga>
- Pakenham, K. I. (2015). Effects of acceptance and commitment therapy (ACT) training on clinical psychology trainee stress, therapist skills and attributes, and ACT processes. *Clinical Psychology & Psychotherapy*, *22*(6), 647-655.
- Pandurangi, A. K., Keshavan, M. S., Ganapathy, V., & Gangadhar, B. N. (2017). Yoga: Past and present. *The American journal of psychiatry*, *174*(1), 16-17.
- Pincock, J. S., & Terrill, A. L. (2020). Association of mindfulness to resilience, anxiety, and depressive symptoms after spinal cord injury—a correlational study. *Spinal cord series and cases*, *6*(1), 1-6.
- Pollack, M. H. (2005). Comorbid anxiety and depression. *Journal of Clinical Psychiatry*, *66*, 22.

- Ritzert, T. R., Forsyth, J. P., Sheppard, S. C., Boswell, J. F., Berghoff, C. R., & Eifert, G. H. (2016). Evaluating the effectiveness of ACT for anxiety disorders in a self-help context: Outcomes from a randomized wait-list controlled trial. *Behavior therapy, 47*(4), 444-459.
- Roemer, L., Orsillo, S. M., & Salters-Pedneault, K. (2008). Efficacy of an acceptance-based behavior therapy for generalized anxiety disorder: Evaluation in a randomized controlled trial. *Journal of consulting and clinical psychology, 76*(6), 1083.
- Rowan, C. R., Wynne, B., McHugh, L., Keegan, D., Byrne, K., Hartery, K., ... & Mulcahy, H. E. (2017). A randomised controlled trial of acceptance and commitment therapy (ACT) for the treatment of stress in inflammatory bowel disease. *Gastroenterology, 152*(5), S138.
- Ruiz, F. J., & Odriozola-González, P. (2017). A longitudinal comparison of metacognitive therapy and acceptance and commitment therapy models of anxiety disorders. *Anales de Psicología/Annals of Psychology, 33*(1), 7-17.
- Sawyer, D. (2018). Mindfulness meditation: A sartrean analysis. *Sartre Studies International, 24*(2), 66-83.
- Shohani, M., Badfar, G., Nasirkandy, M. P., Kaikhavani, S., Rahmati, S., Modmeli, Y., ... & Azami, M. (2018). The effect of yoga on stress, anxiety, and depression in women. *International journal of preventive medicine, 9*.
- Telles, S., Singh, N., Joshi, M., & Balkrishna, A. (2010). Post traumatic stress symptoms and heart rate variability in Bihar flood survivors following yoga: a randomized controlled study. *BMC psychiatry, 10*(1), 1-10.
- Uebelacker, L. A., Tremont, G., Epstein-Lubow, G., Gaudiano, B. A., Gillette, T., Kalibatseva, Z., & Miller, I. W. (2010). Open trial of vinyasa yoga for persistently depressed

individuals: evidence of feasibility and acceptability. *Behavior Modification*, 34(3), 247-264.

Wicaksana, I. G. A. T., Wahju, T., Eko, R., & Yudara, P. (2018). The Effect of acceptance and commitment therapy (ACT) on anxiety levels in elderly living at Panti Sosial Tresna Werdha (PSTW) Bali. *Public Health of Indonesia*, 4(2), 83-90.