A JOURNEY THROUGH ANXIETY AND PSYCHOTHERAPY

by

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Abstract

Anxiety is one of the two most common mental health concern experienced worldwide. Depression often accompanies anxiety. Anxiety is characterized by worrisome thoughts, intense physical symptoms, emotional fearfulness and behavioural changes. According to the World Health Organization (2017) each year the number of people living with anxiety and depression continue to rise – globally the number is approximately 300 million in 2015. Anxiety appears to be one of the most prevalent reasons people seek psychotherapy. And according to literature, psychotherapy is the first line of treatment for anxiety issues.

This manuscript thesis attempts to understand various sorts of anxiety and possible avenues of psychotherapy. Chapter one begins with an introduction to anxiety and therapy. Chapter two investigates anxiety in childhood, adulthood and in later life. Chapter three takes a closer look at unmasking layers of anxiety to deepen our foundational understanding of how anxiety affects people. Chapter four explores various psychotherapeutic approaches for the variety of anxiety noted in chapter two. Chapter five seeks entheogen's potential use for anxiety in psychotherapy.

Keywords: generalized anxiety, social anxiety; obsessive-compulsive; panic, phobia, post-traumatic stress, anxiety, children, adult, older adults, alexithymia, gifted, glossophobia, entheogens, psychedelics, psychotherapy, therapy, counseling.

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+ All humans living with anxiety, may this offer you mental peace putting your heart at ease +

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CHAPTER 1 INTRODUCTION

Welcome! What is Anxiety?

Welcome! Let me open the door for you into the world of anxiety and psychotherapy. This thesis will explore different types of anxiety (childhood anxiety, general anxiety, social anxiety, obsessive-compulsive, panic, phobia, post-traumatic stress and other types of anxiety) and psychotherapeutic approaches available for each. The goal of this paper is to: (a) broaden our understanding of the spectrum of anxiety, (b) recognize presenting symptoms, (c) learn tools, technique, and strategies for connecting, coping and managing one's anxiety, and (d) develop different perspectives on anxiety.

The first chapter of the thesis will provide an overview of anxiety and psychotherapy. Chapter two examines general information anxiety and other possible causes of anxiety. In addition, specific anxiety (general, social, obsessive-compulsive, panic, phobia, post-traumatic stress), and their definition, symptoms, causes, and implications will be articulated. Chapter three delves into various aspects of anxiety to ultimately stretch our understanding of what anxiety is. Chapter four seeks to comprehend avenues of psychotherapy for anxiety. Additionally, efficacy and effectiveness of psychotherapy in children, youth, adults, and older adults will be analyzed. Chapter five appreciates enthogens as an adjunct treatment in psychotherapy. Most of the topics, subjects, themes mentioned in this paper warrant further amplification for future studies – this is only the beginning of the journey.

Methodology

The manuscript thesis implements a literature review style. What is a literature review? Once the topics are chosen, the search begins with related content from the literature. The literature review has particular goals: it engages the audience with results of other studies closely

examined and “relates a study to the larger, ongoing dialogue in the literature” (Creswell, 2014, p. 27-8). Cooper (2010) discussed four types of literature reviews that “(a) integrate what others have done and said, (b) criticize previous scholarly works, (c) build bridges between related topics, (d) identify the central issues in the field’ (as cited in Creswell, 2014, p. 28). This thesis provides a combination of the four types of the literature review.

In addition to the literature review, you will witness many tables utilized in the process of reading this paper. The purpose of the tables is to convey focused information in the space available. In other words, the tables are an efficient way of organizing data retrieved from the literature to further enhance our understanding.

Searches were conducted using City University of Seattle and University of British Columbia database. Databases used were PsycINFO, PsycARTICLES, and PsycBooks. Search terms used are written in bold headings and subheadings embedded in this paper. The following limitations to search articles were applied: full text, scholarly peer-review and within the field of psychology, psychotherapy, and counseling. No other limitations were used for the reason of widening our search results.

Overview of Anxiety

Anxiety is the most common mental health issue in Canada (Kessler, Nelson, McGonagle, Edlund, Frank & Leaf, 1996; Offord, Boyle, Campbell, Goering, Lin, Wong & Racine, 1996). It also affects people across the spectrum of life with differing ages, income, education, and culture. Anxiety is characterized by an ‘intense fear, anxious arousal, irrational thought and avoidance’ (ADAC, 2003). Chapter two will offer a detailed definition of the differing types of anxiety disorders.

Definition

What defines anxiety? Anxiety is a normal cognitive, emotional and behavioral response to dangerous stimuli. Most people normally feel anxious when stressed. The neurological response is a basic emotion available in infancy and childhood, and how anxiety is expressed is basically on a spectrum from mild, moderate to severe (Beesdo, Knappe & Pine, 2009). Anxiety is typically adaptive in many situations when it helps with avoidance of danger. Mild anxiety helps us stay alert and attentive to threats and challenges.

Individuals with anxiety disorders have the tendency to become easily overwhelmed by their emotions. They are particularly weighed down by their negative response to unwanted feelings and scenarios. Often times, people cope with these negative responses by avoiding scenarios that trigger anxious feelings. Unfortunately, the avoidance strategy usually has a boomerang effect, in which avoidance of anxiety perpetuates greater anxious feelings overtime (American Psychological Association, 2016).

Facts about Anxiety

How does anxiety affect the individual? When anxiety is experienced continuously and affects daily activities of living, it can turn into a maladaptive response and mental health issues ensue. Mental health issues affect thinking, mood and behavior of a person. The promptness and intensity of anxiety can be devastating and debilitating. When the distress lasts at least six months, it's considered chronic, and likely to worsen over time without treatment (Statistics Canada, 2015). Impairments in functioning affect personal, social, and occupational roles (Statistics Canada, 2015). With effective treatment through psychotherapy, people suffering from anxiety disorders can lead a normal life (American Psychological Association, 2008).

Statistics about Anxiety

We will look at the overview of statistics for the different type of anxiety to understand the bigger picture of anxiety and its impact on our society. Greater detail of how each anxiety embodies its statistics are explained in the next heading entitled epidemiological and prevalence factors for anxiety disorders.

American.

Table 1.1 American Statistics of Anxiety Overview

	# Affected in America	% of Population in America	Facts
General	6.8 million	43.2%	Affects women twice as men
Panic	6 million	2.7%	Affects women twice as men
Social	15 million adults	6.8%	Equal with women and men; begins around age 13; 36% of people with social anxiety disorder report experiencing symptoms for 10 or more years before seeking help.
Phobias	19 million adults	8.7%	Affects women twice as men
***Obsessive compulsive**	2.2 million adults	1.0%	One-third of affected adults first experienced symptoms in childhood.
***Post-traumatic stress**	7.7 million adults	3.5%	Affects women twice as men; Rape is the most common trigger of PTSD: 65% of men and 45.9% of women; Childhood sexual abuse is a strong predictor of lifetime likelihood for developing PTSD.
* Symptoms usually begin in childhood with an average age-of-onset is 7 years old; these two anxiety disorders are closely related			

Note: Data for American Statistics on Anxiety Overview within their population from ADAA (2016).

Canadian. Mood and Anxiety Disorders of Canada (2014) estimated approximately three million Canadians (11.6) aged 18 years or older reported experiencing mood or anxiety disorders. One in five Canadians experiences mental health issues per year (CAMH, 2012; CMHA, 2017). By the time Canadians arrive at 40-years-old, one out of two will experience mood or anxiety issues. Generally, women have higher rates of anxiety disorders than men (CAMH, 2012). The yearly prevalence of any anxiety disorder is 12% and at least one in four Canadians will experience anxiety disorder once in their lifetime (Kessler, McGonagle, Zhao, Nelson, Hughes, Eshleman & Kendler, 1994). For example, 2.6% of Canadians are affected by general anxiety per year (ADAC, 2003).

Epidemiological and Prevalence Factors for Anxiety Disorders

This section will focus on epidemiological and prevalence factors. Epidemiology is defined as “the study of the distribution and determinants of disease in a population” and prevalence is defined as “the proportion of people in a population that have a given disorder at a given time, it represents the existing cases of a disorder in a population or group” (Gradus, 2017). Moreover, prevalence also “estimates by demographic factors such as age and gender…it’s important to keep in mind that prevalence is dynamic – it changes over people, places and time” (Gradus, 2017). Let’s look at epidemiological and prevalence factors for generalized anxiety, social anxiety, obsessive-compulsive, panic, anxiety phobia anxiety, and post-traumatic stress anxiety. The statistics expressed in this section are written in a numerical value with a percentage sign. The description of each disorder will be further elaborated in chapter two.

Epidemiology of General Anxiety (GAD). How many people are affected by this type of anxiety? GAD affects approximately 3% of the general population (APA, 1995; Kessler, Chiu, Demler & Walters, 2005; Statistics Canada, 2015). Approximately 40 million American adults ages 18 and older, or 18.1 percent of people in this age group in a given year have GAD. Nearly 75% of those with GAD will have their first episode by age 21.5 (APA, 2017).

The National Institute of Mental Health (2017a) in the United States (US) reported their lifetime prevalence of 1% for ages 13 to 18-year-old; lifetime prevalence of severe GAD of 0.4% for ages 13 to 18 years old; with the gender breakdown of female 1.4% and male 0.6%. Regarding the adult population (18 years old and greater), there is a 3.1% yearly prevalence of GAD and 32.2% are classified as having severe GAD (NIMH, 2017a). In the older adult category, the prevalence of GAD estimates range from 0.7% to 9% (Flint, 2005)

According to Canadian statistics, in 2012, an estimated 2.4 million (8.7% of population) of Canadians aged 15 years and older reported symptoms related to GAD and among these individuals, 30% (2.6% of population) reported symptoms for 12 months and greater (Pearson, Janz & Ali, 2013; Government of Canada, 2017). Another study by Kessler & Wittchen (2002) reported estimates ranging from 4% to 7% of the general population of Canada.

Other epidemiological studies conducted in the US, Europe, and Australia found a similar yearly estimation of one to four percent of the general population with GAD (Lieb, Becker, Altamura, 2005; Kessler et al., 2005; Hunt, Issakidis & Andrews, 2002).

Epidemiology of Social Anxiety. How many people are affected by social anxiety? Social anxiety is one of the most prevalent types of anxiety. The lifetime prevalence of social anxiety ranges between 3 to 13% the general population (APA, 1995; Kessler et al., 2005; Kessler, 2003). The annual prevalence rate is 7% (Kessler et al, 2005). And women are more likely to experience social anxiety more than men (Wittchen & Fehm, 2001; Wittchen & Fehm, 2003; Stein & Kean, 2000; Kessler et al, 2005).

The National Institute of Mental Health (2017c) in the US reported statistics: lifetime prevalence of 5.5% for ages 13 to 18 years old; lifetime prevalence of severe social anxiety of 1.3% for ages 13 to 18 years old. 6.6% were female and 4.5% were male (13-14 years old: 3.9%; 15-16years old: 6.1%; 17-18 years old: 6.9%). Hudson & Dodds (2011) suggest an annual prevalence of 7% in children. Regarding the adult population (18 years old to 60 years old), there is a 6.8% annual prevalence and more than one third (29.9%) are classified as having severe social anxiety (NIMH, 2017d).

Canada's lifetime prevalence of social anxiety ranges from 8% to 13% of the general population - an annual prevalence rate of 6.7% (Stein & Kean, 2000). Shields (2004) reported

8% of the general population will experience social anxiety once in their lifetime – that is approximately 2 million Canadians aged 15 years of age and older. Those who experienced social anxiety are likely to suffer from depression, panic or substance use (Shields, 2004).

Secondary to dementia and cognitive impairment, anxiety disorder (including social anxiety) is considered the most common mental health issue in older adults (Cairney, McCabe, Veldhuizen, Corna, Streiner & Hermann, 2007). There are currently limited data on epidemiological studies of social anxiety in later life - the literature implies that data on the annual estimates are unreliable and do not reflect the current rates (Cairney et al., 2007). The approximate annual prevalence is 1.3% and lifetime prevalence is 4.9% for social anxiety in older adults (Cairney et al., 2007).

Epidemiology of obsessive-compulsive (OCD). How many people are affected by OCD? Lifetime prevalence rate of OCD is approximately 2 % in the US (APA, 1995; Bobes, Gonzalez, Bascaran, Arango, Saiz & Bousono, 2001). While the annual rate is slightly lower – the course of OCD is chronic with variability in severity of symptoms (Sasson, Zohar, Chopra, Lustig, Lancu & Hendler, 1997). The National Institute of Mental Health (2017e) reported OCD annual prevalence as 1% of the general adult population, while half of these cases 0.5% are classified as severe. Other studies show lifetime prevalence for OCD is 12.1% of the general population (Kessler et al., 2005; NIMH, 2017e). In the Canadian population, estimates are 1% to 2% will experience OCD; most have both obsessions and compulsions, with 25% to 50% reporting multiple obsessions (Clark, 2014).

Epidemiology of Panic Disorder(PD). How many people are affected by this type of anxiety? Approximately three out of 100 people will suffer from PD at some point in their lives

(Gauthier, 2014). Onset appears to be in late adolescent (Statistics Canada, 2015) or young adulthood, a period of ‘considerable stress’(Gauthier, 2014).

PD affects six million adults or 2.7% of the American population (ADAA, 2016) where women are twice as affected as men (Gauthier, 2014). Lifetime prevalence rates are 1% to 2% (APA, 1995). In U.S a yearly prevalence of 2.7% (Kessler, Chiu et al., 2005; NIMH, 2017h) and lifetime prevalence of 5% (Kessler, Berglund et al., 2005). According to the National Comorbidity Survey Replication, yearly prevalence amongst adults females were 3.8% compared to males at 1.6% (NIMH, 2017h). Amongst these adults, the degree of impairment was assessed using Sheehan Disability Scale and ranked according to mild (25.7%) moderate (25.9%) and severe (44.8%) (Kessler, Chiu et al., 2005).

With regards to the Canadian population, one-third of the population will experience PD (CMHA, 2018). Approximately, one million Canadians (or 3.7% of the population) have experienced PD with 4.6% women and 2.8% men (Statistics Canada, 2004). Yearly prevalence is 1% to 2% while lifetime prevalence is 4% of Canadians will experience PD (CMHA, 2018).

The National Comorbidity Survey Adolescent Survey reported a lifetime prevalence of PD as 2.3% and 2.3% of this adolescent had a severe impairment (NIMH, 2017h). The prevalence of panic disorder amongst female adolescent is higher (2.6%) than males (2.0%) (NIMH, 2017h).

Epidemiology of Specific Phobia. How many people are affected by specific phobia? The Canadian Psychological Association declared more than one in every 10 Canadians experiences phobias (McCabe, 2015). And the Anxiety and Depression Association of America (2016) reported specific phobia affecting 19 million adults (or 8.7% of the population).

Accordingly, a phobia is the most common anxiety disorder – with 49% of people describe experiencing unreasonably strong fear (Rowney, Hermida & Malone, 2010).

The National Comorbidity Survey Replication's yearly prevalence amongst adult females was 12.2% compared to males at 5.8%. Amongst these adults, the degree of impairment was assessed using Sheehan Disability Scale and ranked according to mild (48.1%), moderate (30.0%) and severe (21.9%) (Kessler, Chiu et al., 2005).

The National Comorbidity survey for adolescent reported a lifetime prevalence of specific phobia as 19.3% and 0.6% of this adolescent had a severe impairment (NIMH, 2017i). The prevalence differs amongst females (22.1%) and males (16.7%) (NIMH, 2017i).

Epidemiology of PTSD. How many people are affected by this type of anxiety? The National Center for PTSD reported that PTSD affects 7.7 million adults (or 3.5% of the U.S. population) (Gradus, 2017) and women are likely more affected than men (ADAA, 2016; Kessler, Chiu et al., 2005; NIHM, 2016b; Kessler, Sonnega, Bromet, Hughes & Nelson, 1995). Childhood sexual abuse and rape is the most likely trigger of PTSD – 65% of male and 45.9% of female (ADAA, 2016). PTSD prevalence reaches 20% amongst those victims of war trauma (Rowney et al., 2010). Lifetime prevalence of PTSD is approximately 8% of the population (APA, 1995; Kessler, Chiu et al., 2005; Kessler, Sonnega et al.,1995).

The National Comorbidity Survey Replication's (surveyed 5692 participants diagnosed with PTSD) yearly prevalence amongst adult females was 5.2% compared to males at 1.8%. Amongst these adults, the degree of impairment was assessed using Sheehan Disability Scale and ranked according to mild (30.2%), moderate (33.1%) and severe (36.6%) (Kessler, Chiu et al., 2005). Lifetime prevalence amongst adults was 6.8%; last year's prevalence was 3.5%; women at 5.2% and 1.8% among males (Gradus, 2017).

The National Comorbidity survey for adolescent reported a lifetime prevalence of specific phobia as 5.0% and 1.5% of this adolescent had a severe impairment (NIMH, 2017i). The prevalence differs amongst female (8.0%) and males (2.3%) (NIMH, 2017i).

Economic Cost to Society

Economic cost estimates are $7.9 billion in 1998 ($4.7 billion in care and $3.2 billion in disability and early death); 3.8% of hospital admissions were related to anxiety disorders, bipolar disorders, schizophrenia, major depression, personality disorder and suicidal behavior (CMHA, 2017). Regarding disability leave for mental health issues, it is approximately double the cost of a leave due to physical illness (CAMH, 2012). Statistics on number of Canadian employees that are unable to work due to mental health issues are rising: 355 000 disability cases due to mental/behavioural issues (Institute of Health Economics, 2007) and 175 000 full time workers absent from work due to mental health issues (Dewa, Chau & Dermer, 2010). Economic burden of anxiety has been a downfall since it is often unrecognized compared to schizophrenia and depression (ADAC, 2003). Anxiety disorders have the largest cost (31.8%) of all mental health issues because of their soaring prevalence and younger onset of age (DuPont, DuPont & Rice, 2002).

Resilience and Risk Factors for Anxiety

Why do some people develop anxiety disorders and other people do not? Risk factors predispose individuals to develop anxiety; while on the other hand, resilience factors (also known as protective factors) cushions anxiety from developing. What does resilience and risk factor mean? The National Research Council and Institute of Medicine (2009) defined protective and risk factors as:

Protective factors are defined as a characteristic at the biological, psychological, family, or community (including peers and culture) that is associated with lower likelihood of problems outcomes or that reduce the negative impact of risk factors on problems and outcomes. Conversely, the risk factor is defined as “a characteristic at the biological, psychological, family, community or culture level that precedes and is associated with a higher likelihood of problem outcomes (as cited from youth.gov, n. d., para.3).

Now that we are aware of what these two definitions mean; what are the specific resilience factors and risk factors for anxiety? The National Assembly on School-Based Health Care (n, d.). delineated a list of protective and risk factors for anxiety, five major factors arise (community [school, work, neighborhood], family, peer, individual and society) see table 1.2 noted below:

Table 1.2 Protective and Risk Factors for Anxiety	
Protective/Resilience Factors	**Risk Factors**
Community/Society	
Having a high socio-economic status	Witnessing violence in the community
	Having a low socio-economic status
Family	
Consistent home/family routine	Living in a single parent family
High family support	The family history of the problem
	Parental overprotection
	Parental conflict/fighting
	Close-knit/enmeshed family
School	
Experiencing less/removal of stressors	Low academic self-efficacy
High social support	Low academic achievement
Individual/Peer	
Self-oriented perfectionism	High self-esteem
Brain injury/physical trauma	Feelings of self-worth
Stressful live event	Internal locus of control
Recent stressors (death, illness)	Consistent physical activity
Low general self-efficacy	Sufficient social skills
Maladaptive learned response	Secure attachment style
Substance abuse	Active problem-solving coping strategies
Depressive attribution style	
External locus of control	
Low self-esteem	

Note: Data for Protective and Risk factors from The National Assembly on School-Based Health Care (n, d.).

Development of Anxiety from Childhood to Adulthood

How do thoughts and feelings of anxiety develop in childhood and in adulthood? How does childhood anxiety differ from adulthood anxiety? What are the factors that influence an individual towards developing anxiety? The National Academies Press and U.S. Department of Health and Human Service and Substance Abuse and Mental Health Services Administration (2009) studied risk and protective factors for mental, emotional, and behavioural disorders across the life cycle - individual factors represented in blue; family factors represented in purple, and community factors represented in orange - a summary is represented in table 1.3 noted below:

Table 1. 3 Risk and Protective Factors for Anxiety Across the Life Cycle

	Infancy & Early Childhood	Middle Childhood	Adolescence	Early Adulthood
Risk Factor ▪ **blue individual factors** **purple family factors** **community factors orange**	▪ Irritability ▪ Fearfulness ▪ Marital conflict ▪ Negative events ▪ Specific traumatic experiences ▪ Negative events ▪ Lack of control or mastery experiences	▪ Shyness ▪ Parents with anxiety disorder or anxious childrearing practices ▪ Parental over control and intrusiveness ▪ Parents model, prompt, and reinforce threat appraisal, and avoidant behaviors ▪ Marital conflicts; poor marital adjustment ▪ Negative life events ▪ Witnessing community violence ▪ Social trauma ▪ Negative events ▪ Lack of control or mastery experiences	▪ Low self-esteem ▪ Shyness ▪ Parental/marital conflict ▪ Family conflict (interaction between parents and children and among other children) ▪ Parental drug and alcohol use ▪ Parental unemployment ▪ Community violence ▪ School violence ▪ Poverty ▪ Traumatic event	▪ Childhood history of untreated anxiety disorders ▪ Childhood history of poor physical health ▪ Childhood history of sleep and eating problems ▪ Poor physical health ▪ Spousal conflict ▪ Single parenthood ▪ Negative life events
Protective Factor ▪	▪ Self-regulation ▪ Secure attachment ▪ Mastery of communication and language skills ▪ Ability to make friends and get along with each other ▪ Reliable support and discipline from caregivers ▪ Responsiveness ▪ Protection from harm and fear	▪ Mastery of academic skills (math, reading, writing) ▪ Following rules for behavior at home, school and public places, ▪ Ability to make friends ▪ Good peer relationship ▪ Consistent discipline ▪ Language-based rather than	▪ Positive physical development ▪ Academic achievement/ intellectual development ▪ High self-esteem ▪ Emotional self-regulation ▪ Good coping skills and problem-solving skills ▪ Engagement and connections in two or more of the following context: a school with peers, in athletics, employment, religion, culture	▪ Identity exploration in love, work, and worldview ▪ Subjective sense of adult status ▪ Subjective sense of self-sufficiency, making independent decisions, becoming financially independent

blue individual factors purple family factors community factors orange	▪ Opportunities to resolve conflict ▪ Adequate socioeconomic resource for the family ▪ Support early learning ▪ Access to supplemental services such as feeding, screening for vision and hearing ▪ Stable, secure attachment to the childcare provider ▪ Low ratio of caregivers to children ▪ Regulatory systems that support a high quality of care	physically-based discipline ▪ Extended family support ▪ Healthy peer groups ▪ School engagement ▪ Positive teacher expectations ▪ Effective classroom management ▪ Positive partnering between school and family ▪ School policies and practices to reduce bullying ▪ High academic standards	▪ The family provides structure, limits, rules, monitoring, and predictability ▪ Supportive relationships with family members ▪ Clear expectations for behavior and values ▪ Presence of mentors and support for the development of skills and interest ▪ Opportunities for engagement within school and community ▪ Positive norms ▪ Clear expectations for behavior ▪ Physical and psychological safety	▪ Future-oriented ▪ Achievement motivation ▪ The balance of autonomy and relatedness to family ▪ Behavioral and emotional autonomy ▪ Opportunities for exploration in work and school ▪ Connectedness to adults outside of the family

Note: data for Risk and Protective Factors for Anxiety Across the life cycle from National Research Council and Institute of Medicine (2009).

Table 1.3 allows us to see the bigger picture and understand how anxiety develops. It helps us comprehend both risk and protective factors and its relation to the life cycle. Anxiety specialist noted that children experiencing anxiety more frequently and intensely than peer counterparts are likely to experience a major disruption in their lives (Anxiety BC, 2017). These disruptions can interfere with daily activities such as attending school, joining clubs, sleeping throughout the night, doing homework or making friends (Anxiety BC, 2017). These major disruptions in their activities are at greater susceptibility to risk factors for these children and youth, and many anxiety disorders are rooted in childhood development.

Risk Factor

Risk factor gives us a clue about ways that increase one's susceptibility to developing anxiety. Irritability and fearfulness were individual emotional responses experienced in early childhood that contributed to anxiety. Regarding family factors, marital conflict and negative events experienced to contribute to anxiety. And community factors such as specific traumatic experiences, negative events, and lack of control or mastery experienced contributed to anxiety.

These core presented issues experiences stemmed from early childhood seems to influence the development of anxiety and appears to possibly affect the person's life into their adulthood. Other risk factors (genetic and environmental factors that interact with each other) include shyness, behavioral inhibition in childhood, female gender, less economic resource, an anxiety disorder in close relative and elevated cortisol levels in saliva (particularly social anxiety) (NIMH, 2016b).

Cortisol is a hormone the body produces in response to stress; and as a result, cortisol levels are physiological samples (ie: blood, urine, saliva) of how much of this hormone is circulating in the bloodstream; thus elevated cortisol levels reflect a greater stress response within the body.

Protective Factor

On the contrary, protective factors are ways that safeguard one's ability to develop issues such as anxiety in any part of their lives. As counselors, it is important for us to recognize protective factors because they provide vital information about the client's well-being. Protective factors such as self-mastery in communication, language, emotions, social and other skills necessary to grow and develop in a healthy manner contribute to individual factors. Other salient individual protective factors include a positive outlook on life (past, present, and future), secure attachment, healthy self-perception, self-sufficiency and goal-oriented achievements. With regards to family factors, key themes that stand out include one's quality interaction with their parental figure (qualities of such are listed on the next page). External support from friends and others whom we interact with (for example neighbors or mentors) that support exploring, learning and connecting are a vital safety net that shields us from needless suffering (such as anxiety).

Overview of Psychotherapy for Anxiety

What are the implications of experiencing anxiety disorders? Hollander, Ewon, Stein, Broatch, Rowland & Himelein (1996) reported 58% of individuals with an obsessive-compulsive tendency experience academic underachievement, 47% experienced occupational impairment, while 40% are unable to sustain long-term employment. Moreover, an anxiety disorder in youth is alarming and poses the risk of developing substance use in adulthood (Regier, Rae, Narrow, Kaelber & Schatzberg, 1998; Wittchen, Kessler, Pfister & Lieb, 2000). Surprisingly, anxiety disorders increase chances of suicide by ten times the risk factor (Khan, Leventhal, Khan & Brown, 2002). Therefore, it is important to understand circumstances of anxiety and steps in providing support through psychotherapy for individuals living with anxiety.

According to the literature, anxiety disorders are highly treatable. The staggering amount of people accounts for the majority of those seeking professional support through psychotherapy. Majority of these individuals are able to reduce or eliminate symptoms after several months of psychotherapy, and many individuals notice improvement after just a few sessions (APA, 2016).

Hunsley, Elliot & Therrien (2003) reported psychotherapy as a first-line treatment for the six types of anxiety. “Many clinical practice guidelines encourage clinicians to consider psychotherapy as first treatment option” for anxiety disorders – psychotherapy offers lowered rates of premature termination over pharmacotherapy which is attributed to the potential adverse effects associated with medications (Hunsley, Elliot & Therrien, 2003, p.3). Chapter four will discuss avenues of psychotherapy for specific types of anxiety. And chapter five will discuss the potential use of enthogens as an alternative therapeutic avenue.

While conducting this research, it has been difficult to find statistical estimates on the number of individuals who seek psychotherapy for anxiety disorders. Also found it difficult to

locate the precise percentage on the efficacy and effectiveness of therapy on anxiety. More research on this topic is required.

Summary

The first chapter provided an overview of anxiety and therapy. The chapter opened up with the methodology for gathering data and an explanation of a literature review. Next, the general definition of anxiety was expressed. And additionally, facts, statistics were listed in accordance with American and Canadian social comparison. Risk and protective factors were thoroughly investigated. The therapist ability to understanding how foundational (childhood) experience leads to developing or negating issues such as anxiety require careful attention. While recognizing an individual, family and community factors that contribute to the development of anxiety are also is important.

It is positive to note that overall protective factors outweighs the number of available risk factors, there simply are more protective factors listed in table 1.2 and table 1.3. This chapter leaves us on a positive note – our findings in chapter one indicate a significant advantage for most people living with anxiety, it proposes hope and optimism through understanding and psychotherapy. Our journey through the spectrum of anxiety continues onto the next chapter where we will explore the different types of anxiety; let's continue to carry the torch of hope and optimism throughout this paper – allowing us to shed light onto the shadows of anxiety.

CHAPTER 2 ANXIETY ACROSS LIFESPAN

Chapter two explores the spectrum of anxiety in greater detail - childhood, adult, and older adult anxiety will be covered. The door into the world of anxiety has opened, come in and let's begin our journey together.

Childhood Anxiety

The journey through the spectrum of anxiety for this chapter begins with childhood anxiety. In the first chapter, we learned how risk factors contribute to the development of anxiety and resilience factors protect against it. We can begin to expand our perception of childhood anxiety by diving into the literature. Types of anxiety, definition, examples, symptoms and other considerations are categories of inquiry. Table 2.1 noted below consist of a summary outlining the range of anxiety experienced in childhood:

Table 2.1 Anxiety Experienced in Childhood

Type	Definition and Examples	Symptoms	Other considerations
Agoraphobia	▪ Sudden onset of intense fear (panic attack) accompanied by worries of next episode	▪ Difficulty breathing ▪ Racing heart ▪ Sweating ▪ Needing to escape ▪ The sense of danger or doom ▪ Chest pain	▪ Occurs in youth who fear locations where escape appears difficult and unable to receive help
Anxious-Ambivalent Insecure Attachment	▪ The child will be ambivalent when caregiver returns and seek closeness from caregiver but will be resentful and resistant when caregiver initiates attention	▪ Child of this attachment style is anxious about exploration and of strangers even when the caregiver is present ▪ When caregiver departs, the child is extremely distressed	▪ For further information see Mary Ainsworth attachment theory
Anxious-Avoidant Insecure Attachment	▪ Strangers will not be treated differently from caregivers ▪ Not much emotional range display regardless of who is the in-room or if it is empty	▪ A child with this attachment will avoid or ignore the caregiver showing little emotion when caregiver departs ▪ The child will not explore very much regardless of who is there	▪ For further information see Mary Ainsworth attachment theory
Body-Focused Repetitive Behavior	▪ A cluster of habitual behavior: hair pulling (trichotillomania); skin picking (skin excoriation); nail-biting; nose picking; lip or cheek biting	▪ Experience ongoing and repetitive engagement in pulling one's hair or skin picking despite hair loss, skin abrasion or lesions ▪ Occurs despite extensive efforts to stop the behavior	▪ Significant impairment and disruption in routine functioning occurs
Complex PTSD	▪ Multiple incidences of child abuse (physical or sexual or emotional), prolonged	▪ Less than age six symptoms: ○ Bedwetting after using the toilet	▪ Children and teens have extreme reactions to trauma

	domestic violence, concentration camp, torture, slavery, genocide ▪ May also develop disruptive, disrespectful or destructive behaviors; interpersonal problems and sensitivity	o Forgetting how or being unable to talk o Acting out scary events during playtime o Unusually clingy with a parent or other adults ▪ Negative self-concept and affect dysregulation	▪ Older children and teens show symptoms more like adult PTSD ▪ Not in DSM; available in ICD
Generalized anxiety (GAD)	▪ Excessive worry about the number of things like social, school, extracurricular activities and home life ▪ Worrying causes great distress and looks for approval and reassurance from others to cope	▪ Muscle tension ▪ Headaches ▪ Stomach Aches ▪ Restlessness ▪ Sleep difficulties ▪ Difficulty concentrating ▪ Worry about global warming, parents divorcing, making mistake, health, world events, performance	▪ Children tend to be very hard on themselves and strive for perfection ▪ Seek constant approval or reassurance from others
Health Anxiety	▪ Excessive anxiety related to somatic or physical symptoms or illness or condition	▪ Excessive, ongoing, uncontrollable worry	▪ Frequent visit to professional ▪ Reassurance seeking from other
Hoarding Disorder	▪ The ongoing and significant difficulty in getting rid of possession	▪ A strong urge to save/acquire often nonessential items that prevent extreme distress	▪ Living space compromised ▪ Affects social, occupational functioning
Obsessive-compulsive disorder (OCD)	▪ Involuntary thoughts or images that arise in child's mind which are unpleasant (obsession) ▪ Rituals or behaviors to lessen anxiety (compulsions)	▪ Compulsions dressing a particular way, counting, hand washing, checking doors and locks, tapping, repeating certain words or numbers over and. ▪ Compared to adults, children and teens may not be cognizant that their obsessions and compulsions are extreme and disproportionate	▪ Children with OCD are diagnosed around age 10 ▪ OCD can affect children as young as two or three years old ▪ Majority of onset: for boys - before puberty; for girls - during adolescence
Panic Disorder	▪ Child experiences at least two panic attack 'out of the blue' in one month ▪ Frightened of attacks and physical symptoms	▪ Shortness of breath ▪ Racing Heart ▪ Choking sensation ▪ Dizziness ▪ Fear of dying or losing control	▪ Often appears in adolescence
Post-traumatic Stress disorder (PTSD)	▪ Experience PTSD after witnessing a stressful or traumatic event such as the death of a loved one, natural disaster, physical or sexual abuse ▪ Greater risk are those who experienced violence at home	▪ Difficulty sleeping ▪ Excessive clinginess ▪ Nightmares ▪ Irritability ▪ Avoidance of things or people associated with the traumatic event ▪ Excessive fear of the event taking place	▪ Most at risk: directly witness or suffered (injury or death of a parent) ▪ Had mental health problems or lack of strong support network before event/experience
Anxiety-based refusal to go school	▪ Refusal to go school or has problems staying at school	▪ Repeatedly asked to visit the school nurse ▪ Physical symptoms: a headache, stomachache, nausea, diarrhea	▪ Affects 2-5% of school-age children

	▪ Complain of physical symptoms shortly before time to leave for school ▪ Starting school, moving, stressful life events, transitions trigger the onset of refusal to go school	▪ Tantrums, inflexibility, separation anxiety, avoidance, and defiance may show up	▪ Occurs between ages 5-6 and 10-11 (times of transition) ▪ May have average or above intelligence
Selective Mutism	▪ The child does not speak in some situations (school), comfortably speaks in other situations (chatterbox at home) ▪ Refusal to speak therefore interferes with school and friendship	▪ May stand motionless and expressionless, turn their heads, chew or twirl hair, avoid eye contact, or withdraw into a corner to avoid talking ▪ Extension of social anxiety	▪ The average age of diagnosis is 5 when a child enters school ▪ Parents surprised that child refuses to speak at the school
Separation Anxiety	▪ Excessive fear of leaving or being left by primary caregiver (parent, grandparent or nanny) ▪ Normal in toddlers and preschoolers (18 months to three years old) ▪ Occurs age four plus due to difficulty adjusting when left at school or with others	▪ Being excessively afraid of sleeping over at friend's home or sleeping alone ▪ Refusing to go school ▪ Repeated request to have someone with them to fall asleep or get into the bed of parents in the middle of the night ▪ Following parent around – not letting them out of sight ▪ Not wanting to or avoiding going places by themselves	▪ Affects 4% of children; most common in children age 7 to 9 years old
Social Anxiety	▪ Intense fear of scrutiny and evaluation by peers or authority figure (teachers) and performance ▪ Avoid situations where they have to engage in activities that feel anxious ▪ School performance, attendance, and friendships are compromised	▪ Feeling intensely afraid of or avoiding: o Social performance situation o Initiating conversations with others o Speaking in front of the class o Inviting others to social activities o Participating in peer-oriented activities (sports, parties)	▪ Physical symptoms: o Dizziness o Stomach aches o Racing hear o Sweating o Crying
Specific Phobias	▪ Excessive and/or unrealistic fear of a specific situation and things (the dark, storms, water, heights, animals, being in enclosed space, dentist or doctor, needle)	▪ Intense clinginess ▪ Crying ▪ Tantrums ▪ Freeze ▪ Stomach aches and headaches ▪ Avoidance	▪ Children will avoid situations or things they fear ▪ Unlike adults, they are not aware that fear is irrational

Note: data for separation anxiety disorder, social anxiety disorder, OCD, GAD, PTSD, panic disorder from ADAC (2007a), for body focused repetitive behaviours, GAD, health anxiety, hoarding disorder, OCD, panic and agoraphobia, PTSD, social anxiety, selective mutism, separation anxiety disorder, specific phobias from Anxiety BC (2017), for anxiety based school refusal from Anxiety Disorder Association of American (2016), for anxious-ambivalent insecure attachment and anxious-avoidant insecure attachment from Brodie (n. d.)., for PTSD from National Institute of Mental Health (2017g), for complex PTSD from World Health Organization (2016) and traumadissociation.com (n. d.).

Table 2.1 comprehensively depicts various types of anxiety experienced in childhood. As counselors, we have to take a moment and ask: how do these symptoms relate to risk factors

presented in chapter one? We can also be mindful of assessing individual, family and community factors as related to these presenting symptoms.

Adulthood Anxiety

Let's continue to understand what represent as anxiety – this time for adults. The next section of the thesis provides general facts about the six different types of anxiety experienced by adults (general anxiety, social anxiety, obsessive-compulsive anxiety, panic anxiety, phobic anxiety and post-traumatic stress). Tremendous amounts of information are available on this subject and to set boundaries, it will focus on specific categories of inquiry (about anxiety, signs and symptoms, causes and implications); more research in the future is required regarding other areas of inquiries.

Particularly, this paper attempts to answer these proposed questions: Tell me more about this particular anxiety? How does anxiety manifest in everyday life? What are the signs and symptoms of anxiety? How does it affect individuals and their overall functioning as a person? What causes the differing types of anxiety? And what happens when this type of anxiety is left untreated?

General anxiety (GAD)

"The most difficult part for me was knowing that the things I worried about probably wouldn't happen but I still just couldn't turn off my mind. I worried about money, about the kids, about losing my job. I would wake up in the morning so keyed up that I could barely catch my breath. By the end of each day, I was a complete wreck. No matter how many times people would try to reassure me, I just couldn't stop worrying" (ADAC, 2007b, para 1.).

The Worry-Wart

What is general anxiety? General anxiety is the most common type of anxiety disorder. It is described as 'severe' and 'chronic' anxiety disorder; formerly called 'anxiety neurosis' (Lieb, Becker & Altamura, 2005) in the 1980's before the diagnostic statistical manual of mental health

(DSM) labelled it as ‘generalized anxiety disorder’ (GAD) (APA, 1995). It appears that individuals excessively think about the ‘what ifs’ (Statistics Canada, 2015) and considered by their colleagues and family members as a ‘worrywart’ (Allgulander, 2012).

About GAD

How does GAD manifest in everyday life? GAD is characterized by “excessive worry or anxiety about everyday events and problems to the point that the individual experiences considerable distress and difficulty in performing day-to-day tasks” (Hunsley, Elliot, Therrien, 2013, p. 12). Individuals have recurring fears and worries about their health or finances (NIMH, 2016a; Statistics Canada, 2015) and often think of the worst possible outcome (APA, 2008).

What are the signs and symptoms of anxiety? And how does it affect individuals and their overall functioning as a person? According to the literature, the following listed are symptoms of GAD (as cited from Dugas, 2015; NIMH, 2016a; Lieb, Becker & Altamura, 2005; Allgulander, 2012; Statistics Canada, 2015) and some are classified based on moderate and severe noted in parenthesis:

- Chronic, excessive and uncontrollable worry (moderate to severe)
- Difficulty controlling the worry
- Difficulty concentrating or having their minds go blank (moderate to severe)
- Restlessness, on edge
- Hypervigilance, hyperarousal, and tension (moderate to severe)
- Being easily fatigued (moderate to severe)
- Irritability
- Muscle tension
- Sleeping problems (difficulty falling or staying asleep or restless, unsatisfying sleep) (moderate to severe)
- Together impair work capacity, relations, and leisure (severe)
- Unemployment (moderate to severe)

Causes of GAD

What causes the differing types of anxiety? The precise cause of GAD is unknown. Here are several thoughts on possible factors that contribute to GAD:

- Genetic contribution (NIMH, 2016a, APA, 1995),
- Neurotransmitters such as serotonin and norepinephrine disrupted (Statistics Canada, 2015)
- The build-up of stressful life situations or having a serious illness may trigger anxiety (Statistics Canada, 2015)
- certain personality types that are prone to feelings of anxiety or worry or feelings of insecurity (Statistics Canada, 2015)

Implications of GAD

What happens if anxiety is left untreated? The rationale for intense feelings of anxiety may be difficult to pinpoint. However, the fears and worries are real. It often prevents individuals from concentrating on day-to-day task (APA, 2008). The feelings can interfere with daily activities such as job performance, school work, and relationships (NIMH, 2016a).

GAD can lead to other issues such as fear of meeting people (social phobia), severe panic attacks (panic disorder) and depression (Dugas, 2015) If left untreated, those with GAD are at greater risk of developing medical problems such as heart disease, diabetes, cancer (Dugas, 2015) and cerebrovascular disease, pulmonary disease, and neurological disease (Allgulander, 2012).

Social anxiety

"Just the thought of going to a party would send me over the edge. I just couldn't cope with not knowing what to say or do with people that I didn't know. I would start to worry about the events for weeks before it took place and I would get all sorts of physical symptoms. By the time the day of the party rolled around, I'd feel so frightened and anxious that I couldn't go or I'd pretend I was sick. It really took a toll on my family and I felt so guilty about it" (ADAC, 2007c, para 1).

The Shy and Self-Conscious

What is social anxiety? Social Anxiety, also known as a social phobia is one of the most common anxiety disorders (Pini, Cassano, Simonini, Savino, Russo & Montgomery, 1997; Wittchen & Fehm, 2001). It has been described as "crippling shyness"(Shields, 2004) and these individuals are mistakenly labeled as "snobs." (Stein & Gorman, 2001).

About Social Anxiety

How does social anxiety manifest in everyday life? Individuals living with social anxiety feel very nervous in social settings and feel very self-conscious in front of others (APA, 2016). They fear social situations which they may feel embarrassed, judged, rejected, or afraid of offending others (APA, 2016; NIMH, 2016b). Examples include fear of speaking in front of people, fear of talking with a person of authority or fear of eating in public or using the washroom (NIMH, 2016b), hard time making friends, and worrying for days before a social event and feeling shaky (APA, 2016). The individual is aware that their fear is excessive yet continues to avoid situations that trigger intense anxiety and stress as they cannot overcome it (Statistics Canada, 2015).

People with social anxiety feel 'always been this way' about themselves (Kessler & Stein & Berglund, 1998). The onset of social anxiety often begins in early childhood or early adolescence (Dummit, Klein, Tancer, Asche, Martin & Fairbank, 1997; Beidel, Turner & Morris, 1999; Shields, 2004; Wittchen & Fehm, 2003). Nearly 50 % of individuals described experiencing anxiety at an early age (Magee, Eaton, Wittchen, McGonagle & Kessler, 1998) approximately before the age of 11 and 75% before the age of 16 (Hudson & Dodd, 2011). Social anxiety seldom develops later in adulthood (Wittchen & Fehm, 2003). Accordingly, social development becomes impacted early in life for these individuals (Wittchen & Fehm, 2003). The National Institute of Mental Health (2016c) reported:

> Some researchers think that misreading of others' behavior may play a role in causing or worsening social anxiety. For example, you may think that people are staring or frowning at you when they truly are not. Underdeveloped social skills are another possible contributor to social anxiety. For example, if you have underdeveloped social skills, you

may feel discouraged after talking with people and may worry about doing it in the future (para 11).

What are the signs and symptoms of social anxiety? According to the literature, the following listed are symptoms of social anxiety (NIHM, 2016b; NIHM 2016c; Statistics Canada, 2015:

- Show a rigid body posture, make little eye contact, or speak with an overly soft voice
- Feeling highly anxious about being with other people and having a hard time talking to them
- Feel self-conscious in front of other people and feel embarrassed and awkward
- Worried about feeling humiliated, or rejected, or fearful of offending others
- Being very afraid that other people will judge them
- Worrying for days or weeks before an event where other people will be
- Staying away from places where there are other people
- Having a hard time making friends and keeping friends
- Rapid heart rate, blushing, sweating, or trembling around people
- Feeling nauseous or sick to your stomach when around others

Symptoms may come and go with stress and pressure of life (Statistics Canada, 2015). When the anxiety continually interferes with day-to-day functioning, it's classified as 'generalized social anxiety' (Stein & Gorman, 2001). The course of anxiety disorder is chronic and lifelong – some estimates an average of 20 years (Kasper, 1998; Shields, 2004).

Causes of Social Anxiety

What causes social anxiety? The exact cause of social anxiety is unknown. The literature demonstrated several thoughts on the possible cause of social anxiety:

- Genetic component – parental history of mental health issues (APA, 1995; Kasper, 1998; Wittchen & Fehm, 2001);
- First-degree family history (anxiety.org, 2017a);
- Exposure to stressful events in childhood (NIMH, 2016b);
- Family environment – overprotective parents that restrict their child exposure to the stressful situation causing underdevelopment of coping skills resulting in avoidance of anxiety (Wittchen & Fehm, 2001);
- Parental/social modeling – child watches reaction and behavior of their models and develop same fear (Wittchen & Fehm, 2001);

- The embarrassing, humiliating or traumatic event at the moment when individual develop a fear for a particular scenario (Statistics Canada, 2015).

Implications of Social Anxiety

What happens when social anxiety is left untreated? People with social anxiety are persistently concerned about looking foolish around others (Statistics Canada, 2015). The avoidance and stress of social situations significantly affect daily life functioning in areas such as occupation, social, and personal (APA, 1995; NIMH, 2017d). The fear may be severe that the anxiety negatively impacts the individual's ability to create and maintain relationships with others (NIMH, 2017d) resulting in withdrawal from family and friends (Statistics Canada, 2015).

Social and occupational functioning is mostly affected. Severe anxiety causes one to avoid all social situations resulting in dropping out of school or quitting their job (Statistics Canada, 2015). They avoid social interaction or face social encounters with dread (Shields, 2004). They struggle with making new friends (Stein & Gorman, 2001). It also prevents them from having a romantic relationship due to their avoidance in dating because of the intense distress experienced in social situations (NIMH, 2017d).

Thus early intervention is necessary to prevent the condition from worsening. However, many individuals with social anxiety do not seek help for their condition (Statistics Canada, 2015; Kessler, 2003). There are a couple of reasons for this - because they are afraid of being judged or embarrassed to see a professional (Kasper, 1998) or they believe that their 'shyness' is part of their personality instead of a mental health issue (Kessler, 2003).

To cope with their debilitating anxiety, those with social anxiety will self-medicate and consume alcohol to reduce their anxiety (Kessler, 2003). Many feel lonely and isolated (Stein & Gorman, 2001) and these people with low self-esteem are at risk for depression and suicide (Statistics Canada, 2015).

Overall, social anxiety disorder is associated with poor quality of life and reduced health. Because of their avoidance, they are likely to be low income, unemployed, less educated, afflicted relationships, on social assistance, social isolation and increased rates of disability (Shield, 2004).

Obsessive-Compulsive Anxiety

"I found myself thinking thoughts that were really disturbing to me and I just couldn't make them stop. The thoughts would make me feel really anxious that I might have touched something dirty that could infect my whole family and that made me feel really guilty. The only thing that helped me was washing my hands. As time went on, it got to the point where the only thing that would calm me down was washing my hands constantly. I didn't want to keep washing my hands but I just couldn't stop myself" (ADAC, 2007d, para 1).

What is obsessive-compulsive anxiety? Obsessive-compulsive disorder (OCD) is a type of anxiety characterized by two factors: obsessions and compulsions. Obsessions are invasive thoughts, often unwanted and uncontrollable (Statistics Canada, 2015); Examples of obsessions include aggression, contamination, sexual, hoarding/saving, religious, symmetry/exactness, somatic and miscellaneous (Robinson, Rose & Salkovskis, 2017). Whereas, compulsions are the specific repetitive behaviors that one engages in to lessen their anxiety; examples of compulsions include: hand washing, excessive cleaning of the house, constant checking over and repeatedly for mistakes (APA, 2008). Typically, OCD is a combination of both obsession and compulsions – they occur simultaneously.

About OCD

How does OCD manifest in everyday life? It is rare to exhibit OCD without the compulsion (Statistics Canada, 2015) as they often go hand in hand. People with OCD are aware of their obsession and compulsions as excessive, unrealistic and senseless (Clark, 2014) however, their urge to act upon the ritual is overpowering and leads to worsening of anxiety (Statistics Canada, 2015).

What are the signs and symptoms of OCD? According to the literature, the following listed are symptoms of OCD (as cited from APA, 1995; Clark, 2014; Statistics Canada, 2015):

- Recurrent, persistent, intrusive thoughts known as obsessions
- Attempt to neutralize thoughts by ritualistic compulsions
- Compulsions rigidly performed in response to an obsession
- Disconnected from reality caused by excessive and unreasonable fear
- Time-consuming behavior with increased distressed
- Difficulty concentrating on endless uncertainty
- Repetitive doubts – checking house lock, stove off
- Interferes with personal, occupational and social functioning
- Contamination by dirt or germs (mysophobia)
- Compulsions such as washing hands, showering or cleaning

OCD has an early onset – its symptoms become noticeable in childhood, adolescence or young adulthood (APA, 1995). The average age of onset is 7 years old (ADAA, 2016) and appears to be more common with an earlier onset in boys than girls (Keeley, Storch, Dhungana & Geffken, 2007). In adults, men and women are equally affected (Statistics Canada, 2015). There are very few cases of individuals who experienced their first OCD episode after 40 years of age (Clark, 2014).

Cause of OCD

What causes OCD? According to CPA, the cause of OCD is unknown (Clark, 2014). Here are several possibilities that contribute to OCD: genetic component - first degree biological relatives are at higher risk of developing OCD (Clark, 2014; Statistics Canada, 2015); abnormal brain activity such as poor functioning of serotonin (Zohar, Sasson, Chopra, Amiaz & Nakash, 2003); behavioural conditioning – compulsions as a learned response to reduce or avoid anxiety associated with obsession: compulsions negatively reinforces the obsessive-compulsive cycle (Keeley, Storch, Dhungana & Geefken, 2007);

Implications of OCD

How does OCD affect individuals and their overall functioning as a person? OCD has a major impact on a person's daily functioning (NIMH, 2017e). Those suffer immensely from persistent unwanted obsession and compulsions that feel they cannot control. The obsessions and compulsions frequently require an excessive amount of time to compete, thus individuals are unable to carry out normal responsibilities (APA, 1995). Their overall quality of life becomes affected due to high levels of anxiety and stress. Individuals oftentimes will experience depression with anxiety (APA, 1995).

OCD also affects one's social functioning. For example, the person may ask their family or friends to engage in their ritualistic behavior such as helping them check and make sure that the check is correct (APA, 1995). Individuals constantly check their work or ask for reassurance from others because of their excessive self-doubt (Rowney, Hermida & Malone, 2010). As a result, their relationship with others becomes strained due to conflict arising when they engage others in their ritualistic behavior (Clark, 2014; Cyr, 2007).

OCD also affects occupational functioning. With regards to work, they may be preoccupied with constantly checking that they may not even go to work (Statistics Canada, 2015). Their concentration for the mental task is interrupted due to their obsession (APA, 1995; Cyr, 2007). As a result, their personal, occupational and social life greatly suffers due to limitations of anxiety-provoking obsessions and compulsion (APA, 1995; Cyr, 2007).

What happens when OCD is left untreated? Individuals with severe OCD suffer from extreme anxiety (APA, 1995). Their mental preoccupation with obsession and compulsions affect practically every area of their life. Disrupted social and occupational functioning may lead to lower self-esteem, reduced motivation for success, marital problems, guilt, depression, and

insomnia (Cyr, 2007). The more anxiety they experience, the more they become homebound (APA, 1995).

Panic Anxiety

"I was sitting in my car, stuck in heavy traffic. Suddenly my heart started to race, I felt my hands and feet go numb and I felt like I couldn't breathe. Everything around me suddenly seemed unreal and I wondered if I was somehow going crazy. My hands started shaking so badly on the steering wheel. I felt like I needed to get out of the car as fast as I could and run. It was absolutely terrifying." (ADAC, 2007e, para 1).

Petrified and Panicky

What are a panic attack and panic anxiety? A panic attack involves fear that occurs without unforeseen specific trigger or stressor (NIMH, 2017h). It is characterized by intense physical symptoms such as rapid heartbeat, chest pain, nausea, trouble breathing/shortness of breath, flushing, chills, terrors, impending doom (Rowney, Hermida & Malone, 2010). Symptoms are short-lived and "peaks within ten minutes of onset" (Statistics Canada, 2015, para 4).

Panic anxiety instantly activates the stress response (fight or flight or freeze) – when this system becomes shocked and stimulated, individuals experience a cascade of physical and psychological response that can be overwhelming (ADAC, 2007e). They think their having a heart attack or dying (Gauthier, 2014) and "very often, these patients first present to an emergency department" (Rowney, Hermida & Malone, 2010, para 11).

About PD

How does PD manifest in everyday life? Some people can experience occasional episodes; while others can experience it on a regular basis developing a panic disorder (PD).

Sometimes panic attacks even happen during sleep (Statistics Canada, 2015). Panic attacks' unexpected effect leads people to become fearful about the next occurrence (APA, 2008) - they fear the next episodes may interfere and restrict their daily functioning (APA, 2016).

What are the signs and symptoms of panic anxiety? Signs and symptoms of PD consist of complex factors. A compiled list of symptoms experienced is listed below in table 2.2.

Table 2.2 Signs and Symptoms of Panic Attack/Disorder

Category	Signs and Symptoms
Physical	• Shortness of breath or smothering sensations • Dizziness, unsteady feelings, or faintness • Palpitation or accelerated heart rate (tachycardia) • Trembling or shaking • Sweating • Feeling of choking • Nausea or abdominal distress • Numbness or tingling sensation in one or more parts of your body (paresthesias) • Hot flashes or chills • Chest pain or discomfort
Psychological/Emotional	• Feelings of being out of control during a panic attack • Intense worry about when next attack will happen • Feeling that your body is unreal/detached from oneself (depersonalization) • Feeling that your environment is not real/unreality (derealization) • Fear of dying, going crazy, losing self-control • Feeling a need to escape • Having the feeling of imminent doom or danger
Behavioral	• Sudden and repeated attacks of intense fear • Fear or avoidance of places where panic attacks have occurred in the past

Major Type of Panic Attack	Type of Attack	Defining Features	Diagnostic significance
Situationally bound (cued) panic	Almost always occurs immediately upon encountering, or in anticipation of, a situational cue	A patient who always panics when in a crowded shopping mall	Frequent in panic disorder. Experienced by the majority of patients with social and specific phobias
Situationally predisposed panic	Often, but not always, occurs in response to a situational cue	A patient who is more likely to panic when standing in a supermarket line	Frequent in panic disorder. Experienced by many patients with GAD and PTSD
Unexpected panic	Appears (to the patient) to occur spontaneously or 'out of the blue'	A patient who panics but can't identify any trigger for the attack	Necessary for diagnosis of panic disorder

Note: Data for physical, physiological, emotional and behavior categories from Anxiety Disorder Association of Canada (2007e), American Psychiatric Association (2000), National Institute of Mental Health (2016b), Rowney et al., (2010); Taylor et al., (2007); for major types of panic attack, types of panic attack, defining features and diagnostic significance from American Psychiatric Association (2000), Taylor et al., (2007).

Causes of PD

What causes PD? The exact cause is unknown, however, professional experts believe it's caused by several factors including genetics, biological and psychological (Gauthier, 2014). Genetically, PD appears to run in families – one 20-year study of depressed parents found three times increased in anxiety disorder of their children; and increased substance use, younger onset and more health challenges (Weissman, Wickramarante, Warner, Normoura, Pilowsky & Verdeli, 2006). Biologically, other research shows that people with PD may have atypical brain activity and biochemistry (Gauthier, 2014). Psychologically, individual susceptible to panic attacks are less likely to panic when informed in advance about sensations they may experience in a certain scenario (hyperventilation) or chemical (caffeine) (Gauthier, 2014). For others, different explanations such as childhood experiences or other life challenges (ie: loss, overwork, move, accident, divorce) are other possibilities (ADAC, 2007e).

Implications of PD

And how does it affect their overall functioning? Panic attacks can also happen more than once a day – individuals may experience a considerable amount of anxiety in between each episode; and the fear of anticipation can be more debilitating than the panic attack itself (APA, 1995; Statistics Canada, 2015; Taylor, Asmundson, Wald, 2007). The terror of anticipation is what leads them to avoid future situations alike. To cope with their overriding fear, they will start to avoid things and situations that cause anxiety (ADAC, 2007e). Some people may change their behavior, for example, quit their job (Gauthier, 2014). As a result, a range of implication lies for PD – from disturbances of sleep, concentration to personal, social and occupational functioning are common (Rowney, Hermida & Malone, 2010).

Another disruption in functioning is complicated with agoraphobia (APA, 1995). Approximately one-third of individuals with PD will experience agoraphobia (Statistics Canada, 2015). Gauthier (2014) defined agoraphobia:

> Agoraphobia is anxiety about being in places or situations from which escape might be difficult (or embarrassing) or which help may not be available in the event of a panic attack...it involves fear of situations such as being alone outside the home or being home alone, being in a crowd or standing in line, being on a bridge or in an elevator, or traveling in a bus, train or car...these situations are avoided or endured with considerable dread, or confronted only when accompanied by a trusted companion (p. 1).

Some believe that agoraphobia is an avoidance behavior strategy (ADAC, 2007e).

For example, a person has a panic attack while driving, they may begin to avoid driving and instead take the bus. Furthermore, if this person has a panic attack on the bus, they may begin to avoid taking the bus and perhaps stay home. Understandably due to the overwhelming fear, the avoidance cycle begins. These attempts may initially help reduce suffering; however, over time this cycle becomes restrictive and harmful to one's self-esteem, relationships, career, general life (ADAC, 2007e). PD left untreated can become chronic and have devastating consequences. 50-65% of individuals with PD will develop depression, while 36% of others develop substance abuse problems (Gauthier, 2014).

Phobia Anxiety

"I was so afraid of flying that I would drive for hours in order to not have to fly. I would have to plan my trips so carefully and always have to make excuses [for] why I was going to drive rather than fly. But I just couldn't bear the thought of getting on a plane and I'd do anything to avoid it" (ADAC, 2007f, para 1).

About Phobia Anxiety

What are phobia anxiety and specific phobia? Phobias have similar symptoms and behavior to PD. Phobia is characterized by excessive, distressing and intrusive fear triggered by *five main categories* (but not limited to, other dimensions may be available) (as cited from ADAC, 2007f; APA 2008; APA, 2016; McCabe, 2015; Rowney, Herida & Malone, 2010):

(a) *animal type* – rats, spiders, dogs, rodents, snakes, birds, cats, bugs
(b) *natural environment* - storms, lightning, water, bridges, tunnels
(c) *blood-injection-injury* – seeing blood, injections, medical procedure
(d) *particular situation* - enclosed places, driving, blood, heights, dentist, doctors, elevators, loud noises
(e) *other* – fear of choking or vomiting etc.

The onset of age related to blood-injection-injury and animal phobias start in early childhood; whereas the onset of phobias related to situational and natural environment start late adolescent to early adulthood (McCabe, 2015).

How does specific phobia manifest in everyday life? Here is the Canadian Psychological Association definition for specific phobia:

> The focus of an individual's fear is generally anticipated harm or danger related to the situation or object (having an accident while driving, or being bitten by a dog) or fear of losing control and having anxiety related physical sensations (panicking in an enclosed place, fainting upon seeing blood). The fear is considered excessive because it is out of proportion to the actual level of danger associated with the situation. When an individual is exposed to the feared stimulus, an anxiety response is triggered and sometimes grows into a full-blown panic attack. Consequently, people will avoid the feared situation or object otherwise they endure a lot of distress. For example: an individual with a phobia of snakes experiences an anxiety reaction in a number of situations including seeing a snake on television, being outside in grassy or [wooded] area where snakes may live and [see]

things that resemble a snake such as a coiled garden hose in the yard (McCabe, 2015, p. 1).

Adults are aware that their symptoms are intense and irrational; and these fears that have no actual threat yet thinking about facing the feared object or situation causes them severe anxiety (NIHM, 2017i). What are the signs and symptoms of social anxiety? (as cited from APA, 2000; McCabe, 2015; Rowney, Hermida & Malone, 2010)

- Persistent fear that is excessive or unreasonable, cued by presence or anticipation of specific object or situation.
- Exposure provokes immediate anxiety, which can take the form of a situationally predisposed panic attack
- Avoids phobic situations or else endured with intense anxiety or distress

Causes of Phobia Anxiety

What causes specific phobia? The fear generated by specific phobia causes significant distress and interferes daily social and occupational functioning (McCabe, 2015). Here is a list of some possible causes of specific phobia:

- Direct conditioning of traumatic event in the phobic situation – stuck in elevator or panic attack while flying (McCabe, 2015)
- Vicarious acquisition – actually witness a frightening event in the phobic situation or seeing someone else afraid in the phobic situation (McCabe, 2015)
- Informational transmission – hearing about the scary event in a phobic situation through media or family member (McCabe, 2015)
- Genetic factor for panic-generalized anxiety agoraphobia group and specific phobia group (Hettema, Prescott, Myers, Neale, Kendler, 2005; Rowney et al., 2010); a close relative with PD has 10-20% increased risk (Statistics Canada, 2015)
- Environmental stressors – external cues and how they are processed and reacted to (Hettema et al., 2005).
- Heightened sensitivity –sensitivity to physiological changes and diminished autonomic flexibility results of faulty central information processing in anxiety-prone person (Hoehn-Saric, McLeod, Funderburk, Kowalski, 2004).
- Stressful life events or periods – heavy workload, excess caffeine or stimulating drugs (Statistics Canada, 2015).
- Separation anxiety and other childhood psychological trauma –experiences associated with the onset of anxiety symptoms (Vanin & Vanin, 1999).

Implications of Phobia Anxiety

What happens when specific phobia is left untreated? Since this anxiety produces cause a lot of stress - avoidance becomes the main strategy for coping as evidenced by these examples (as cited from McCabe, 2015):

- A person fear of needles or medical procedure avoid treatments due to their phobia
- A person may turn down a job on the high floor of a building because of the fear of height
- A person may turn down a job promotion that requires flying across the country
- A person may avoid pleasant activities such as gardening, nature walks, or camping due to fear of snake

Similar to other types of anxiety discussed in this chapter, phobia anxiety has a significant effect on one's daily life in social, personal and occupational functioning.

Post-traumatic Stress Disorder (PTSD)

"My brother died in my arms in the hospital. After he died it was like I went numb. I had never experienced anything like this before. I felt haunted by the image of his lifeless, emaciated body lying on the hospital bed – his eyes and mouth wide open. I knew he didn't want to be remembered this way but I couldn't stop the images from coming. They would flood in my mind and it was like I was in the hospital with him all over again. I started having nightmares about his death and couldn't sleep. I felt so agitated all the time. It was really hard just to get through each day" (ADAC, 2007g, para 1).

About PTSD

PTSD is when traumatic events occur (such as rape, assault, torture, kidnapped, held captive, combat, severe car accident, natural or manmade disasters); generally it involves actual or perceived threat to self and others that result in intense fear and hopelessness (Statistics Canada, 2015; Nemeroff, Bremner, Foa, Mayberg, North & Stein, 2006; Bryant, 2003).Therefore, the traumatic incident may result in increased psychological distress (Koch, 2015).

How does this anxiety manifest in everyday life? And what are the signs and symptoms of PTSD? Table 2.3 below is a comprehensive list of the six main categories that help us define and diagnose PTSD for greater understanding.

Table 2.3 Signs and Symptoms of PTSD			
1	At least one	Exposure	Exposed to a traumatic event – actual or threatened
2	At least one	Re-Experiencing	Flashbacks – reliving trauma over and over (includes physical symptoms of racing heart or sweating) Intrusive – thoughts and images about the event Bad dreams/Nightmares – about the event or similar event Example: Frightening thoughts/feelings – affect daily routine; begins with thoughts and feelings, words objects or situations trigger re-experiencing
3	At least one	Avoidance	Staying away from external places, events, objects that remind of experience Avoiding internal thoughts and feelings related to the traumatic event Example: Change usual routine – after a bad car accident may avoid driving or riding in a car.
4	At least two	Arousal & Reactivity	Being easily startled and/or feeling tense Difficulty falling or staying asleep Physical arousal – physically upset when reminded of the event angry outburst – irritable, aggressive, self-destructive or careless Example: Constant "on edge" and hyper-vigilant– difficult to do the daily task (sleeping, eating, concentrating)
5	At least two	Cognition & Mood	Trouble remembering - key features of the traumatic event Emotional numbness – being out of touch with feelings Negative perception - about oneself or the world "I am bad" or "The world is a very dangerous place" Distorted feelings - persistent negative trauma-related emotion (fear, horror, anger, guilt, shame, blame) Restricted emotions – persistent inability to experience positive emotions Loss interest – in previously enjoyable activities Example: alienated and detached from family and friends – begin or worsen after a traumatic event
6	At least two	Impairment in Functioning	Present for more than one month Significantly impairs social, occupational and other areas of functioning

Note: data for signs and symptoms of PTSD from Anxiety Disorder Association of Canada (2007g), American Psychiatric Association (1995), American Psychiatric Association (2000), American Psychiatric Association (2013), Koch (2015), National Institute of Mental Health (2017g), Rowney et al., (2010), Statistics Canada (2015).

Causes of PTSD

What causes this type of anxiety? The cause of PTSD is apparent – an event or experience that produces significant anxiety (hyperarousal of the nervous system). Events and situations that cause the development of PTSD include, but are not limited to:

- An individual experienced witnessed or confronted with an event that involved actual or threatened death or serious injury (APA, 2000; Rowney et al., 2010)
- After severe physical or emotional trauma such as a natural disaster (threat to the physical integrity of others) or serious accident or crime" (APA, 2008; APA 2016)
- Violent personal assaults, combat and other forms of violence (NIHM, 2017f)
- Initial response include extreme fear, panic attacks, or dissociation (a method of coping by blocking out of one's mind the upsetting event as it is occurring) (Koch, 2015, p. 2)
- Susceptible and have histories, for example, depression, anxiety, trauma, angry predisposition, avoidant coping style (Koch, 2015)
- Negative attitude or beliefs about one's own coping ability or safety of the world; repeated angry or resentful thinking about reasons for trauma make it difficult to recover (Koch, 2015)
- Emergency workers (paramedics, police, firefighters, other emergency personnel) are more vulnerable due to a shortage of organizational support (Koch, 2015)

"Not everyone with PTSD has been through dangerous events. Some experiences, like the sudden or unexpected death of loved ones, can also cause PTSD" (NIMH, 2017f, para 3). About half of American adults will have an experience a traumatic event in their life, but most do not experience PTSD (NIMH, 2017f).

Implications of PTSD

What happens if anxiety is left untreated? PTSD results in tremendous personal affliction. The effects of PTSD affects a person's overall functioning: avoidance of important activities (driving or socializing); decreased sleep and increased fatigue; subsequent health issues (a headache); increased absenteeism from work and school; higher rates of unemployment and lower income (Kosh, 2015).

Anxiety in Later Life

Anxiety in later life is fairly common; it is secondary to other mental health issues such as dementia, Alzheimer's or depression. Phobias (social and specific phobia) begin in childhood. PTSD and panic occur mostly in adulthood. Worrying and rumination (GAD) are most common amongst older adults - half of those with GAD in later life is considered late onset (Lenze & Wetherell, 2011). Even though anxiety in later life is fairly common, it is often undiagnosed and untreated – researchers propose that older adults are less likely to seek assistance for their symptoms (Anderson, Wickramariyaratne & Blair, 2017).

Anxiety in later life is considered late onset; 11% of older women and 2% of older men (Lenze & Wetherell, 2011). Psychological and social risk factors contribute to late-onset of anxiety – factors such as female gender, cognitive impairment, chronic health condition, poor self-perception, functional limitations, personality traits (neuroticism and poor coping skills) (Lenze & Wetherell, 2011). Additionally, risk factors for anxiety include "being childless, having lower income and experiencing traumatic event" (Lenze & Wetherell, 2011, p. 383). Experts realize that anxiety in older adults also had anxiety when they were younger (ADAA, 2016).

What causes anxiety in later life? A study by Flint, Bradwejn, Vaccarino, Gutkowska, Palmour & Koszychi (2002) suggested age-related changes in brain function and make-up contribute to the reduction of nervous system reaction over time. Symptoms of anxiety are associated with stressful events such as a fall or acute illness (ADAA, 2016).

What happens if anxiety is left untreated? Anxieties in older adults create significant stress and impairment. Fear of falling is a universal fear amongst older adults which is characterized by avoidance and trepidation (Howland, Peterson, Levin, Friend, Pordon & Bak, 1993). Fear of falling and anxiety related to illness increases one's disability and as a result,

agoraphobia may ensue over time (Lenze & Wetherell, 2011). Fear and avoidance only grow over time if left unattended and consequently, older adults experience a "significant quality of life impairment and increased burden on health care cost is noted in GAD for older adults, on par with that seen in late-life depression (Lenze & Wetherell, 2011, p. 384). Older adults may completely avoid going outside for fear of falling and fear of acquiring illness which leads to greater disability.

Reflection

Table 2.4 summarizes features of anxiety across the lifespan as discussed in this chapter.

Table 2.4 Features of Anxiety Disorder Across Life Span

	Childhood/ Adolescence	Adulthood	Old Age
Key presenting symptoms	Irritability, poor sleep	Fatigue, poor sleep, irritability	Poor concentration or memory
Compliant	Somatic symptoms	Somatic symptoms	Fatigue, poor sleep, somatic symptoms
Context	School	Work, social settings	Activities of daily living, healthcare settings
Burden	School refusal, the burden on parents	Occupational disability, interpersonal	Excess health care utilization, caregiver dysfunction, excess healthcare burden, cognitive decline, cardiovascular and utilization of age-related disease, excess disability, premature mortality

Note: Data for features of anxiety disorder across the lifespan from Lenze & Wetherell (2011, p. 391).

In this chapter, we had the opportunity to learn about anxiety across the lifespan. We covered the following topics of anxiety related to: separation, social, obsessive-compulsive, generalized, post-traumatic stress, panic, bodily focused repetitive, health, hoarding, agoraphobia, selective mutism, phobia, school refusal, anxious-ambivalent insecure attachment, anxious-avoidant insecure attachment, complex post-traumatic stress, fear of falling, fear of illness and lastly fear of disability. The next chapter, chapter three delves into what anxiety is. It attempts to acknowledge and discern what constitutes anxiety. We will attempt to uncover layers of anxiety and unveil parts of what makes up anxiety.

CHAPTER 3 UNMASKING ANXIETY

Chapter two of the thesis examined the many faces of anxiety disorders. Chapter three, on the other hand, will be unmasking parts of anxiety. Upon closer examination, it seems that anxieties listed in chapter two are anxieties experienced in day to day life. Therefore, this chapter is divided into three main components of this chapter: (1) clarifying anxiety; (2) perspectives of anxiety; and (3) integrating anxiety. We will look at how anxiety is expressed in the day to day life.

Clarifying Anxiety

Before we wander off to explore anxiety experienced in everyday living, let's take a step back, pause for a moment and revaluate. Let's reconsider the definition of anxiety. Based on our findings in chapter two – is anxiety a thought? Or is it an emotion? Or bodily response? Is it also possible that anxiety is a behavior? Or physiological response? What is anxiety? Through the lens of hope, this chapter seeks to examine anxiety from various angle and diverse perspectives. And through the lens of understanding, this chapter will shed light on different aspects of anxiety.

An attempt to clarifying and understanding anxiety begins with defining the word anxiety. What does the word 'anxiety' and 'fear' mean? APA (1995) defined the word 'anxiety' as anticipation of future threat; whereas the word 'fear' is the emotional response to actual or perceived imminent threat. There are other differences between these two words. The word 'anxiety' is related to future danger response such as vigilance (cautious behavior), muscle tension (preparation for stress response) or avoidance (response to flight) (APA, 1995). On the contrary, the word 'fear' is associated with the activated arousal of the nervous system (APA, 1995).

The nervous system comprises of the brain and the spinal cord – central components for the pathway of communication within the body. Once the nervous system is activated, the response comprises of immediate thoughts of danger and behavioral response (fight, flight, freeze). Flight, commonly known as avoidance is a universal way of managing one's anxiety. Similarly, anxiety and fear share undue anxiety and fear which transpires turmoil in ways of conducting oneself. They both appear to contain 'a response' to a present, future or perceived threat. We will break down what anxiety is from different perspectives– psycho-emotional-linguistics, cognition, emotion, behavioral and somatic will be explored.

Psycho-emotional-linguistics

Anxiety versus Fear. We shall continue to take a step back by analyzing what is anxiety? Table 3.1 presented below describes (a) the root meaning of the word (etymology dictionary); (b) glossary of words to express fear and anxiety based on its complexity from simple to difficult words (thesaurus); and (c) opposite meaning of the word fear and anxiety (antonyms). The purpose of this table is to learn the root meaning of each word. In addition, it widens our vocabulary of words used to communicate thoughts and feelings of anxiety and fear. Future study is required for an in-depth analysis of the psycho-emotional-linguistics of the words anxiety and fear.

Table 3.1 Anxiety versus Fear

Word	Etymology Dictionary	Simple vocabulary	Standard vocabulary	Difficult vocabulary	Antonyms
Anxiety **noun: worry and tension**	"uneasy, troubled mind" "anguish, anxiety, solicitude" "apprehension caused by danger, misfortune,	apprehension, concern, doubt, dread, misery, panic, suffering, trouble, uncertainty, butterflies, care, distress, drag, flap,	Angst, disquiet, misgiving, mistrust, suspense, creeps, downer, fidgets, foreboding, fretfulness, fuss,	jitters, nervousness, restlessness, unease, uneasiness, botheration, disquietude, heebie-jeebies, watchfulness, worriment, all-overs, ants in pants, cold sweat, goosebumps,	Advantage, belief, blessing, calm, calmness, certainty, collectedness, confidence, contentment, ease, faith, happiness, joy, peace, security, sureness, trust, peacefulness, assurance,

	error, uneasiness, uncertainty, dread”	jumps, shakes, sweat	needle, shivers, solicitude, willie	nail-biting, pins, and needle	composure, nonchalance, tranquility
Fear **noun: alarm, appreh-ension** **verb: terrify, frighten**	“calamity, sudden danger, peril, sudden attack” “harm, distress, deception” “being afraid, uneasiness caused by possible danger”	anxiety, concern, despair, dismay, doubt, dread, horror, panic, suspicion, terror, worry, agitation, aversion, awe, distress, reverence, tremor	angst, scare, cowardice, creeps, foreboding, fright, funk, nightmare, phobia, qualm, revulsion, timidity trembling	jitters, unease, uneasiness, abhorrence, consternation, discomposure, disquietude, faintheartedness, misgiving, presentiment, trepidation, bête noire, chickenheartedness, cold feet, cold sweat, recency	Assurance, calmness, cheer, confidence, contentment, ease, encouragement, faith, happiness, joy, trust, comfort, like, love, bravery, courage, fearlessness, heroism, unconcern

Note Data for etymology words from Online Etymology Dictionary (2018a; 2018b), for thesaurus and antonyms words from online thesaurus dictionary (2018a; 2018b).

Emotional Charge. Just like there are many words to describe anxiety, there is also many ways one experiences anxiety. There’s an abundant way of expressing anxiety –table 3.1 took us across a gamut of simple to complex words. These words correspondingly are connected to levels of intensity experienced for anxiety and fear. When reading these words, they seem to carry a great deal of emotional charge (of thoughts, feelings, images, and memories). Emotionally charged words carry a specific weight depending on its intensity level. For example, in our society, words such as fear and anxiety carries a substantial weight thus have a negative connotation and consequently most people attempt to avoid, deny or negate their fear and anxieties.

Opposite meaning. One method of diffusing emotional charge words is to utilize words of the opposite meaning. Antonyms are words that act as an antidote to lessen the charge of these words. Here is an example, using words such as ‘assurance, calmness, and courage’ shines light

onto the shadow of fear and anxiety such as ‘panic, dread, jitters, and despair.’ Antonyms seem to convert the heavy weight of the word to a lighter one.

Additionally, antonyms build one’s protective factors – the more they use these words to describe themselves and their situation, the greater they deposit buoyancy into their bank of hope. Since antonyms embody a protective essence to them, utilizing words of this nature cultivates resilience within – this resilience within operates as a counteractive measure against fear and anxiety.

Cognition

Worrying. Could worrying actually be beneficial and considered a positive aspect of our life? Worrying is commonly experienced worldwide by many individuals; it is the cognitive component of anxiety. What is the mechanism that allows worrying to help us survive? Psychologist Roemer and Borkovec at Pennsylvania State University researchers of worrying believed that worrying is at the heart of anxiety. They articulated:

> When fear triggers the emotional brain, part of the resulting anxiety fixates attention on the threat at hand, forcing the mind to obsess about how to handle it and ignore everything else for the time being. Worry is, in a sense, a rehearsal of what might go wrong and how to deal with it, the task of worry is to come up with positive solutions for life’s perils by anticipating dangers before they arise (as cited from Goleman, 1995, p. 65).

Attentiveness, alertness, awareness, carefulness, caution, prudence, vigilance, wakefulness and watchfulness are general traits of worrying. Similarly, these traits act as a means of survival that protects against impending danger. The advantage of worrying seems to

be the ability to evoke opportunities for resolution through reflection. Thus, worrying as a merit has been a vital survival skill to our human evolution.

However, the disadvantage that most people experience is allowing anxiety to boggle their thinking – "instead of coming up with solutions to these potential problems; worriers typical simply ruminate on the danger itself, immersing themselves in a low-key way in the dread associated while staying in the same rut of thoughts" (Goleman, 1995, p. 67). Goleman gave an example (1995) "the main trouble with insomniacs was not somatic arousal, what kept them up were intrusive thoughts' (p. 67). These are the individuals who suffered from insomnia – their worries persistently meddled with their thoughts resulting in difficulty staying asleep.

Fear conditioning. Does fear conditioning help us survive? Are people conditioned to experience fear? Layton (2018) described this phenomenon:

> The circuitry of fear response may have been honed by evolution, but there is also another side to fear condition. Conditioning is why some people fear dogs as if they were fire-breathing monsters, while others consider them part of the family. In the 1920's, in what is probably not one of psychology's fine moments, American psychologist John Watson taught an infant to fear white rats. 'Little Albert' had no fear of the laboratory test animals. He showed joy at the sight of the white rats especially and always reached out [to] them. Watson and his assistants taught Albert to be terrified of white rats. They used Pavlovian (classical) condition, pairing a neutral stimulus (the rat) with a negative effect. Whenever Albert reached for one of the rats, they created a terrifyingly loud noise right behind the 11-month-old child. Not only did Albert very quickly learn to fear the white rats, crying and moving away whenever he saw one, but he also started to cry in the presence of other furry animals and a Santa clause mask and a white beard (para 1-2).

Brain lateralization of Anxiety. According to Nichols (2018) researchers, Miller and Heller studied anxiety's psychological brain activity using functional resonance imaging (fMRI). 42 total participants were separated into two groups: (a) anxious apprehension (verbal rumination and worry) and (b) anxious arousal (intense fear, panic, or both). Findings suggest group (a) revealed increased activity in the left brain associated with speech production; enhanced activity in the left brain is commonly seen in GAD (Nichols, 2018). On the contrary, group (b) revealed increased activity in the right brain concerned with 'tracking and responding to information signaling danger'; enhanced activity in the right brain is commonly seen in panic attacks or disorders (Nichols, 2018). Anxiety can either be one or combined response of the right and left the brain.

Emotion

Since anxiety is the anticipation of future threats, the underlying emotion that governs anxiety is fear. Fear (as earlier defined) is the emotional response to a threat (actual or perceived) thereby resulting in immediate activation of the nervous system. Let's start to understand what fear means through the lens of our emotions.

Basic Emotions. According to Turner (1996a; 1996b), humans experience three primary emotions: (1) assertion-anger; (2) aversion-fear; and (3) disappointment sadness. Plutchik, on the other hand, believed basic emotions are primary ones and encompass trust, fear, surprise, sadness, disgust, anger, anticipation and joy (Krohn, 2007). For the purpose of this paper, we will examine fear only. Other emotions are briefly mentioned as a way of understanding the bigger picture - how we interact with our emotions, others and the environment.

Combination of Emotion – fear with... *Fear* is a primary emotion and *can be combined with other emotions creating* (as cited from Turner, 1996a, p. 7);

- fear & happiness = *awe*
- fear & anger = *guilt, envy*

- fear & sadness = *worry*
- fear & surprise = *panic, anticipation*
- happiness & fear = *wonder*
- anger & fear = *shame, hate, jealousy*
- sadness & fear = *hopefulness*
- surprise & fear = *shock*

Plutchik proposed the following – fear plus.... (as cited from Krohn, 2007):

- fear + trust = *submission*
- fear + surprise = *awe*
- fear +joy = *guilt*
- fear + sadness = *despair*
- fear + disgust = *shame*
- fear + anticipation = *anxiety*

Combination becomes slightly more complexed when fear is combined with... (as cited from Turner 1996b, p. 146):

- Satisfaction & Happiness + aversion & fear = *wonder, hopeful, relief, gratitude, pride, reverence*
- Assertion & Anger + aversion & fear = *abhorrence, jealousy, suspiciousness*
- Disappointment & Sadness + aversion & fear = *regret, forlornness, remorseful, misery*
- Startlement & Suprise + aversion & fear = *shock, alarmed, unnerved, unsettled, agitated, vigilant*
- aversion & fear + Satisfaction & Happiness = *awe, reverence, veneration*
- aversion & fear + Assertion & Anger = *guilt revulsed, repulsed, antagonism, dislike, envy*
- aversion & fear + Disappointment & Sadness = *dread, wariness*
- aversion & fear + Startlement & Suprise = *panic, consternation, alarm, scared*

Shame and Guilt.

Table 3.2 Structure of Shame and Guilt (likely to activate defense mechanisms)		
Rank-order of primary emotions	Second-order emotions	Examples
	Shame **Generated when one has behaved incompetently**	
1	Disappointment –sadness (at self)	behaving inadequately in the eyes of others and one's own self-assessment
2	Assertion-Anger (at self)	having engaged in behaviors
3	**Aversion-fear** (in consequence to self)	having failed and seen as incompetent and inadequate
	Guilt **Guilt is an extreme shame; activated by failure to meet moral expectations**	
1	Disappointment –sadness (at self)	Having failed meet expectations
2	**Aversion-fear** (in consequence to self)	For having failed
3	Assertion-anger (at self)	Disappointment about one's actions

Noted: data for the structure of shame and guilt from Turner (1996b, p. 151-152)

Shame and guilt are a necessary part of social control – Turner (1996b):

> Because if individuals do not feel shame at themselves for dissociative and inadequate behavior or for failing to meet order-sustaining expectations as well as guilt for such behavior, [the] social organization would not be possible ...the world would be filled with sociopaths (p. 152).

Intensity. The intensity of emotion changes from strong to weaker response; for example trust goes from acceptance to admiration and fear goes from timidity to terror (Krohn, 2007). Turner (1996a; 1996b) suggested that humans have three variants of aversion-fear intensity which ranges from low (concern, hesitant, reluctance, shyness), moderate (misgivings, trepidation, anxiety, scared, alarmed, unnerved, panic) to high (terror, horror, high anxiety). The greater variants of fear increase intensity of emotions experienced. Emotions are aroused by the degree of congruity or incongruity between (a) what is expected and (b) what is experienced in a situation; "when there is high incongruity, emotional arousal ensues" (Turner, 1996b, p. 134). Subsequently, the emotional arousal activates defense mechanisms.

Defense Mechanism. Defense mechanisms "seek to protect self from unpleasant emotion...which compress and distort emotional responses" (Turner, 1996b, p. 141-2). It is particularly aimed at either core or peripheral self that includes "repression, displacement or projection that distorts individual's perception about themselves in ways that change the overt emotional reactions and the level of emotional energy displayed in a situation – [such as short periodic outburst]" (Turner, 1996b, p. 142-3). How does defense mechanism affect a person? Repression dampens emotional liveness and increases emotional affinity towards disappointment and sadness; displacement of emotions onto others may trigger aggressive and angry response; while projection leads to an aversion-fearful response from others (Turner, 1996b). Defense mechanisms are non-adaptive to social life when it prevents the person from feeling these

emotions that are necessary for relational interaction. Additionally, they are maladaptive to the person if they lower one's emotional energy and lessen their ability to take on responsibilities in life.

Emotional arousal process. What happens when we experience fear? What is the biological-neurological-psychological-physiological response that occurs within? Triggered emotionally by an internal or external stimulus causes a cascade of reaction to occur within the mind and body – particularly this reaction is known as emotional arousal. Below is a list that portrays the breakdown of the emotional arousal process – this is the pathway of how anxiety is activated in our brain and body (as cited from Layton, 2018; Turner, 1996b) :

- A person encounters a stimulus (internal or external cue) - the response begins when one or more primary emotion becomes activated such as fear
- Stimulus data enters senses (through eyes, ears, mouth, skin) and sends a signal to thalamus - the part of the brain that relays sensory information
- Data is then transmitted to the sensory cortex – part of the brain that interprets the data
- The data becomes stored and retrieved as conscious memories in the hippocampus – part of the brain that processes stimuli to facilitate understanding of circumstance
- The emotional data becomes decoded in the amygdala – the part of the brain that decides whether the emotions are safe or a threat; this is also where fear-related memories are stored
- When the brain decides the threat is fearful worthy, the hypothalamus then activates the flight or fight response via nerve pathway (sympathetic nervous system) and/or stress response via bloodstream (adrenal-cortical system)
- The sympathetic nervous system sends nerve impulses to the glands
- Smooth muscles of the glands signal adrenal medulla to release epinephrine (adrenaline) and norepinephrine (noradrenaline) into the bloodstream; these two stress hormones are responsible for chemical changes in the body that result in increased heart rate and blood pressure
- Physiological response – blood move to vital organs (brain, heart, lungs, eyes, and muscles) in preparation to respond to perceived stressful stimuli
- Digestion and immune system (parasympathetic nervous system 'rest-digest' system) shuts down to allow more energy for emergency functions
- Chemistry changes cause difficulty focusing on small task – as the brain focuses on the big picture in order to figure out where the threat is coming from

The pathway to anxiety seems like a complex system yet readily felt-sensed on a day to day basis. The stress response is further explored under the behavioral section of the paper.

Threat Sensitivity and Emotion dysregulation. How do children develop sensitivity towards threat? Experiencing or witnessing violence at a young age affects neurobiological development in children and consequently changes their perception of threat. They develop a specific sensitivity for detecting the threat. As a result, their sensitivity leads to emotional dysregulation. Overdevelopment of fear is the emotional response which includes an alteration to how the hippocampus and amygdala functions – thus, their brain is 'hardwired' and conditioned to expect threat (Thompson, Hannan, & Miron, 2014). The hippocampus is associated with dissociative behavior, whereas the amygdala is concentrated on the flight-or-fight response (Thompson et al., 2014).

Childhood maltreatment (physical, emotional and sexual abuse, neglect, and or exposure to family violence) if continual experienced (chronic) can have lifelong adversity. This may result in "increased risk for internalizing problems (anxiety and depression) or externalizing behavior problems (aggression)" (Thompson et al., 2014, p. 28). Shields & Cicchetti (1998) adds exposure to child maltreatment leads to 'development of heightened arousal and hypervigilance for threat cues...and [readily] results in emotional and physical [preparedness] to fight or remove themselves from threat' (as cited from Thompson et al., 2014, p. 29). This constant activation leads to aggression, dissociation, and dysregulation – all mechanisms designed to manage their sensitivity to threat and protect their emotional state.

Heightened arousal and hypervigilance are manifestations of physical and emotional dysregulation. Researchers Rowney et al., (2010) believed neurotransmitters responsible for dysregulation include the serotoninergic and noradrenergic systems. There appears to be an

‘underactivation’ of the serotoninergic system (regulates mood, appetite, movement, sleep) and ‘overactivation’ of the noradrenergic system (regulates stress response: alertness, vigilance, and arousal) (Rowney et al., 2010). The discrepancy between these two systems contributes to the physical, emotional and physiological dysregulation that a person experiences.

Behavioral

Nervous System Response. How does fear stimulate the behavioral response? And what is the process? When fear is experienced, a couple of things occurs within the autonomic nervous system of the body (ANS): – (a) the sympathetic nervous system (SNS) becomes activated; while (b) the parasympathetic nervous system (PNS) becomes deactivated. The PNS (‘rest-digest’) shuts down to conserve energy used during the crisis – the energy is instead used by the SNS (‘fight-flight’). When the SNS is activated our pupils dilate to allow more light, our veins tighten causing greater blood flow - oxygen floods our lungs and blood quickly rushes to our muscles causing them to tense up. This activation prepares the person to respond behaviorally to a perceived threat. This fear response is also known as ‘acute stress response’ - described in table 3.3.

Acute Stress Response.

Table 3.3 Acute Stress Response

SNS response	Definition	Example	Other notes
Freeze	Tonic immobility & hypervigilance (being on guard, watchful, alert) Those that remain ‘frozen’ during threat are more likely to avoid capture	Initial response: ‘stop-look-listen’ Attentive, immobility, orienting response	Earlier literature called it ‘playing-dead’ Followed by attempts to flee (hence: ‘flight or fight’)
Flight or Fight	Attempts to flee, once exhausted, there is an attempt to fight	When soldier encounters a threat their first instinct is to flight	Flight or fight is a proper sequence as opposed to fight or flight.
Fright	Similar to freeze – tonic immobility Useful when the slow-moving organism is faced in a life-	Referred to as peritraumatic “panic-like’ symptoms in PTSD literature	Enhances survival and adaptive chances The explanation for the behavior of rape victims

	threatening situation with larger predators	Child psychology refers fright to 'freezing'	during the assault (extreme passivity during the assault)
Faint	An extreme response to an unavoidable and inevitable threat	Loss of consciousness	Occurs in phobias as a response to fear

Note: Data for acute stress response from Bracha (2004, p. 679) and Bracha, Ralston, Matsukawa, Williams & Bracha (2004).

Table 3.3 noted above delineated a summary of the stress response – freeze, flight, fight, fright, flag, faint – in that specific order of responses to perceived threatening situations. Freeze is commonly experienced as immobility, flight as avoidance, fight as skepticism and fright as panic. When the sequential system fails, fainting occurs resulting in losing one's consciousness.

You may be wondering why the SNS is called the 'freeze-flight-fight-fright-faint' response. Most literature available regarding the stress response labels the activation of SNS as 'fight or flight'. Walter Cannon (1929) who coined the term 'fight or flight' (as cited from Bracha, Ralston, et al., 2004) used this term to describe two common behavioral responses when under threat. However Bracha, Ralston et al (2004) argues that "'fight or flight' – mischaracterizes the ordered sequence of response that mammals exhibit as the threat escalates or approaches...freeze, flight, fight or fright is a more complete and nuanced alternative to 'fight or flight'" (p. 448). It appears that the once simple fight or flight response has evolved to coordinate with demands of everyday experiences, yet the underlying behavioral response is centered on the value of protecting oneself from anticipated danger.

freeze-flight-fight-fright-flag-faint. Schauer & Elbert (2010) examined this **step by step behavioral response to threat**:

(1) Freeze

- Attentive immobility; 'orienting response'

(2) /(3) Flight or fight

- The uproar of sympathetic activation
- Dizziness, lightheadedness, palpitation, dry mouth, numbing, muscle tension, feelings of irreality

(4) Fright

- Tonic immobility, unresponsive immobility

- Tachycardia [fast heart rate], vasoconstriction [narrowing of blood vessel], hypertension [high blood pressure], hyperalertness, high emotional arousal, fear largely repressing anger
- Fright has a faster onset and termination of immobility

(5) Flag

- ‘Shut down’ parasympathetic activation
- Bradycardia [slow heart rate], vasodilatation, hypotension, drop in arousal, surrender, cognitive failure, numbing of all emotions
- The flag has a slower onset and termination of immobility

(6) Faint

- An extreme response to an unavoidable and inevitable threat

It appears that the acute stress response (triggered here by fear) activates both branches of the autonomic nervous system – (a) the SNS branch (fight-flight-freeze-fright-faint response) and the (b) PNS branch (flag response)

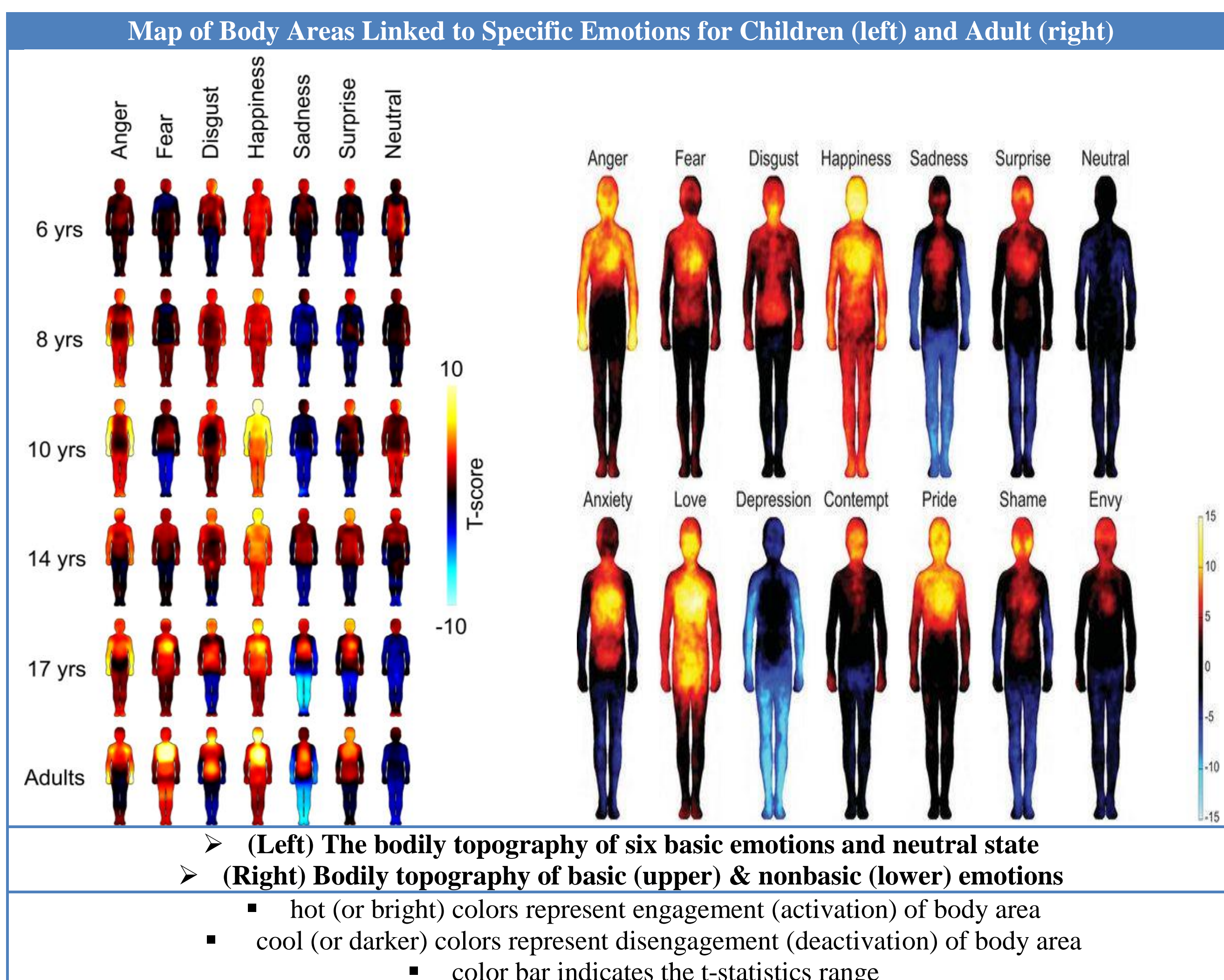
Evolutionary Behaviour related to Survival. According to Robert Plutchik’s sequential model, emotions are activated as a response to a stressful stimulus. Before apes or humans, emotions have been a part of the evolutionary process (Krohn, 2007). The limbic system of an animal and human brain are similar – they both experience similar basic emotions (Krohn, 2007). An emotional response such as fear and terror occurs due to survival reasons. Flight, fight, freeze developed as a protective mechanism allowing us to withdraw and retreat – behaviors that enable one to live and to survive (Krohn, 2007).

Somatic

“Cold feet, sweaty palms, goosebumps, shivers down my spine, butterflies in my stomach, weak in the knees, hot-headed, cold-hearted...” (Bergland, 2014, para 1) are common ways to describe our physiological emotional states - also known as somatic, physical, physiological or bodily felt experiences.

Researchers Nunnebnaa, Glerean, Hari, Hietanen (2014) specifically mapped body areas linked to specific emotions – refer figure 1 below. They believed emotional experiences were

held directly in the body – for example: “anxiety might tighten our muscles, make our hands sweat and tremble before an important job interview” (p. 646). These maps were obtained with west European and East Asian sample population; researchers believed this bodily topography map represents ‘somatosensory system as culturally universal...and perception of these bodily changes may play a role in generating consciously felt emotions...a unique tool for emotion research and [possibly] provide biomarkers for emotional disorders’ (Nummenmaa et al., 2014, p. 646). In the map below, hot (or bright) colors represent engagement (or activation) of body area; whereas cool (or darker) colors represent disengagement (or deactivation) of body areas, and color bar indicates a t-statistics range.



Map of Body Areas Linked to Specific Emotions for Children (left) and Adult (right)

- **(Left) The bodily topography of six basic emotions and neutral state**
- **(Right) Bodily topography of basic (upper) & nonbasic (lower) emotions**

- hot (or bright) colors represent engagement (activation) of body area
- cool (or darker) colors represent disengagement (deactivation) of body area
- color bar indicates the t-statistics range

Figure #1 *Map of Body Areas Linked to Specific Emotions for Children (left) and Adult (right)* (Hietanen, Glerean, Hari & Nummenmaa, 2016, p. 1114; Nummenmaa et al., 2014;)

According to table 3.4 above, we noticed that bodily sensations related to emotions are quiet in early childhood. Meanwhile, in adults, the sensation is experienced both in the central and peripheral part of the body (Hietanen et al., 2016). Findings of the study suggested, "young children have an interoceptive awareness of emotion-related bodily states" (Hietanen et al., 2016, p. 1111). This means that children's concept of emotions is based on sensory, visceral and kinaesthetic sensations; which occurs prior to their verbal ability to express their experiences (Bucci, 1997).

Interestingly, children aged six to 17 years old are capable of distinguishing bodily sensations associated with emotions (such as happiness, fear, and surprise) (Hietanen et al., 2016). Similarly to adults, children from aged two to four years old - "happiness is the first emotion they label...followed by sadness or anger, and then either fear or surprise...the last to emerge is disgust" (Hietanen et al., 2016, p. 1115). This study captures the core of emotional development associated with somatic experiences for children and youths.

The first part of this chapter took us through a passage of considering different aspects of anxiety from psycho-emotional-linguistics (emotionally charged words and opposite meaning); cognition (worry, fear conditioning, brain lateralization); emotion (basic emotions, combination of emotions, intensity, defence mechanisms, emotional arousal process and threat sensitivity and emotional regulation); behavioural (nervous system response, acute stress response, evolutionary behaviour related to survival); and somatic (bodily maps). Now let us attempt to expand our awareness of anxiety by scanning through other's perspective of anxiety.

Perspectives of Anxiety

In the second section of this chapter – let us consider other perspectives of anxiety. We will briefly look at anxiety from four different theories of anxiety (James-Lang, Freud, Hawkins, and Dabrowski). Excerpts have been taken from its original text to fully depict these theories accurately.

James-Lange

Early theorist of emotion proposed (Bergland, 2014):

> The physiological change is primary and emotion is experienced when the brain reacts to the information received from the ANS... the hypothesis is that all emotion is derived from the presence of a stimulus, which evokes a physiological response (muscle tension, increased heart rate, dryness of mouth) and the physical arousal makes a person feel a specific emotion (para 7).

According to this theory, emotion theorist William James and Carl Lange believed that emotions are secondary felt experience as a response to a stimuli "we do not tremble because we are scared, but rather we are scared because we tremble" (Bergland, 2014, para 4); this theory debunks the idea that we experience fear first, then subsequently a bodily (physiological) response occurs. Instead, we feel the physiological response first and then subsequently experience the emotion fear.

Freud

Sigmund Freud, the founder of psychoanalysis, described anxiety as mainly somatic symptoms that occur 'free-floating anxiety' or 'apprehension' or state of 'sudden anxiety attacks' (Rickels & Rynn, 2001, p. 1-2). Symptoms include (Rickels & Rynn, 2001):

- Trepidation
- Sweating
- Nausea tremor
- Increased urination
- Increased appetite
- Diarrhea
- Vertigo
- Tremor

- Low self-esteem
- Increased sensitivity to pain
- Decreased sexual interest
- Heavy feeling in stomach
- Arrhythmia (irregular heartbeat)
- Dyspnea (difficulty breathing, shortness of breath)
- Paresthesias (tingling, burning, numbness sensation)
- Pavor noctumus (night terror/nightmares)

Freud also believed in two types of avoidance symptoms: (a) chronic apprehension that manifests as phobias, vertigo, anxiety attacks that lead to agoraphobia; and (b) anxious expectation that manifests as nervousness, apprehension, and free-floating anxiety]. In 1894, Freud believed anxiety neuroses were experienced with other types of neurosis calling it 'mixed neurosis' (symptoms include: neurasthenia [mental and nervous exhaustion], hysteria and obsession) (Rickels & Rynn, 2001, p. 1-2).

Hawkins

David R. Hawkins is an international psychiatrist, consciousness researcher, and spiritual teacher. He described a scale of human consciousness entitled – 'force versus power' and is represented in table 3.4 below, fear is noted in asterisk as this is our focus for this paper.

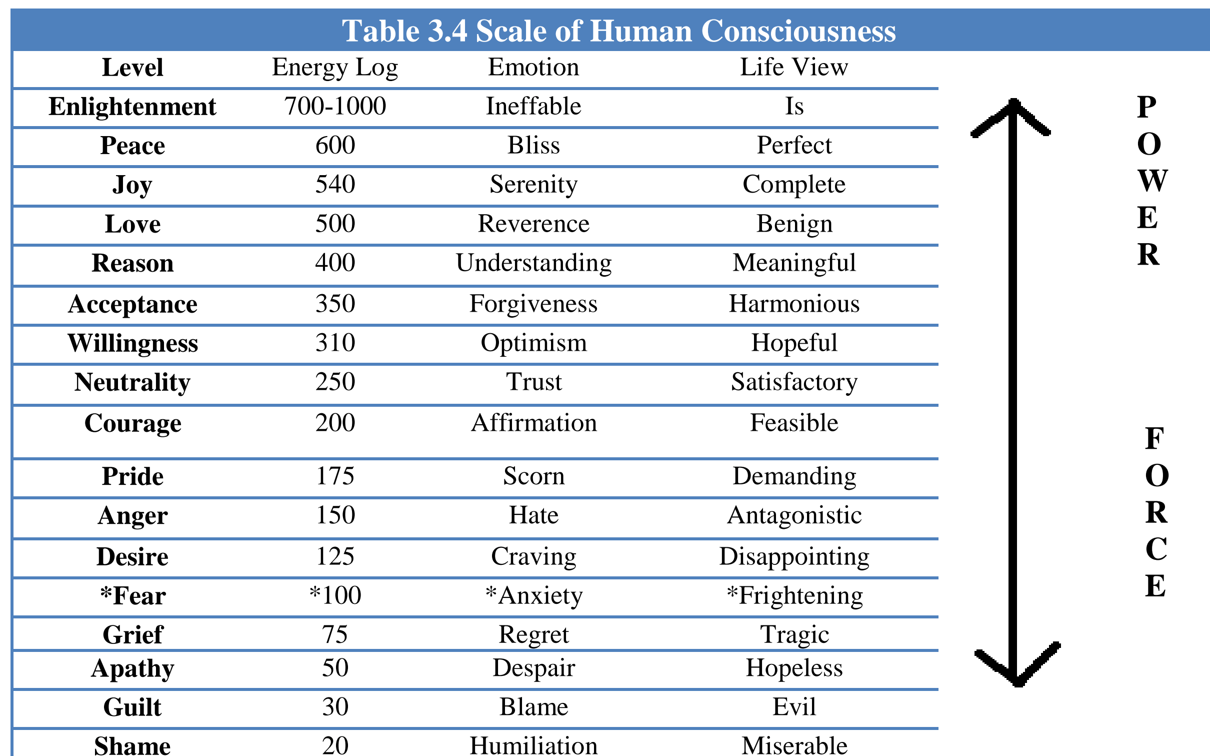


Table 3.4 Scale of Human Consciousness

Level	Energy Log	Emotion	Life View
Enlightenment	700-1000	Ineffable	Is
Peace	600	Bliss	Perfect
Joy	540	Serenity	Complete
Love	500	Reverence	Benign
Reason	400	Understanding	Meaningful
Acceptance	350	Forgiveness	Harmonious
Willingness	310	Optimism	Hopeful
Neutrality	250	Trust	Satisfactory
Courage	200	Affirmation	Feasible
Pride	175	Scorn	Demanding
Anger	150	Hate	Antagonistic
Desire	125	Craving	Disappointing
***Fear**	*100	*Anxiety	*Frightening
Grief	75	Regret	Tragic
Apathy	50	Despair	Hopeless
Guilt	30	Blame	Evil
Shame	20	Humiliation	Miserable

POWER

FORCE

Note: Data for Scale of Human Consciousness from Hawkins (1994).

Hawkin's force versus power provides a framework for understanding the levels of human consciousness. Let's dissect components of this framework for our comprehension. First of all, each level of consciousness is associated with a particular emotion and a corresponding life view. For example, at the bottom of the level of consciousness scale lies shame - calibrated at level 20, its emotion is 'humiliation', while the life view is 'miserable.' The power versus force dichotomy represents many possibilities – for example in this thesis: risk factors and protective factors. Power is characterized by factors that promote growth – for example, inner strength and resiliency in alignment with one's moral virtue; while on the other hand, force represents factors the inhibit growth – for example, harshness and oppressive towards self. And lastly, the level of consciousness synchronizes with the notion of 'life force' (also known as universal energy, great spirit, prana, chi, cosmic energy, ki, depending on your personality, worldview, life experiences, attitudes, and beliefs). The greater one's life forces are, the higher one's level of consciousness becomes as represented on the scale, for example, the movement towards love, peace, joy, and enlightenment.

How to increase one's levels of consciousness? The initial step requires our attention and awareness. In this paper, we discuss fear which is at level 100 of this scale. Fear supposedly suppresses self and is possibly harmful to growth (Hawkins, 1994). At this level, fear (force) is emotionally experienced as anxiety with the life view as frightening – it is seeing the world as dangerous and unsafe (Pavlina, 2005). Anxiety can progress to paranoia, suspiciousness and/ or defensiveness (Pavlina, 2005). For example, these are individuals whom you will witness trapped for a long time in an abusive relationship (Pavlina, 2005, para 9).

Courage (power), on the other hand, is capable of grasping opportunities and the first level of true strength (Hawkins, 1994; Pavlina, 2005). This is where you begin to see life as

challenging and exciting instead of overwhelming (Hawkins, 1994). For example, these are individuals whom you will witness display proclivity towards personal growth, skill building, career advancement and education (Hawkins, 1994). Understanding this life view is the foundation of what creates a human being – the belief that people are conscientiously accountable for their growth and success. The next step upwards is neutrality at level 250, this is where individuals are living comfortable and flexible with a sense of security (Hawkins, 1994). This level epitomized the saying 'live and live life' which radiates a flexible, relax, detached attitude 'whatever, roll with the punches, you don't have to prove anything, you feel safe and get along with others' (Pavlina, 2005, para 10). Since your needs are met, individuals at this level do not push themselves too hard (Pavlina, 2005).

Dabroswki

What if anxiety symptoms are part of personality growth and development? Kazimierz Dabrowski, a Polish psychiatrist, and psychologist developed positive disintegration (TPD). Dabrowski explained his point of view regarding mental health and psychopathology – he believed that 'psycho-pathological symptoms' (for example what Freud described as psychoneuroses) are a necessary part of developing one's personality. One must experience symptoms to fully develop themselves (Mendaglio, 2008). Therefore, for high functioning individuals, misdiagnosis as having excessive anxiety or compulsive behavior can occur; however, these symptoms suggest individuals are along the path of development rather than pathology as "it reflects a mentally healthy process of development' (Daniels & Piechowski, 2009, p. 86). Furthermore, Dabrowski strongly believed that disintegration and personal conflict were indications of advanced development (Daniels & Piechowski, 2009). See table 3.5 below regarding details about levels of development and its process:

Table 3.5 Levels of Development and Process			
Levels of Development & Process		**Description**	**Example**
Unilevel Process	**Level I Primary Integration** no inner growth	(1) There is no development, little introspection, and little inner conflict (2)A crisis may precipitate a breakdown; this is a unilevel disintegration; resolution of crisis ends with a return to the previous way of life	⌖ Concern for the well-being of others tend to be limited/gives place to exploiting them ⌖ Goals towards material success and power over others (competitive behavior)
	Level II Unilevel Disintegration unilevel development	(1)The individual problems are recycled with no upward direction of development - same issue with different people (2)Experiencing a developmental milestone or following a breakdown of trust in authority, development moves towards a sense of self. If developmental potential has no multilevel elements and no vertical tension, re-integration at a lower level or a negative disintegration will result (3)When development potential has multilevel elements, development may take the upward direction	⌖ Experience ambivalence, doubt, dissatisfaction with themselves yet lack a clear set of inner values ⌖ Experience feelings of inferiority, they seek approval from others ⌖ Looking for answers outside of the self ⌖ The crisis may erupt when authority is exposed as wrong, misleading, exploitative & abusing – feeling betrayed, they reject authority for failing them – they begin to look for self-knowledge, self-definition in people like themselves, eventually in themselves (self-reflection/evaluation) ⌖ The quest for self: inner transformation – personal growth and sense of responsibility
Multilevel Process	**Level III Spontaneous Multilevel Disintegration** multilevel development	Formation of inner psychic milieu emerges. The strong vertical tension between the higher in oneself ("what ought to be") and the lower in oneself ('what is') triggers positive disintegration, multilevel development, and the process of inner transformation – a process of intense ups and downs, many setbacks; however, the trend is nevertheless upwards Goal: an authentic sense of self	⌖ When emotional development begins ⌖ Begins spontaneously through external catalyst (loss of a loved one, severe illness, or a brush with death) or internal catalyst (mystical experience, person's unconscious or semi-conscious awareness of being ready to move forward) ⌖ Striving to actualize higher self, people may encounter experiences that are quite troubling, disorienting, unsettling, or frightening
	Level IV Organized multilevel disintegration advanced multilevel development	When a sense of mission in life enables a person to act on his or her own ideas, it diminishes the prior vertical tension; now 'what ought to be' is enacted consistently. Self-actualization takes place.	⌖ Match ideals with actual living ideas ⌖ "What ought to be will be" (p.25) ⌖ Inner transformation: move towards becoming compassionate, responsible, self-realization & acceptance of others

	Level V Secondary Integration highly advanced multilevel development	A person of great inner knowing and depth of consciousness – a connection to something larger than us and in which we can trust – who works for the benefit of humanity, whether on a large or small scale. Such a person may have achieved true inner peace.	⌖ Peace Pilgrim, Eleanor Roosevelt, Paul Robeson, Antoine de Saint-Exupery, Etty Hillesum, Abraham Lincoln ⌖ Exemplars like Christ and Gandhi set criterion of this level impossibly high

Note: data for levels of development and its process from Daniels & Piechowski (2009, p. 20-28).

Dabrowski believed that "the conflict between the real self and the ideal self" results in frustration, discomfort, and anxiety between how things are and how they would like things to be" thus it appears that "higher-level emotions are essential for advanced development (Daniels & Piechowski, 2009, p. 90). Moreover, he understood that:

> Comfort with self and society often indicates basic or initial integration....and that growth would only arise when discomfort and subsequent disintegration occurs resulting in secondary integration...if we have insight and self-reflective tendencies, we are likely to explore the differences and grow as a result...how one views this discomfort and steps that one takes to address it helps determine one's course, viewing one's emotions as neurotic anxiety that must be eliminated immediately through the use of medications is less likely to yield positive disintegration and subsequently personality development than the view that the conflicts must be embraced through struggle in order to resolve them and re-integrate at a higher level...[therefore] Dabrowski saw anxieties, not as something to remediate, but rather something to celebrate (Daniels & Piechowski, 2009, p. 90).

The disagreement between self, or self and the world ultimately leads to personality growth. Dabrowski helped to realize the "transformational potential in what was previously seen as dysfunctional behavior, emotion, and cognition – describing multilevel growth process to the world" (Daniels & Piechowski, 2009, p. 124). Dabrowski's theory of positive disintegration is

considered a favorable theory explaining the inner conflict, deeper meaning of turmoil and peculiar behavior of people blessed with exceptional capacities.

Integrating Anxiety

What are anxieties experienced in normal day to day life? Anxiety affects all aspects of life. Let us consider in chapter two – implications of anxiety consist of major interruption of daily functioning in all facets of life – personal, social and occupational. A simple list was generated by researching how anxiety interacts with particular life situations. Since there is an abundance of information available regarding this inquiry, there are more types of anxieties experienced in life than expressed in this paper. The alphabetical inventory of possibility noted below offers other reasons why people seek therapy for anxiety. The ones marked with an asterisk (*) will be briefly explored; while the remainder of the anxiety listed warrants future inquiries.

Inventory of possibility - Anxiety associated with...

- Alexithymia*
- Anger
- Attachment style (anxious/avoidant/ disorganized attachment)
- Burnout caused by exhaustion/build up of stress
- Career
- Career change
- Childhood trauma (past experiences of abuse and neglect)
- Chronic pain
- Dementia
- Developmental
- Existential
- Fertility
- Financial
- Gender Identity
- Genetics
- Giftedness*
- Grief and loss
- Health
- Illicit drug use
- Intellectual disability
- Internet
- Lack of oxygenation – high altitude, emphysema, pulmonary embolism
- Learning disorders
- Life transitions
- Medical treatments
- Mood (disturbances, changes, low, elated, mixed)
- Other emotions/mixed emotions
- Personality
- Post-partum
- Public speaking*
- Relational
- Religion
- School
- Separation

- Serious medical illness (heart attack, heat stroke, hypoglycemia)
- Sexuality
- Shopping
- A side effect of medications
- Sleep disturbances
- Spirituality
- Terminal illness
- Test/Exam anxiety
- The trauma of other nature
- Travel
- War veteran
- Work

Alexithymia

In 1972, the term alexithymia was invented by Dr. Peter Sifneos, a Harvard Psychiatrist; alexithymia is greek for a-for "lack", lexis for "word" and thymos for "emotion" (Goleman, 1995, p. 50). Dalbudak, Evren, Aldemir, Coskun, Ugurlu & Yildirum (2013) defined alexithymia as "difficulty in identifying feelings" and "difficulty in describing feelings" (p. 272). Goleman (1995) noted other characteristics of alexithymia that includes (p.50-51; 96):

- Limited emotional vocabulary
- Difficulty expressing own or others feelings
- Difficulty discriminating among emotions
- Difficulty discerning between emotion and sensations
- Difficulty identifying bodily sensations
- Unable to put into words exactly how they are feeling
- Do not have the fundamental skill of emotional intelligence and self-awareness
- Rarely cry and when they do their tears are copious
- When feelings do come, they experience a perplexed bundle of distress

Another characteristic of alexithymia is noted by (Ogrodniczuk, Piper & Joyce, 2010, p. 43)

- An impoverished fantasy life with limited imagination and impaired empathy
- The propensity for impulsive behavior
- The tendency to somatize emotions
- Difficulty distinguishing bodily sensation of emotional arousal
- Offering undifferentiated descriptions of emotional experience
- Externally oriented cognitive styles
- Difficulty describing feelings to others

Individuals who experience alexithymia may feel 'terrible' or 'not great' yet unable to fully articulate what kind of 'terrible' or 'not great' it is. They may experience fast heart rate, sweating, dizziness yet do not recognize that they are feeling anxious. They are utterly unable to

describe what is going on with themselves. Understanding this ‘not knowing’ generates much anxiety and perplexed distress associated with ‘not knowing’.

A related form of alexithymia is termed ‘repressor’ (also known as denial or unflappables) – these are individuals “who habitually and automatically seem to blot emotional disturbances from their awareness” yet these people are “quite proficient in regulating emotions, they become so adept at buffering themselves against negative feelings, it seems, they are not even aware of the negativity” (Goleman, 1995, p. 75).

How does one become a repressor or unflappables? Psychologist Daniel Weinberger reported “tuning out emotions such as anger and anxiety is not uncommon – about one in six people [demonstrates] this pattern” (Goleman, 1995, p. 75). Children may learn these skills as a method for survival. For example, in family situations where the parent's misuse alcohol and the actual problems are overlooked. Another causation factor may be related to genetics – for example, the key parental figure also unable to describe their emotional states and expression.

Giftedness

Overexcitability (OE) as a defining characteristic of giftedness is an “innate tendency to respond in an intensified manner to various stimuli” (internal and external) which is a “polish word meaning superstimulatability” (Daniels & Piechowski, 2009, p. 8); In addition, “the person requires less stimulation to produce a response, as well as a stronger and longer lasting reaction to stimuli (Daniel & Piechowski, 2009, p. 9). In other words, individuals who experience OE live a life of depth, meaning, vividness and therefore, pass on aliveness to those around them. Furthermore, there are five general classifications of OE: psychomotor, sensual, intellectual, imaginational, and emotional –further illustrated in table 3.6 below.

There is a question about ‘anxiety and excitement’ – is the emotional experience similar? Can OE be mistaken as anxiety? Misdiagnosis of OE do occur and can be mistaken as mood disorders, attention disorders (ADHD), anxiety disorders (GAD, OCD, social anxiety, panic), impulse control disorder (Oppositional Defiant Disorder - ODD) or other disorder (Asperger’s Disorder), (Daniel & Piechowski, 2009). Table 3.6 below summarizes behavioral characteristics of OE, expressions of OE, and misdiagnosis of OE:

Table 3.6 Behavioural Characteristic of OE, Expression of OE and Misdiagnosis of OE

Type of OE	**Behavioral**	***Expressions*** **of OE**	***Misdiagnosis*****:**
Psychomotor	Movement, restlessness, driveness, an augmented capacity for being active and energetic	*The surplus of energy* – rapid speech, excitation, intense physical activity, pressure for action, marked competitiveness *Psychomotor expression of emotional tension* – compulsive talking and chattering, impulsive actions, nervous habits (tics, nail biting), workaholism, acting out	Impulsiveness as Attention Deficit Hyperactive Disorder (*ADHD*) Compulsions as *Obsessive-Compulsive Disorder*
Sensual	Enhanced refinement and aliveness of sensual experiences	*Enhanced sensory and aesthetic pleasure* – seeing, smelling, tasting, touching, hearing, delight in beautiful objects, sounds of words, music, forms, color, balance *Sensual expression of emotional tension* – overeating, sexual overindulgence, buying sprees, wanting to be in the limelight	Heightened experience of stimuli with five senses (seeing, smelling, tasting, touching or hearing); Sensory overload as *excessive anxiety or nervousness*
Intellectual	Thirst for knowledge, discovery, questioning, love of ideas & theoretical analysis, search for truth	*The intensified activity of mind* – curiosity, concentration, capacity for sustained intellectual effort, avid reading, keen observation, detailed visual recall, detailed planning *A penchant for probing questions and problem solving* – search for truth and understanding, forming new concepts, tenacity in problem-solving *Reflective thought* – thinking about thinking, love of theory and analysis, preoccupation with logic, moral thinking, introspection (without self-judgment), conceptual and intuitive integration, independence of thought (sometimes very critical)	Obscure or narrowly focused on *Asperger’s Disorder* Intense passion and fascination with topic cause neglect and disconnection with others as a *Social phobia or Social Anxiety or Schizoid personality*
Imaginational	Vividness of imagery, richness of association, facility for dreams, fantasies, and inventions, endowing toys and other objects with personality (animism),	*Free play of the imagination* – frequent use of image and metaphor, facility for invention and fantasy, facility for detailed visualization, poetic and dramatic perception, animistic and magical thinking *Capacity for living in a world of fantasy* – predilection for magic and fairy tales, creation of private words, imaginary companions, dramatization	Distractibility or lack of focus – *ADHD* Daydreamers – *delusional, schizophrenic, or even dissociative*

	preference for the unusual and unique	*Spontaneous imagery as an expression of emotional tension* – animistic imagery, mixing truth and fiction, elaborate dreams, illusions *Low tolerance for boredom* – need for novelty and variety	
Emotional	Great depth and intensity of emotional life expressed in a wide range of feelings, great happiness to profound sadness or despair, compassion, responsibility, self – examination	*Feelings and emotions intensified* – positive/negative feelings, extremes of emotion, complex emotions and feelings, identification with others feelings, awareness of a whole range of feelings *Strong somatic expression* – tense stomach, sinking heart, blushing, flushing, pounding heart, sweaty palms *Strong effective expression* – inhibition (timidity, shyness), enthusiasm, ecstasy, euphoria, pride, strong affect memory, shame, feelings of unreality, fears and anxieties, feelings of guilt, concern with death, depressive and suicidal moods *Capacity for strong attachment, deep relationships* – strong emotional ties and attachment to persons, living things, places, attachment to animals, difficulty adjusting to a new environment, compassion, responsiveness to others, sensitivity in relationships, loneliness *Well-differentiated feelings towards self* – inner dialogue and self-judgment	Caring and empathy in its extreme form Highly sensitive to feelings of others and self, intense high and low emotions – *Bipolar disorder* Worry about many things – a *Generalized Anxiety disorder* Intense anxiety reactions in certain situations – *Panic disorder*

Note: Data for Behavioural Characteristic of OE, Expression of OE and Misdiagnosis of OE from Daniel & Piechowski (2009, p. 96-100).

For example with psychomotor OE – the issue here with misdiagnosis lies in intervention or treatment for these ‘disorders’. Commonly they are treated with medications or therapy to alleviate symptoms as part of the treatment plan – however, these approaches are considered “counterproductive to re-integration” (Daniel & Piechowski, 2009, p. 87). On the contrary, if these traits are seen as a normal part of development rather than pathological, a conducive approach consisting of “re-integration at a higher level rather than attempt to stop the very behaviour that may cause growth...the impulsive or compulsive behaviour may be a pure form of anxiety necessary for growth” (Daniel & Piechowski, 2009, p. 97). In these cases, TPD better explains the circumstances rather than diagnosed with a disorder. If treatment is focused on giftedness and promotes growth and development “the problematic behavior will decrease, or in some cases, disappear or extinguish” (Daniel & Piechowski, 2009, p. 87). As a result,

misdiagnosis and improper treatment lead to two consequences: side effects of inappropriate treatment and/ or ineffective approach that hinder growth and development.

Fear of Public Speaking

There are three main types of phobia as discussed in chapter two, they include agoraphobia, social phobia, and specific phobia. "Most socially anxious individuals fear public speaking but those with public speaking fear do not typically display other social fears (Panayiotou, Karekla, Georgiou, Constantinou & Parskeva-Siamata, 2017, p. 279). Therefore, fear of public speaking is a precise and exclusive form of social anxiety (Bögels, Alden, Beidel, Clark, Pine, Stein & Voncken, 2010; Crome & Baillie, 2014). In addition, fear of public speaking is commonly associated with "circumscribed reactivity to the survival-threat scene" (Panayiotou et al., 2017, p. 278). These individuals commonly exhibit "distress and arousal when faced with their feared stimuli" (Clark, 2005, p. 198; Larsen, Norton, Walker, Stein, 2002). According to Lang (1985), the distress-arousal continuum has two sides: (1) the flight or fight response (defensive when danger is imminent), or (2) hypervigilance and immobility (when the threat is distant) (as cited from Panayiotou et al., 2017).

There are several terminologies used within the ocean of literature that refers to the fear of public speaking. They include stage fright, public speaking apprehension, performance anxiety, speech anxiety and glossophobia. The word glossophobia comes from the Greek word glōssa*,* meaning tongue, and phobos meaning fear or dread (Flaxington, 2015; Kluger, 2001; Lochrdige, 2011; Sisgold, 2011). You will witness the various terminologies being used interchangeably within this section about fear of public speaking.

How many people are affected by fear of public speaking? The literature expressed fear of public speaking as number one fear by most people; in fact, it is above the fear of death or

disease (Lochridge, 2011; Seip, 2006; Sisgold, 2011). Approximately 75% of American population dread speaking in public (All about counseling, 2018; Lewis, 2016); while Austin (2016) claims 74% of citizens experience speech anxiety. Another source reported an estimation range of 40% to 75% of individuals experience stage fright (Shaw, 2016); while Flaxington (2015) revealed three out of four people fear public speaking and women appears to be more affected than men.

How does glossophobia affect an individual? First of all, this fear has several facets. It can affect a person standing in front of a crowd (such as giving a presentation) or speaking to a massive crowd with a microphone (Sisgold, 2011). Another situation this fear becomes visible is simply in a group of four or more people (Sisgold, 2011) or meeting new people in general (All about counseling, 2018). On the contrary, a person may be able to sing and dance on stage, yet the thought of speaking before a crowd shocks and causes panic (All about counseling, 2018). Symptoms of glossophobia include: feelings of anxiety, dry mouth, a perceived lump in throat, complete loss of voice (All about counseling, 2018) and racing heart, shaking and possibly vomiting (Shaw, 2016). Both the situation and symptoms experienced harbor great feelings of fear, inhibition, discomfort and possibly pain. Furthermore, individuals who continuously experience glossophobia will immensely avoid speaking in public thereby hindering their personal, social and occupational growth and opportunities (Bubel, Jiang, Lee, Shi & Tse, 2016). When this fear becomes extreme it can have a major constraint on one’s life and consequently increase one’s risk of developing depression.

How does speech anxiety in social situation arise? It is an emotional, psychological and physiological concern that becomes activated when feeling vulnerable in social scenarios (Shaw, 2016). These individuals fear looking bad, being criticized, rejection, losing friends or others

(Seip, 2006); they may also fear being judged, humiliated, embarrassed (Flaxington, 2015), shamed or scolded (Sisgold, 2011). Ultimately these individuals do not have self-confidence. Collectively, these fears stem from social experience in their upbringing. For example, a person experienced being ridiculed by their schoolmates in front of the class can have a negative impact on their social well-being. Sisgold (2011) explained how this process occurs:

> The unprocessed emotional residue from this event remains in the body as somatic memory, emotional stress, energy blocks and physical tension...[this phenomenology] influences a person on many levels establishing patterns of thinking and behavior that persist [overtime]...this past trauma [becomes] superimposed on the present and is subliminally re-experienced over and over again (para. 5).

The deep-seated belief becomes ingrained into one's way of being; for example: If I speak up, others will ridicule me. When this person becomes an adult, they will experience great frustration, perplexity, pressure, and misery in the social situation due to their overriding fear of speaking in public.

Summary

This chapter has allowed us to assimilate many factors that contribute to one's thoughts, feelings, behaviors, and physiological response to anxiety and fear. It seems that worrying has its positive traits – particularly by helping human beings survive by over-thinking situations in preparation for a possible threat. We can take the time to appreciate worry's adaptive nature as opposed to depreciating this trait.

The next chapter, chapter three explores anxiety and psychotherapy – how to help an individual manage and control their anxiety.

CHAPTER 4 ANXIETY ACROSS PSYCHOTHERAPY

PART I

Psychotherapy for anxiety can enable an individual to experience greater overall functioning in their everyday life and thus improve their quality of life. Thus, we will take a closer look at various psychotherapeutic approaches for different types of anxiety. This chapter hopes to discover various approaches and intervention available for GAD, SAD, and OCD. Moreover, it seeks to understand psychological intervention's efficacy and effectiveness for children, youths, adults, and older adults.

Assessment of Fear and Anxiety

Why assess? Hays (2013) defined assessment as an 'evaluation method to better understand characteristics of people, place, and things' (p. 4). Counselors use this information to prepare for therapy and evaluate therapeutic interventions. Clients, on the other hand, can use this data to better understand themselves. The assessment process can facilitate clarification of symptoms experienced, expand various points of view and provide support for presenting issues. Table 4.1 is a sample of various assessments tools used in counseling for fear and anxiety. This table depicts a brief overview of available assessment and it illustrates how assessment is used as part of the preliminary process in counseling; more research is required for further details and aspects of these assessment apparatus.

Table 4.1 Assessment of Fear and Anxiety

Nature of Assessment	Description
State-Trait Anxiety Inventory	(Form Y) – has two scales: State-Anxiety (S-Anxiety) measure transitory anxiety (tension or calmness) and a trait-anxiety (T-Anxiety) that measure persistent anxiety (restlessness or self-satisfaction); both scales contains 20 item on a 4-point scale
State-Trait Anxiety Inventory for Children	For grade four, five, six because reading level is higher; only used for students who have the above-average reading ability
Beck Anxiety Inventory (BAI)	(BAI-I and BAI-II) Measures symptoms of anxiety that are independent of depression; contains 21 items answered on a 4-point

	scale; results analyzed into four clusters (neurophysiological, subjective, panic and autonomic)
Social Phobia and Anxiety Inventory	45 item that measures the frequency of social phobia and agoraphobia symptoms (fear of public scrutiny, fear that is embarrassing or humiliating, avoiding situations or places)
Multidimensional Anxiety Questionnaire	Provides score for overall anxiety or fears (physiological-panic, social phobia, worry-fears, and negatively affectivity)
Mathematics Anxiety Rating Scale-Revised	Evaluates student's anxieties and difficulties with mathematics; assess emotional reactions to arithmetic; contains 98 items on the scale
Maudsley Obsessional Compulsive Inventory	Measures level of Obsessional-Compulsive behavior exhibited; 30 item scale
Posttraumatic Stress Disorder Symptom Scale	Assess symptoms and severity of PTSD; 17 item scale
Fear Questionnaire	Assess anxiety and fear; 24 item on an 8-point scale
Adult Manifest Anxiety Scale for College Students	49 item scale (worry/oversensitivity, physiological anxiety, social concerns/ stress, test anxiety, lie)
Adult Manifest Anxiety Scale for Elderly	44 item scale (worry/oversensitivity, physiological anxiety, fear of aging, lie)
Other assessment for PTSD: Stressful Life Event Screening Questionnaire (SLESQ), post-traumatic diagnostic scale (PDS), PTSD checklist (PCL), posttraumatic cognitions inventory (PTCI), Accident Fear Questionnaire	

Note: data for State-Trait Anxiety Inventory, State-Trait Anxiety Inventory for Children, Beck Anxiety Inventory, Social Phobia and Anxiety Inventory, Multidimensional Anxiety Questionnaire from Hays (2013, p. 153-4); for Mathematics Anxiety Rating Scale-Revised from Baloglu & Zelhart (2007); for Maudsley Obsessional Compulsive Inventory from Stuart-Hamilton (2007); for fear Questionnaire from Hays (2013, p. 155); for Adult Manifest Anxiety Scale for College Students and Adult Manifest Anxiety Scale for Elderly from Reynolds, Richmond & Lowe (n. d.).; for Stressful Life Events Screening Questionnaire, Post traumatic diagnostic scale, PTSD checklist, Posttraumatic Cognitions Inventory, Accident Fear Questionnaire from APA (2013) and Koch (2015).

General approaches

We will now take a glance and sample through general approaches available in the literature of psychotherapy for anxiety disorders. Table 4.2 describes an overview of individual, group, spiritual support for general anxiety, social anxiety, and obsessive-compulsive anxiety. Some are mainstream approaches, while some are considered alternative approaches. Researching multiple resources allows us to develop a broader sense of competency in generating solutions for a specific problem.

Table 4.2 Overview of General Approaches for Anxiety

Type of anxiety	Goal	Individual Approach	Literature source

1	General anxiety	Develop relaxation skills	Cognitive therapy; progressive muscle relaxation	Barlow, Rapee & Brown, 1992
2	General anxiety	Learn cognitive component and self-control desensitization	Cognitive-behavioral therapy; applied relaxation	Borkovec & Costello, 1993
3	Social anxiety	Learn cognitive component	Cognitive-behavioral therapy; exposure therapy	Hope, Heimberg & Bruch, 1995
4	General anxiety	Develop awareness of in-the-moment process	Mindfulness – cultivated through daily tasks such as eating, walking, and breathing	Hofmann, Sawyer, Witt & Oh, 2010; Duffy, Guiffrida, Araneda, Tetenov & Fitzgibbon, 2017; Kabat-Zinn, 1994
5	All types of anxiety	Provide support to individual	Group psychotherapy	APA, 2016
6	All types of anxiety	Help family members understand loved one's anxiety; Encourage family interaction rather than reinforce anxious behavior	Family therapy - helpful especially for children and adolescents	APA, 2016
7	All forms of anxiety	Significantly and positively impacts children's cognitive, affective, and moral	Nature-based therapy - direct contact with nature	Greenleaf, Byrant & Pollock, 2014
8	All forms of anxiety	Aim to establish this human-nature relationship; Biologically connected to a larger ecosystem	Ecotherapy – understand needs of the earth and needs of the human individual are interwoven	Kamitsis & Simmonds, 2007; Buzzell and Chalquist, 2009; Mackay & Neill, 2010; Roszak 1992; Roszak 1995
9	All forms of anxiety	To achieve specific clinical goals	Horticultural therapy – structured gardening activities	Sempic, Aldrige & Becker, 2003

Note: Data for 1 to 9 from referring to subsection entitled literature source

Psychotherapy for GAD

Why psychotherapy? Individuals with GAD often seek treatment (Statistics Canada, 2015) and psychological therapy is effective in the treatment of GAD (Dugas, 2015). In a current Canadian study, 77% of those receiving short-term psychotherapy (16 sessions of cognitive and problem-solving training) recovered from GAD after treatment (Dugas, 2015). The fact that psychotherapeutic approaches and interventions demonstrate positive results shows psychotherapy as a resource for those seeking help with anxiety-related issues.

What are the most common types of *psychotherapy for general anxiety* and why?

- *Cognitive therapy* offers individuals to correct patterns of thinking to reduce anxiety and worry (Barlow, Rapee & Brown, 1992)
- *Cognitive therapy* often accompanied with behavioral techniques to modify maladaptive cognitions (Hanrahan, Field, Jones & Davey, 2013)
- *Cognitive-behavioral therapy* offers individuals to learn cognitive components of anxiety and self-control desensitization (Borkovec & Costello, 1993)
- *Mindfulness-based therapy* allows individuals to develop awareness for in-the-moment process cultivated through daily task such as eating, walking, and breathing (Hofmann, Sawyer, Witt & Oh, 2010; Duffy, Guiffrida, Araneda, Tetenov & Fitzgibbon, 2017; Kabat-Zinn, 1994)
- *Exposure therapy* connects anxiety-causing stimuli to the situation thus helping an individual cope with their fears (Statistics Canada, 2015) and confront and control rather than avoid and be controlled by fears (Dugas, 2015).
- *Progressive relaxation* to decrease physical symptoms of anxiety such as rapid breathing (CPA, 2015); to cope and reduce anxiety by learning relaxation skills (Barlow, Rapee & Brown, 1992)

Overall, the goal of therapy for anxiety include: to gain control over worries; to decrease discomfort associated with anxiety; and to improve quality of life (Dugas, 2015). Let's continue to explore the topic in greater detail by examining psychotherapeutic approaches and their relationship to anxiety.

Cognitive behaviour therapy (CBT)

Clinical practice guidelines for adults with GAD suggest cognitive behavioral therapy (CBT) as first-line treatment for GAD (Ballenger, Davison, Lecrubier, Nutt, Borkivec, Rickels & Wittchen, 2001; National Institute for Clinical Excellence, 2004). Another study also recommends CBT for GAD (Hoyer & Gloster, 2009; Salzer, Jaeger, Kreische, Kachele, Leichsenring, Leweke, Winkelbach, 2009). Approximately half of those who seek treatment showed an improvement in functioning (Salzer et al., 2009).

CBT can help individuals recognize thoughts, feelings, and behaviour associated with GAD and turn them into positive ones (Statistics Canada, 2015). CBT technique involves psychoeducation, acceptance, time to control and to master worry, strategies for relapse (Hoyer

& Gloster, 2009), and internet-mediated interventions (Robinson, Titoy, Andrews, McIntyre, Schwenche & Solley, 2010).

What about CBT with medications? Does combining CBT with medication have added benefits? A study conducted by Critis-Christoph, Newman, Rickels, Gallop, Gibbons, Hamilton, Pastva (2011) tested some patients who accepted CBT in addition to psychopharmacological treatment; and the results concluded no added benefit was shown. Moreover, psychological interventions are linked with lower attrition rates meaning that treatments are better tolerated by most individuals (Mitte, 2005) compared to psychopharmacological intervention alone.

Efficacy and Effectiveness of GAD Psychotherapy

Children and Youths. According to Hunsley, Elliot and Therrien (2013) no meta-analysis exist specifying the efficacy of psychotherapy in youths with GAD – however, meta-analysis have looked at the efficacy of psychotherapy for childhood anxiety disorders and found CBT as an effective treatment choice. Fisher and Durham (1999) suggested individual CBT produced greater and expedited rates of progress than group CBT for younger individuals with GAD.

In-Albon and Schneider (2007) looked at the efficacy of treatments for childhood anxiety by examining 24 studies (a total of 1, 275 children aged six to eighteen years). In all the studies, CBT apparently helped improve anxiety conditions – 68.9% recovered and no longer met the criteria for anxiety disorder.

Reynolds, Wilson, Austin, and Hooper (2012) inspected the efficacy of treatments for childhood anxiety which reviewed 55 studies (a total of 2, 434 youths aged 19 years and younger in the treatment group and 1, 824 youths in the control group). Results demonstrate that psychotherapy was better than no treatment (treatment group) versus the control group

(psychoeducation or supportive counseling). The study revealed that CBT confirmed the efficacy in treating anxiety disorders in youth.

Adults. A meta-analysis by Hunot, Churchill, Texeira & Silva de Lima (2010) looked at the efficacy of psychotherapeutic approaches for adults with GAD. It reviewed 25 studies involving adults diagnosed with GAD. A total of 1, 305 adults aged 18 to 75 years old participated. Results show that GAD treated with CBT were likely to reduce symptoms of anxiety – in fact, 46% showed overall improvement. This study also compared CBT with other therapy such as psychodynamic approach. Due to the variance of treatment session in comparison, the results were inconclusive. Researchers were unable to conclude the relative efficacy of this treatment. However, researchers were able to conclude important information – there was an increased percentage of ending treatment early with older adults compared to younger adults.

A review conducted by Stewart and Chambless (2009) compared CBT's effectiveness in treating adults with anxiety disorder – 56 studies were examined, 11 were focused on GAD. It appeared that CBT for GAD significantly improved symptoms in comparison to their control group. In the same review, Hunsley and Lee (2007) reported similar findings – that CBT for adult GAD is likely to be effective when used in clinical settings.

Older adults. Studies on psychotherapy for older adults was inspired by the emergent of literature supporting the efficacy of CBT with younger adults (Barlow, Rapee, & Brown, 1992; Borkovec & Costello, 1993; Ladouceur, Dugas, Freeton, Leger, Gagnon & Thibodeau, 2000).

Stanley, Beck, Novy, Averill, Swann, Diefenbach & Hopko (2003) examined CBT as a psychological intervention for older adults. A total of 85 older adults aged 60 and over participated. Results show CBT as efficacious in treating anxiety in later life. CBT helped with a

day-to-day task such as problem-solving and sleep management skills. The study verified higher percentage in discontinuation of treatment in older adults compared to younger adults. Moreover, it provided strong evidence for the use of CBT for GAD in older adults, however, the generalizability of study's findings are limited. The study gathered data from an academic clinical setting and thus, it is not congruent with the reality of older adults with GAD.

A meta-analysis by Nordhus & Pallesen (2003) reviewed psychological intervention for older adults (aged 60 years old and over) compared to a control group and another treatment. 15 studies and a total of 495 individuals participated involving 20 treatment sessions. The researchers concluded psychological intervention such as CBT, psychodynamic therapy, and interpersonal therapy as a possible treatment to significantly improved GAD symptoms. In addition, other randomized controlled trials suggest mindfulness-based cognitive therapy (Evans, Ferrando, Findler, Stonewell, Smart & Haglin, 2008; Craigie, Rees, March & Nathan, 2008) or psychodynamic therapy (Salzer et al., 2009) can significantly improve symptoms of GAD.

According to Blazer, George & Hughes (1991), very few older adults seek out mental health care (as cited in Stanley et al., 2003). For this reason, it is difficult to gather from the literature an accurate up-to-date representation of psychotherapy with GAD in older adults; more studies and research is necessary.

Psychotherapy for Social Anxiety

Shields (2004) reported only 37% of individuals with social anxiety seek professional help (psychologist, psychiatrist or other professional) for their challenges and struggles. Since individuals with social anxiety avoid most interactions, they are less likely to seek and receive help for their condition. According to the Canadian Community Health Survey, those who did seek treatment 'waited an average of 14 years after the age of onset before seeking help' (as cited

in Shields, 2004). Moreover, symptoms of social anxiety can be mistaken as psychosis; clinicians have to differentiate between fear of being evaluated and paranoia – those struggling with social anxiety crave social interaction yet avoid it due to their anxiety (Rowney et al., 2010).

Specific approaches can address their stress and catered to meet their needs. (NIMH, 2016b). Although, a common adverse effect of psychotherapy is 'temporary discomfort involved with thinking about confronting feared situations' (NIMH, 2016b). Generally, psychotherapy can improve their quality of life. Now let's take a look at the most common types of *psychotherapy for social anxiety* and why?

- *Cognitive behavioural therapy* – practice and learn social skills & reduce thoughts that provoke anxiety and fear in social situations (NIHM, 2016b).
- *Exposure therapy* – person gradual expose to the feared situation (McCabe, 2015) and paired with relaxation exercise or imagery (NIMH, 2016b)
- *Exposure-based CBT* – repeatedly practice facing fear until no longer strong fearful reaction (McCabe, 2015);
- *Family therapy* – educating others about the condition (Statistics Canada, 2015)
- *Group therapy* – very effective with social anxiety (NIMH, 2016b)
- *Acceptance and Commitment Therapy* – accept unpleasant symptoms rather than struggle against them and to develop mental flexibility/learn to adapt (Dalrymple & Hebert, 2007; Kashdan & Rottenberg, 2010; Kocovski, Fleming & Rector, 2009); second-line treatment for social anxiety if CBT is ineffective (Beidel, Turner, Sallee, Ammerman, Crosby & Pathak, 2007)
- *Mindfulness and Acceptance Group therapy* – practice being present in the moment & learn to allow and accept all physical sensation, thoughts and feelings as they arise at the moment (Kocovski et al, 2009)
- *Social Skill Training* – focus on learning social skills such as initiating conversations, establishing a friendship, interacting with others, constructing speech and utilizing assertive skills (Bogels & Voncken, 2008; Beidel & Turner, 2007).

Cognitive Behavioural Therapy

According to NIHM (2016b), a meta-analysis revealed that CBT was the best treatment for social anxiety. There are two parts to CBT for social anxiety: cognitive therapy and exposure therapy. Cognitive therapy assists in 'identifying, challenging and then neutralizing unhelpful

thoughts of the underlying anxiety disorder' (NIHM, 2016b). Meanwhile, exposure therapy allows individuals to tackle their fear as opposed to avoiding them.

CBT can be effective one-on-one or in a group setting; and homework is allocated to enhance treatment outcomes (NIHM, 2016b). An estimated 40% to 50% of individuals who sought CBT as treatment showed improvement (Kocovski et al., 2009).

Efficacy and Effectiveness of Psychotherapy

Children and Adolescence. A meta-analysis by Segool & Carlson (2008) examined the efficacy of psychological treatment in children and adolescents with social anxiety. Specifically, it compared the efficacy of CBT and psychopharmacological treatment (anti-depressant – selective serotonin reuptake inhibitor [SSRI]). Researchers reviewed 14 studies involving 332 participants (children and adolescents ages 5 to 19 years). Results indicate general symptoms (social worry and fear) were reduced by CBT and as a result, an increased in social competence was experienced. Moreover, the study also revealed that SSRI was more effective in reducing symptoms. However, caution is taken regarding youths taking medications; as a result, psychotherapy is preferred method for treating children and adolescents with social anxiety.

Adults. Stewart & Chambless (2009) evaluated 11 studies regarding its effectiveness of treatment for adults with social anxiety. Results indicated that CBT for social anxiety significantly improved pretest and post-test symptoms. Hunsley & Lee (2007) had similar findings: CBT for adults with social anxiety can be effective in clinical settings.

A meta-analysis gathered by Acarturk, Cuijpers, van Straten & de Graaf (2009) reviewed 30 studies with a total of 1, 628 participants (adults aged 18 to 65 years old) who identified with social anxiety. 15 format (14 individual and 1 group) was delivered as psychological treatment. Exposure therapy, cognitive therapy, social skill training were some of the therapies compared.

Acarturk et al (2009) study demonstrated effects of treatment remained consistent and improved with time. Moreover, better prognosis lies in individuals with mild symptoms of social anxiety. Those with severe symptoms may be more challenging to assist. Lastly, the authors delineated inconclusive results with regards to which psychological approach is most effective. Most studies they reviewed utilized a combination of psychological approaches and only a handful of studies looked at one approach alone. Thus more research is warranted about which psychological approach is most effective in helping those with social anxiety.

OCD and Psychotherapy

According to Statistics Canada, (2015) individuals with OCD are secretive about their obsession and compulsion – they often feel embarrassed and ashamed about their anxieties. When the person keeps their OCD a secret, they sometimes appear to be experiencing psychosis (Rowney et al., 2010). The therapist must be able to differentiate between bizarre behavior (voices) and OCD symptoms (intrusive thoughts); most often times, individuals suffering from OCD are aware that their thoughts and behavior are irrational (Rowney et al., 2010).

As a result of their secretiveness, they do not seek professional help or support (Robinson et al., 2017). Before OCD was viewed as rare because very few sought treatment and later considered ‘hidden epidemic’ because community survey revealed more results (Stein & Gorman, 2001).

Hollander (1997) reported a 10-year gap between the onset of symptoms and seeking help – and another seven years for those individuals to receive the correct treatment for OCD. While a recent UK study by Stobie, Taylor, Quigley, Ewing & Salkovskis (2007) found a six-year gap from the initial time OCD was impacting the person’s life to the time they sought help.

It appeared that only those with the most severe and debilitating OCD seek help (Goodwin, Koenen, Hellman, Guardino & Struening, 2002).

Since OCD is a chronic condition, without treatment, symptoms simply worsen over time. They may have several compulsions including repeating actions, counting, hoarding or requesting or demanding reassurances (Statistics Canada, 2015). Therefore, it's important for those suffering from OCD to receive proper help.

Psychotherapy for OCD

Why psychotherapy? Those with OCD who seek treatment are likely to show improvement in their quality of life - symptoms are less bothersome and a reduction in distress is observed (Cyr, 2007). Psychotherapy, pharmacotherapy and a combination of those two are an effective treatment for OCD (O'Connor et al., 2006; Eddy, Dutra, Bradley & Westen, 2004). CBT with exposure and response prevention is considered most effective in treating OCD for children, adolescent and adults with OCD (Fireman, Koran, Leventhal & Jacobson, 2001). Now let's take a look at the most common types of *psychotherapy for OCD* and why?

- *Behavioural therapy* – face situations that cause anxiety and attempt to de-sensitize. Also teaches person techniques on how to deal with their anxiety (Rowa, Antony, Swinson, 2000).
- *Exposure and response prevention* (ERP) – face their fear regarding their obsessions (exposure) and develop techniques to mitigate ritualistic behaviour (response prevention) (Clark, 2014).
- *Exposure and response prevention* (ERP) – reduce negative reinforcement through systematic exposure to the feared object or event and through disengagement in compulsive behaviour (Hale, Strauss & Taylor, 2013)
- *Group CBT with EPR* (Jonsson, Hougaard & Bennedsen, 2011)
- *Mindfulness-based therapy* – learn the importance of being present and aware of behavioural intention and urges and encouraged to notice these urges and make an alternative helpful behavioural choice (Hale, Strauss & Taylor, 2013).

Behavioural Therapy

According to the Canadian Psychological Association, behavioural therapy is considered most effective treatment for most types of OCD – the person has the opportunity to face their obsessions (exposure) and while taking steps to prevent the ritualistic behaviour (response prevention) (Clark, 2014). Studies demonstrate 76% of individuals who completed a treatment (13-20 sessions) show significant improvement and decreased in obsessive and compulsive symptoms (Clark, 2014).

Compared to medications, behavioural therapy appears to generate better results and longer lasting effects (Kobak, Greist, Jefferson, Katzelnick & Henk, 2004). 30% of people with OCD will refuse treatment or drop out of treatment prematurely – because of their inability to handle distress associated with the process (Clark, 2014). When psychologist added cognitive therapy to behavioural therapy, CBT facilitates in changing thoughts and beliefs about their anxieties (Clark, 2014) which promises optimism for those struggling with OCD.

Efficacy and Effectiveness of Psychotherapy

Children and Youths. Watson and Rees (2008) reviewed the effectiveness of the psychological intervention in the treatment of OCD in youths. This meta-analysis reviewed 13 studies (10 pharmacotherapy comparisons and 5 CBT comparison). The total number of participants was 1,177 and the average age of participant was 12 years old. Results show that CBT yielded a large effect. Moreover, the results suggest that CBT is the first line treatment for OCD in youths (Barrett, Farrell, Pina, Peris & Piacentini, 2008).

Adults. A study by Houghton, Saxon, Bradburn, Ricketts, and Hardy (2010) looked at the effectiveness of CBT for OCD at the Canadian Psychological Association publicly funded clinic. A total number of participants was 37; nine of these individuals dropped out, while the other 28 individuals finished the treatment. The therapist provided one-to-one CBT for OCD.

Results indicated that 43% of these participants demonstrated change to a certain degree, and 13% reported significant improvement.

Rosa-Alcazar, Sanchez-Meca, Gomez-Conesa & Marin-Martinez (2008) conducted several meta-analyses regarding how effective are psychological interventions for OCD treatment. The total numbers of participants were 752 people diagnosed with OCD; 24% were men. The results of the study revealed cognitive therapy in combination with exposure and response prevention were most effective in treating symptoms of OCD.

Olatunji, Davis, Powers & Smits (2013) looked at 16 studies that involved individuals from across the lifespan. Results show there was a significant effect of the treatment; effect size was smaller in adults than in youths.

PART II

Psychotherapy for Panic, Phobia PTSD, alexithymia, gifted and glossophobia will be covered in part II of this chapter. Barriers and enablers to psychotherapy will also be explored.

Psychotherapy for Panic

CBT and behavioural therapy are recommended for panic (ADAC, 2007h). Additionally, part of the intervention for panic involves psychoeducation - for individuals, as well as their family members to understand symptoms, course, intervention, treatment, and support. When individuals and family are aware of what panic entails, they are reassured to know that there is hope and possible interventions are available. People who experience panic sometimes visits the hospital emergency room for fear that they are having a heart attack (ADAC, 2007h). Therefore, individuals should also receive a medical and physical assessment to rule out medical conditions (Rowney et al., 2010). Subsequently, management of panic involves working with the individual to prevent inappropriate usage of the medical system (Rowney et al., 2010).

Psychotherapy for Phobia

Behavioural therapy, exposure therapy, and CBT are reported to be an effective therapy for phobia (ADAC, 2007h). For most specific phobia, medication is not recommended (ADAC, 2007h). Specifically, CBT appears to be the first line psychotherapeutic choice for phobia disorders. CBT for phobia focuses on gradually and carefully exposing an individual to the phobic situation or trigger. Out of all the anxiety disorders, a phobia is actually considered most treatable (CPA, 2015b). Major improvements can occur and a person can expect a full recovery from “as little as one session of guided exposure lasting [two to three] hours; this form of treatment has been used for adults, adolescent and children” (McCabe, 2015, para 17). For others, “virtual reality environments have also been used to assist in exposure to situations that are difficult to replicate such as flying and heights” (McCabe, 2015, para 18). Virtual reality environments will be explored with regards to fear of public speaking of this chapter.

Psychotherapy for PTSD

Since people experience PTSD differently in terms of how it affects one’s nervous system, treatment may vary from person to person. There is a difference between ongoing trauma and past trauma experienced in terms of therapeutic approach. PTSD treatment is somewhat complex depending on concurrent issues at hand such as depression (moderate to severe), substance use, suicidal ideation, panic attacks and chronic physical pain. Duration of therapy may also vary depending on the severity and intensity of symptoms experienced and its affect on one’s overall daily functioning.

Psychotherapy for PTSD can be individualized or in a group setting (NIMH, 2017g). Therapy involves focusing on personal, occupational, and social functioning; and additionally, education about symptoms, trigger identification and techniques to manage symptoms. In chapter

three, we discussed how stressful events trigger the SNS which activates the stress response – therapy for PTSD is about learning how to regulate one's nervous system and managing one's window of tolerance between hyperarousal and hypoarounsal symptoms that arise.

The most common form of therapy is CBT for PTSD (ADAC, 2007h). Exposure therapy is also common. Psychotherapy helps individuals face their traumatic experiences and helps them gradually feel safe. Individuals may also learn relaxation skills and ways to manage one's anger. Helping the person re-examine their beliefs (for example I can't feel safe in school) about feeling safe, and learning how to set realistic boundaries (for example: it is safe to go to school) that help them feel safe is necessary (Koch, 2015).

What about the somatic symptoms? At the end of chapter two, a common pattern of anxiety across lifespan was somatic complaints. According to the literature, there are many types of somatic psychotherapeutic approaches available. Specifically, we will examine trauma/tension releasing excerises (TRE) as a somatic approach to PTSD.

TRE

Dr. David Berceli who has a PHD in clinical social work and a certified bioenergeticist (Herold, 2015) created TRE – TRE's intends to rouse neurogenic tremors through a series of seven exercises. The purpose of the neurogenic tremor is to diminish PTSD's symptoms.

How did he develop TRE? Berceli stayed in areas where he witnessed military combat. When bombs came down, he noticed people positioned into the fetal position (Herold, 2015). "During any traumatic experience the extensor muscles are inhibited so that the flexor muscles can contract" (Herold, 2015, p. 78). This huddling over helps to "protect the internal organs and creates a feeling of safety". (Herold, 2015, p. 78).

Which muscles are involved during this process? The calf muscles, the quadriceps muscle, the adductors, the diaphragm, the neck muscles and the muscles of mastication are

involved in this process. Specifically, Herold (2015) reviewed which muscles are activated and released during the process of TRE:

> [The specific muscle group that] contracts in life threatening situation are the ilio-psoas muscle, the trunk, including the pelvis and legs...the ilio-psoas muscle contracts when we assume fetal position...[thus there is a] compensatory reaction of the erector spinae muscle that leads to chronic backache in numerous traumatized people, since the tension in the ilio-psoas is chronically increased" (p. 79).

What is the purpose of the tremor? Tremors are the body's natural response to release high levels of stress and tension. Moreover, tremors also release chemical substances which taxes the nervous system for example occurring in traumatic events or incidents. "The trembling process discharges the body's excessive energy and it returns to a state of rest and relaxation...the ability to shake off trauma is one of the most archaic reactions of the human animal" (Herold, 2015, p. 79). Mammals are able to shake off excessive energy during the flight or freeze reaction. Mammals are not able to develop PTSD since they will naturally tremor to discharge the stress.

Dr. Berceli has noted that numerous traumatized people experience spontaneous tremor, however many individuals try to suppress this reaction (for example: feeling embarrassed or shame). Children are able to tremble readily. Many adults prevent this tremor from happening because they are afraid that children will perceive this tremor as anxiety (Herold, 2015). Trauma symptoms develop as a result of not being able to discharge excessive energy. When high stress energy remains in the body, it becomes trapped in the nervous system and therefore has a significant effect on the person's mind and body.

Psychotherapy for Alexithymia

Grabe, Frommer, Ankerhold, Ulrich, Franke & Spitzer (2008) reported that 25% of all clients seeking therapy are alexithymic. And according to the literature, psychotherapy for alexithymia is linked with negative outcomes – alexithymics are generally less responsive in psychotherapy (Rufer, Albrecht, Zaum, Schnyder, Mueller-Pfeiffer, Hand & Schmidt, 2010). Since 25% of those who seek therapy are alexithymics, we are going to spend more time learning about this specific population.

Factors that Contribute to Negative Treatment Outcomes

Why is psychotherapy for alexithymia associated with negative outcomes? Research on alexithymia is centered on those who experienced extreme trauma such as concentration camp survivors (Krystal, 1988) military combat veterans (Hyer, Woods, Summers, Boudewyns & Harrison, 1990) and survivors of multiple cases of sexual abuse (Zeitlin, McNally & Cassiday, 1993).

Family Dysfunction. Alexithymia is also caused by factors related to family dysfunction (emotional expression and family cohesion); and the literature indicates family dysfunction is positively associated with alexithymia (King & Mallinckrodt, 1998). Crittenden (1994) proposed "dysfunction experienced during critical periods of emotional development in the first few years of life" (as cited from Grabe et al., 2008, p. 497) contribute to the development of alexithymia.

Other factors include caregivers unresponsive to the emotional communication of young children, caregiver's own inability to express emotions, inconsistent or adverse communication styles, children insecurely attached to parental figure causing failure to develop the ability for emotional communication and self-regulation skills (Bretherton, 1985; Crittenden, 1994; Slade & Aber, 1992). Gewirtz & Keutter (1992) adds adolescents with alexithymia are unable to regulate

negative affect. Other literature by Berenbaum & James (1994) believed alexithymia is associated with childhood memories of one's family as emotionally cold and unsafe.

Insecure Attachment. As a result of these traumatic incidents, "even when psychological and psychosomatic symptoms improve, alexithymia tends to remain constant over the course" (Mallinckrodt et al., 1998, p. 497). Alexithymia has difficulty forming close emotional relationships and those with severe alexithymia have serious issues developing an attachment to their therapist (Brown, 1985). Clients begin to transfer their family dysfunction into therapeutic interaction. Thus contributing to challenges seen in psychotherapy – the inability to securely attach to therapist becomes a common issue.

How does alexithymics inability to form a secure attachment with therapist contribute to this negative therapeutic outcome? "Feelings of humiliation, resentment, or fears of rejection by the therapist, and reluctance to self-disclose are features of this attachment to a therapist... and may be the legacy of parent role reversal in the client's family of origin" (Mallinckrodt et al., 1998, p. 502). Accordingly, clients with alexithymia can be difficult to work with because they can reject therapist efforts to create an emotional bond (Brown, 1985). They also create negative counter-transference reactions during the psychotherapeutic process (Taylor, 1977).

Undifferentiation. Alexithymic are utterly unfamiliar with their internal process such as recognizing, describing their feelings and differentiating feelings from somatic experience; therefore they may not value the therapeutic process of looking within to problem solve. Exploration of internal psycho-emotional milieu appears to be a hallmark of therapeutic progress, that is - the ability to observe, experience, reflects on, communicate affective states are important for regulating one's emotions (Ogrodniczuk et al., 2010). Their inability to access affective states contributes to their avoidance of psychotherapy. An assumption in the literature

indicate alexithymics are more likely to gravitate towards other treatment such as psychopharmacotherapy; however this assumption has not been tested empirically or specific study available to test this assumption (Ogrodniczuk et al., 2010).

Defense Mechanisms. What are other factors that contribute to negative therapeutic outcomes for alexithymia? Parker, Taylor & Bagby (1998) reported alexithymics have a tendency of utilizing "primitive and immature defenses such as projection, denial, acting-out, dissociation, and passive-aggressive behaviour" (as cited from Ogrodniczuk et al., 2010, p. 44). The lack of assimilation between feelings and thoughts, utilization of immature defense mechanisms and affinity towards impulsive behaviour has major implications for psychotherapy.

Therapist Challenges

What are some of the therapist perspective of working with alexithymic? And what are some challenges that arise? Taylor (1976) reported individuals with high alexithymia are perceived as dull, boring, tedious and frustrating for the therapist to work with. In addition, the person's inability to express their emotional states may threaten the therapist sense of being a competent communicator (Swiller, 1988) or effective healer (Ogrodniczuk et al., 2010). The therapist may act in ways that communicate contempt, frustration or loathe; as a result, the therapist does little to uphold treatment and hope that the person ends therapy prematurely (Ogrodniczuk et al., 2010).

Some of the literature suggests a supportive approach, as opposed to change-oriented approach, is beneficial for individuals with alexithymia (Ogrodniczuk et al., 2010; Rufer et al., 2010). Because of their limited capacity to recognize, differentiate and express their emotional feelings to therapist or others; alexithymics will experience many challenges engaging in the psychotherapeutic process of change.

Specific Approaches to Therapy

What are particular approaches to helping individuals with alexithymia? During the inception of treatment, the therapist can help alexithymics by learning how to differentiating between emotions and somatic experiences. For example, the ability to discern arousal, describe differing affective states and provide an explanation for how these are interconnected. Moreover, it is vital for the therapist to “mirror affective states without imposing their own explanation” (Ogrodniczuk et al., 2010, p. 46). Furthermore, Lane & Schwartz (1992) and Swiller (1988) talks about ways to enhance this approach:

> The therapist can facilitate this process by offering verbal representations that correspond to the patient's current experience as well as by providing new labels for past experiences and identifying previously unrecognized triggers of emotion. It is believed that the expansion of the patient's cognitive schema through symbolic representation reduces the patient's vulnerability to future distress and disorganization because future experiences will be more differentiated, attenuated, and familiar (as cited from Ogrodniczuk et al., 2010, p. 46).

Over time, these interventions will assist to develop awareness of the range of emotions experienced and consequently, help the individual develop communication skills to express their emotions. Focusing on identifying and differentiating of feelings early in treatment may contribute to positive treatment outcomes; thus this may reduce the frustration and anxiety for both the therapist and the client.

Similarly, Malan & Della Selva (2006) believe intensive short-term dynamic psychotherapy may be beneficial for the treatment of alexithymia. This technique focuses on visercal emotional experiences of identifying, connecting and expressing emotional feelings.

Along the same lines, Guttman & Laporte (2002) suggested the capacity to differentiate one's emotional experience from others is required for managing interpersonal relationships. Therefore, inability to express one's feelings can drastically interfere with the person's ability to manage their emotions with others (Lane, 2008). Because of this emotional impairment, alexithymics emotions remain 'global and undifferentiated, leading to a relative inability to use one's own emotions to guide adaptive behaviour" (Ogrodniczuk et al., 2010, p. 43-4).

Considering in chapter three, one of the characteristics of alexithymia is impoverished fantasy life and limited imagination. Bateman & Fonagy (2004) suggested metallization-based therapy may be appropriate for alexithymic.

Another approach towards working with alexithymia involves inpatient treatment for psychodynamic group therapy – although this technique may help lessen an alexithymic's psychoemotional distress at hand, ultimately these individuals demonstrate higher distress at discharge than in-alexithymics – this result reveals negative long-term outcome for alexithymics (Grabe et al., 2008).

Psychotherapy for Gifted

Counseling the gifted calls for having experience and knowledge of gifted children and adults. A great way to start is learning about Dabrowski's TPD as mentioned in chapter three. This theory helps to understand their emotional development. Daborwski believed that emotional development and personality development go hand in hand. "Cognition without an emotional sense to give it value, positive or negative, is sterile...the passion for learning and mastery are characteristics of gifted and is driven by a very powerful emotion: intense interest" (Daniels & Piechowski, 2009, p. 29). To provide assistance for gifted young children and adults requires

knowledge of Dabrowski's theory, the TPD is a valuable tool for counseling this peculiar population.

Vertical Tension

The conflict between their actual self and their ideal self is what causes anxiety, crisis, tension and frustration to arise. There is significant vertical tension about how things are currently and how they would like things to be. Despite their advanced cognitive processes, these individuals are not necessarily aware of these keen differences. "Intelligence, in Dabrowski's view, is not sufficient for development, while the experience of higher-level emotions is essential for advanced development" (Daniels & Piechowski, 2009, p. 90).

Understanding their Intensity

A salient information for counselors is recognizing the individual's inner intensity; "deep responsiveness that is often overlooked and may be intentionally hidden from others – as a variable that cannot be ignored and cannot be separated from the client's essence" (Daniels & Piechowski, 2009, p. 125). Understanding how these factors interplay serves as an important guiding factor towards his or her emotional and personality growth.

Goal of Therapy

The goal of a counselor when counseling the gifted is "acceptance of the [person]" while guiding them towards developing "an authentic personality expression on the highest levels of realization" Daniels & Piechowski, 2009, p. 124). Researchers found psychomotor and sensual OE are often neglected in the process, and incorporating these may be defining prospective agents of stamina and grounding for the individual (Daniels & Piechowski, 2009). Dabrowki's viewpoints are further elaborated in the block quote below (Daniels & Piechowski):

> Excusing behaviour is not the goal; the goal is understanding it, explaining it, and ultimately embracing it. The non-productive behaviour must be adapted into productive ones in a way that promotes development rather than stunts it. In Dabrowski's view, behaviour expressing developmental potential is a necessary step towards development – rather than a pathological impediment to it – and will foster processes of behaviour change, personal development and personal growth. The behaviour is not excused but rather reframed, embraced and addressed in a positive way that allows for further development. Essentially, treating behaviours as pathology and possibly medicating a child for the immediate comfort of others (for example to get the child to comply) may stop the process of further personality development. However, when [the person's] behaviour are explained in the context of positive disintegration and OE, management strategies addressing the frustration can be used to help them through the process of re-integration at a higher level. Giftedness and OE are accepted as healthy parts of him or herself to be shaped and nurtured rather than extinguished (p. 94-95).

When counseling gifted children or adults, acknowledging their anxiety, depression or frustration can help them acknowledge, process and resolve this temporary calamity. As mentioned in chapter three, recognizing the hazard of misdiagnosing the individual's intensity as psychiatric issues may cause disruption in their growth and development. Understanding their intensity, its meaning to the individual and ways to embrace this character trait are a gateway to helping them towards emotional and personality growth.

Psychotherapy for Glossophobia

Like another phobia, glossophobia can also help with CBT and exposure therapy. Other forms of exposure therapy involve engaging in public speaking avenues such as joining a local

club that promotes this type of activity. Practicing public speaking allows an individual to face and eventually conquer their fear.

Reappraising Stress Arousal

An aspect of therapy involves understanding and interpreting the physiological response to stress in a different way. Jamieson, Nock & Mendes (2013) conducted a study regarding stress appraisal and its physiological response. Researchers aimed to understand how psychological appraisal plays a critical role in creating and regulating emotional states – explicitly how one's belief about stress impacts their physiological response and overall health. The study consisted of 73 adults participants randomly assigned to two groups (socially anxious and non socially anxious). Both tests took the Trier Social Stress Test. Each participant were given three minutes to rehearse a five-minute speech, and subsequently asked to count backward by seven. This experiment was done twice. The first experiment acted as a control and revealed that the anxious group reported more anxiety and negative affect during the public speaking task than the non-anxious group. During the second experiment, both groups were instructed the following prior to the public speaking task:

> In stressful situations, like public speaking, our bodies react in very specific ways. The increase in arousal you may feel during stress is not harmful. Instead, these responses evolved to help our ancestors survive by delivering oxygen to where it is needed in the body. We encourage you to reinterpret your bodily signals during the upcoming public speaking task as beneficial (p. 369).

The second experiment revealed reframing the stress arousal as a supportive coping strategy demonstrated reduced attentional bias and improvement in their physiological functioning such as decreased vasoconstriction and increased cardiac efficiency (Jamieson et al.,

2013). Part of the study focused on educating individuals regarding stress as an adaptive response. Learning how to view one's natural response to stress is beneficial and likely to increase one's resources. The study concluded that those with a social anxiety disorder may benefit from interpreting their stress arousal as beneficial to offer positive social outcomes.

Virtual Reality CBT

Wallach, Safir & Bar-Zvi (2009) conducted a study about virtual Reality CBT for those with public speaking anxiety. Virtual reality CBT is similar to traditional CBT. The difference lies in the method of exposure during the process of therapy. The client wears a helmet connected to a computer and is exposed to a virtual reality as opposed to a real or imagined scenario. The helmet provides visual and auditory input.

The goal of the therapist is to utilize the computer program set to change various elements in the virtual environment. The virtual simulation allows the client to be gradually exposed to different aversive stimuli. The therapist can adjust differing amounts of fear on the screen, and then monitor the client's subjective experience of discomfort. Virtual CBT appears to be more effective than traditional CBT for those struggling with public speaking anxiety.

Enablers to Psychotherapy

Robinson, Rose & Salkovskis (2017) discussed five main themes they identified as enablers to seeking help for anxiety: (1) being supported or urged to seek treatment; (2) crisis/crunch point; (3) media influence/information; (4) confidence in general practitioner (GP) and mental health professionals; and (5) drive to seek treatment because of the nature of the thoughts.

Being supported or urged to seek treatment

When partners or family members encourage them to seek help for their issues or being supported by their friends to seek help. Moreover, individuals also gain support from others through OCD website forums.

Crisis/Crunch Point

For example, an individual reported feeling extremely depressed, nonfunctional in everyday living, poor quality of life, using substances to cope and thinking of ending one's life led to this person to see a doctor for professional help.

Media/ information

For example, a person may learn about their condition such as OCD through watching the media (television, internet, newspaper) and as result sought professional help (psychiatrist, psychologist and community psychiatric nurses). The media provided information to the individuals through external support by normalizing mental illness and providing information that links support for people to access.

Confidence in GP/Mental Health professionals

The attitude of the mental health professional has influence over helping an individual with for example OCD. In addition, the amount of information the mental health professional knew about that particular condition and its treatment options made a difference.

Driven to seek help due to the nature of the thoughts

A person may be driven to seek help for their condition due to the nature of their thoughts. For example a person experiencing intrusive thoughts about harming children and feeling frightened about their thoughts. In addition to fearing their thoughts, they may also fear that they are capable of acting on their thoughts. The intensity of their thoughts and feeling

unsafe within themselves also act as an enabler for one to seek professional help for their mental health concerns.

Other Motivators towards psychotherapy

Belloch, DelValle, Morillo, Carrio & Cabedo (2009) proposed another reason why people gravitate towards seeking help for their condition. The fact that their problem was not going away and or they could not control it. Moreover, it appears that their problems become increasingly more disturbing and frequently making people sad about it (Belloch et al., 2009).

Barriers to Psychotherapy

What are barriers to psychotherapy? Barriers are anything that blocks or obstructs access to therapy. Barriers can also be hurdles or obstacles that impede one's ability to come towards psychotherapy. Let's briefly look at these barriers to seeking psychotherapy. The first two categories below describe the number of percentages based on varying reasons towards barriers to seeking help. Table 5.1 below reveals a summary of barriers to seeking help:

Table 5.1 Barriers to Seeking Help

List of barriers to therapy	Barriers to treatment questionnaire	Short questionnaire: interview on help-seeking
▪ Lack of information ▪ 39.8% not sure where to go ▪ 28.4% can handle it on my ▪ 24.9% can't afford treatment ▪ 20.5% afraid what others would think ▪ 16.7% no insurance ▪ 14.7% afraid to take medications ▪ 5.7% treatment won't help 5.7% ▪ 4.5% don't have an anxiety disorder	▪ 58% I felt ashamed of needing help for my problem ▪ 57.1% I was worried about how much it would cost ▪ 54.4% I wanted to handle it on my own ▪ 53.2% I felt ashamed of my problems ▪ 50.4% I was unsure about who to see or where to go ▪ 48.9% I didn't think treatment would work	▪ Feeling that the problem was temporary ▪ Feeling that they could control the problem ▪ Believing that their behaviour/thoughts were not serious ▪ Feeling ashamed of the thought content ▪ Fearing stigma

Note: data for a list of barriers to therapy from Goodwin et al. (2002); for Barriers to treatment questionnaire from Marques, LeBlanc, Weingarden, Timpano, Jenike & Wilhelm (2010); for Short questionnaire: interview on help-seeking from Belloch et al. (2009).

Key Themes Identified as Barriers to Seeking Help

Another study by Robinson et al., (2017) reported five themes they identified as barriers to seeking help: (1) stigma; (2) internal/cognitive factors causing people to delay; (3) not knowing what it was; (4) factors related to GP/treatment; and lastly (5) fear of criminalization. Let's take a closer look at each factor to understand how these reasons hinder one's ability to seek help for their condition.

Stigma. Due to negative stigma associated with mental health issues, individuals do not want to tell anyone about their mental health issues especially their family, friends, and colleagues. Similarly, they also do not want to tell their doctors because they feel ashamed and embarrassed. Others fear about having OCD on their medical health records – since these records are government official; as a result, fear of being discriminated affects one's career. Moreover, it is important for individuals to protect and shield their family. Family members may be upset knowing a member is experiencing mental issues. Or at times, family members may not want to accept that their family member has mental health issues – this is because there's a perception that something is wrong with this person and cannot be fixed.

Table 5.2 Mental Health Stigma According to a 2008 Survey	
1	Just 50% of Canadians would tell friends or co-workers that they have a family member with a mental illness, compared to 72% who would discuss a diagnosis of cancer and 68% who would talk about a family member having diabetes.
2	42% of Canadians were unsure whether they would socialize with a friend who has a mental illness
3	55% of Canadians said they would be unlikely to enter a spousal relationship with someone who has a mental illness.
4	46% of Canadians thought people use the term mental illness as an excuse for bad behaviour, and 27% said they would be fearful of being around someone who suffers from a serious mental illness
5	46% of Canadians thought people use the term mental illness as an excuse for bad behaviour, and 27% said they would be fearful of being around someone who suffers from a serious mental illness
Table 5.3 Mental Health Stigma According to a 2015 Survey:	
6	57% of Canadians believe that the stigma associated with mental illness has been reduced compared to five years ago
7	81% are more aware of mental health issues compared to five years ago
8	70% believe attitudes about mental health issues have changed for the better compared to five years ago
9	64% of Ontario workers would be concerned about how work would be affected if a colleague had a mental illness

10	39% of Ontario workers indicate that they would not tell their managers if they were experiencing a mental health problem
11	40% of respondents to a 2016 survey agreed they have experienced feelings of anxiety or depression but never sought medical help for it

Note: data for one to five from Canadian Medical Association (2008); for six to eleven from Bell Canada (2015) and Dewa (2014).

Internal/cognitive' factors causing people to delay. A second reason why people delay seeking help is due to one's internal or cognitive factors. Table 5.4 provides are six examples:

Table 5.4 Internal Factors that Causes People to Delay Seeking Help

One's internal or cognitive factors	How do these thoughts this manifest?
It's not bad enough	Not recognizing the severity of the impact it had on their life
I can manage	Individuals wanted to deal with the issue themselves
Reluctance to accept that there may be a problem	Their parents did not accept their problem or thought it would improve over time
Never thought of getting help	Part of their everyday life hence thinking that they are the only ones suffering from it
I don't deserve the treatment	Feeling that other people's needs are greater and therefore they need treatment more than myself
Feeling too vulnerable	The process of seeking help takes mental and emotional energy in itself - not having enough strength to talk or think about it; feeling ill, stressed or exhausted

Note: data for this table from Robinson et al. (2017, p. 201-2).

Not knowing what it was. Another reason why people delay seeking help is that they do not know what the problem is or not having information about OCD. These individuals did not have a clue about what was going on for them. Their family members also did not know what it was. As a result of not knowing, the individual and their family members are not able to identify and recognize symptoms of OCD. Additionally, lack of information has been raised by several authors – Torres et al. (2007) suggested that lower level of public awareness about OCD (as compared with depression) may be a barrier.

Factors related to GP/treatment. Three factors related to GP/treatment that causes one to delay seeking help include:

1) Would their GP know what the problem was?

- Some people reported that they felt uncomfortable regarding the doctor's uncertainty about how OCD works and treatments for OCD

2) Concern about GP's reaction

- Similarly to what was written under stigma - individuals may feel embarrassed or ashamed for telling their GP; hence the barrier to treatment is uncertainty and concern about how the GP will react.

3) Concerns about treatment

- There are concerns about psychological or pharmacological treatments and the process and repercussions of each treatment.

Fear of criminalization. Fear of criminalization can prevent one from seeking help for their anxiety (OCD). An example is a fear of harming children. These individuals fear being locked up or having their children taken away, being mandated or imprisoned for their thoughts and behaviour.

Summary

In this chapter, we investigated numerous approaches to psychotherapy for anxiety – CBT, progressive relaxation, applied relaxation, exposure therapy, mindfulness, family therapy, acceptance and commitment therapy, social skill training, exposure and response prevention, behavioural therapy, TRE, nature based therapy, ecotherapy, horticultural therapy. We also had the opportunity to learn about the effectiveness and efficacy of psychotherapeutic treatment for GAD, social anxiety and OCD.

In part two, we explored psychotherapy for panic, phobia, PTSD, alexithymia, gifted and glossophobia. The last section we examined enablers to psychotherapy (supported treatment, crisis point, media information, confidence in mental health provider, and driven by nature of

thoughts) and barriers to psychotherapy (stigma, internal cognitive factors, not knowing what it was, GP or health care provider and fear of criminalization).

The next chapter will explore an alternative psychotherapeutic avenue for anxiety. Chapter five will study entheogen’s history and potential psychotherapeutic use for anxiety.

CHAPTER 5 AWAKENING ANXIETY WITH ENTHEOGENS

Introduction

Medicinal use of entheogenic plants dates back to "3000 years of historical rituals by different indigenous cultures such as the Amazonian shamans" (Majic, Schmidt & Gallinat, 2015, p. 244; Tyls, Palenicek & Horacek, 2014, p. 343). Sandra Ingerman, a world-renowned teacher of shamanism reported for 100, 000 years shamanism has been passed down through generations - it is a system and practice that is very result oriented. Additionally, shamans were considered doctors and psychotherapist in their community – they were responsible for healing people and particularly ask questions such as: "do the people that you work with do their lives improve? And does the planet improve from this work?" (Ted, 2012 March). Similarly, recent research by Taper (2011) and Goldsmith proposed the use of entheogen for therapeutic psychotherapy, personal development, and transformative scared ritual as a means of societal betterment (as cited in Uy, 2016).

It appears that shamanic values of improving the lives of others and nature through the medicinal use of entheogen remain alive until this present day; similarly, these are the values explored in this paper. This chapter focus on understanding the background of, exploring the research of, analyzing the research of and, summarizing and discussing the research data of psychedelics as an adjunct therapeutic aid in psychotherapy for struggles with anxiety.

It is difficult to understand psychedelic psychotherapy through the lens of anxiety only; for counselors to understand psychedelic psychotherapy, we must take the time to understand it holistically. There are many integral parts that become building blocks for supporting individuals through psychedelic psychotherapy. Let's attempt to understand entheogens and psychotherapy.

Definition

Entheogen and psychedelics are two words used interchangeably in this avenue of psychotherapy literature. What does each word mean?

"*Psyche-delics*" is a Greek word broken down into two parts: (a) "*psyche"* means the *mind or soul* and (b) "*deloun"* means *to make visible or reveal*; meanwhile psychedelics drugs refers to anything [plant-based or chemically-based] that produces effects that similarly reveals the mind or soul (online etymology dictionary, 2018c; TED, 2016 Dec).

The word *entheogens* are Greek, "*engen* " means *the experience of god* and "*the*" means *within*; these words combined means "*become divine within*" or "*awaken the divine from within*" (Roberts, 2016). Whereas contemporary studies defined entheogen as a *chemical substance*, *plant or drug, which is ingested to produce a non-ordinary state of consciousness for religious or spiritual purposes* (Dictionary, 2016). These two words will be used interchangeably during the process of reading this chapter.

Another word is used in the psychedelic literature – is the term 'psychotomimetic'. This word is related to experiencing psychosis or hallucinations; thus psychotomimetic is an element that "could reveal underlying psychodynamic processes" (Phelps, 2017, p. 451).

Historical Usage

Many primitive cultures including indigenous population incorporated psychedelics in their collective religious practice. For example, psilocybin (mushroom) is utilized "from Mexico to Siberia, the native American church [utilized] peyote (cactus) and mescaline, while the Amazonians [utilized] ayahuasca (containing DMT)" in their ceremonies (Sessa, 2007, p. S215). Meanwhile, a variety of psychoactive plant and substances were common in pre-Columbian Mesoamerican societies, including the Olmec, Zapotec, Maya, and Aztec cultures (Carod-Artal,

2015). Thus, there's an understanding that psychedelics have a long-standing history with various cultures and used for medicinal value, religious practice and spiritual reasons.

Understanding the Background of Psychedelics

Background and First Discovery in Modern Times

Dr. Albert Hoffman, a Swiss chemist, was the first to synthesize lysergic acid diethylamide (LSD), a classical psychedelic hallucinogen. In 1938, he synthesized it while seeking a new drug therapy for a migraine. On April 16, 1943, he accidentally absorbed LSD, leading to the first recorded LSD trip (Barnes, 2015; Fusar-Poli & Borgwadt, 2008, p. 484; Uy, 2016). The effects of the drug led that day to be known as 'Bicycle Day' as he experienced an incredible bicycle ride on his way home from the lab. LSD was initially "hailed as a wonder drug" for its use in psychoanalysis, particularly for expanding insights into schizophrenia (Fusar-Poli & Borgwadt, 2008, p. 484; Uy, 2016). Hoffman's employer, Sandoz Pharmaceuticals, subsequently made the drug freely available for research purposes. They were the first to publish a clinical trial using the drug in 16 healthy volunteers and 6 schizophrenic patients (Barnes, 2015; Fusar-Poli & Borgwadt, 2008, p. 484; Uy, 2016).

Subsequently, Hoffman became the director of Sandoz pharmaceuticals and began studying other hallucinogens such as mushroom derived from Mexico. He also studied other medicinal plants used by indigenous cultures. Thereafter, he manufactured psilocybin, the active ingredient in 'magic mushrooms' and began studying its effect (Fusar-Poli & Borgwadt, 2008, p. 484).

Banning of Research

In the 1960s, Timothy Leary and others viewed LSD "as a pathway to spiritual enlightenment, and then as a major recreational drug," which led to its ban in the year of 1966 in

the United States, which subsequently most other countries followed (Fusar-Poli & Borgwadt, 2008, Uy, 2016). See figure (#) regarding the international legal status of drugs.

Consequently, strict bylaws ensued. After the passage of the Controlled Substance Act of 1970, psychedelics including LSD was placed under rigorous restriction and classified as a schedule I drug (Nichols, 2016). “This classification made [it] virtually impossible to study clinically and effectively ended any significant research into the pharmacology and medical value of psychedelics for more than three decades” (Nichols, 2016, p. 267). Refer to table 6.1 below for information about differing classification of drugs schedule in concordance with Drug Enforcement Administration policy. Those classified as psychedelics are written in bold text.

Table 6.1 DEA Drug Schedule Guide

Schedule	Description/Definition	Example
I	Drugs, substance or chemical (DSC) with no accepted medical use and high potential for abuse	Heroin, **LSD**, **marijuana** (cannabis), 3, 4-Methylenedioxymethamphetamine (**MDMA**), methaqualone, and **peyote**
II	DSC with high potential for abuse, potentially leading to severe psychological or physical dependence. Considered dangerous	Combination products with less than 15mg of hydrocodone per dosage unit (Vicodin), cocaine, methamphetamine, methadone, hydromorphone (Dilaudid), meperidine (Demerol), oxycodone (Oxycontin), fentanyl, Dexedrine, Adderall, and Ritalin
III	DSC with moderate to low potential for physical and psychological dependence; are also considered dangerous	Products containing less than 90 mg of codeine per dosage unit (Tylenol with codeine), **ketamine**, anabolic steroids, testosterone
IV	DSC with low potential for abuse and low risk of dependence	Xanax, Soma, Darvon, Darvocet, Valium, Ativan, Taiwin, Ambien, Tramadol
V	DSC with lower potential for abuse than scheduled IV; classified as antidiarrheal, antitussive and analgesic purpose	Cough preparation with less than 200mg of codeine or per 100 ml (Robitussin), Lomotil, motofen, lyrica, parepetolin

Note: data for DEA Drug Schedule Guide from Drug Enforcement Administration (n d.).

Table 1 | **The status of certain substances in the international, UK and US legislation**

Substance	United Nations conventions	UK Misuse of Drugs Regulations	UK Misuse of Drugs Act	US Controlled Substances Act
Amphetamine	Schedule II (1971)	Schedule 2	Class B	Schedule II
Cannabis and cannabis resin	Schedules I and IV (1961)	Schedule 1	Class B	Schedule I
Cannabidiol	Not listed	Not listed	Not listed	Not listed
Cocaine	Schedule I (1961)	Schedule 2	Class A	Schedule II
2-bromo-LSD	Not listed	Schedule 1?	Class A? (uncertain)	Not listed
Heroin (also known as diamorphine)	Schedule I (1961)	Schedule 2	Class A	Schedule I
Ketamine	Not listed	Schedule 4	Class C	Schedule III
LSD (also known as lysergide)	Schedule I (1971)	Schedule 1	Class A	Schedule I
MDMA (also known as ecstasy)	Schedule I (1971)	Schedule 1	Class A	Schedule I
Methamphetamine	Schedule II (1971)	Schedule 2	Class A	Schedule II
Methoxetamine	Not listed	Schedule 1	Class B	Not listed
Psilocybin	Schedule I (1971)	Schedule 1	Class A	Schedule I
THC (also known as dronabinol)	Schedule II (1971)	Schedule 2	Class B	Schedule III
THCV	Not listed	Schedule 1	Class B	Not listed

The UK Misuse of Drugs Act (1971) categorizes drugs into three classes according to harms (A>B>C) and these determine the penalties for possession (7 >5>3 years in prison, respectively) or supply (life>14>14 years, respectively). In the United States, the situation is more complex, in that each drug has its own level of penalties applied. The United Nations conventions and the US Controlled Substances Act use roman numerals for the Schedules (that is, I, II, and so on), whereas the UK Misuse of Drugs Regulations use Arabic numerals (that is, 1, 2, and so on). LSD, lysergic acid diethylamide; MDMA, 3,4-methylenedioxy-N-methylamphetamine; THC, Δ^9-tetrahydrocannabinol; THCV, tetrahydrocannabivarin.

Figure #2: International Legal Status of Drugs. (Nutt, King & Nichols 2013, p. 578)

As a result of the prohibition, government officials such as the U.S. Food and Drug Administration (FDA) created major hurdles for researchers to study the effects of psychedelics. Phelps (2017) discussed three phases for controlling research development as briefly described in table 6.2 below.

Table 6.2 FDA protocols for Drug Development and Research	
Phase I	Evidence for safety of medicine is gathered
Phase II	Findings have sought that show that medicine is efficacious for a medical condition
Phase III	Researchers attempt to show that the drug is as effective or more effective than currently available medicines in the existing treatment

Note: data for FDA protocols for Drug Development and Research from Phelps (2017, p. 454).

Hofmann believed LSD was “medicine for the soul” and was utterly “frustrated by the worldwide prohibition that pushed [research and usage] underground” (Fusar-Poli & Borgwadt, 2008, p. 484). Psychedelic research had a deep impact on our society and culture. Consequently, art such as music and visual arts emerged as a response to the influence LSD had.

Hofman “conceded that LSD can be dangerous in the wrong hands” (Fusar-Poli & Borgwadt, 2008, p. 484). For example, there have been historically documented usages for psychedelics which involve thought control and chemical warfare (Buckman, 1977). Specifically “brainwashing thought control, industrial and national espionage or covert activities” these issues have been emphasized by the “Vietnam war, middle east crisis, Watergate, the [central intelligence agency (CIA) investigation and Patty Hearst trial” (Buckman, 1977, p. 8). The CIA utilized LSD as a chemical warfare, for example, they could put this substance “into the enemy water supply, rendering the enemy temporarily psychotic” (Buckman, 1977, p. 11).

There appears to be “growing level of individual and international mistrust amounting to paranoia and complicating issues of individual freedom, civil rights, and human experimentation” (Buckman, 1977, p. 8). These historical events, therefore, raised ethical ramifications for psychedelic usage.

War on Drugs and Prohibition

Debeck, Wood, Montaner & Kerr (2009) examined how the public allocation of funding is utilized federally – they wrote an article entitled “Canada’s new federal ‘national anti-drug strategy’: an informal audit of reported funding allocation” written for the International Journal of Drug Policy. This study found:

> Specifically, law enforcement initiative continue to receive the overwhelming majority of drug strategy funding (70%); prevention (4%) treatment (17%) and harm reduction (2%) and these findings suggest that the Canadian government is failing to invest resources in evidence-based drug policies (p. 188).

Is this cost effective of public funding allocation? Similarly in a workshop entitled ‘harm reduction, public health and social policy’ Baker (2014) reported 74% of public funding is spent

on prohibition, specifically on probation, law enforcement, while 17% of public funding is spent on treatment, 4% on prevention, 7% on coordinated research and 2% on harm reduction.

This calls for change. Law enforcement against prohibition (LEAP) is a nonprofit organization and group of lawyers, attorneys, ex-judges, probation officers who are striving to reform the war on drugs – their motto is "advancing justice and public safety solutions" (Law Enforcement Action Partnership, n d.).

Gazing at the spectrum of public health from left to right on a continuum) (Baker, 2014) – prohibition (starting left on the spectrum), criminalization, market regulation (center on the spectrum), prescription drugs, legalization with many restrictions, legalization with few restrictions (right on the spectrum). Under the left side, where prohibition lies, we see more health and social problems arise. Criminalization involves illegal market of drugs. Whereas public health (at the center of the spectrum) focuses on market regulation. As we move closer towards the right side of the spectrum – prescription drugs, legalization with many or fewer restrictions, we see a rise in corporate profit. Is there a paradox in prohibition?

On the contrary to Canada's approach to public health. In 2001, as a response towards high drug use amongst the general population, Portugal decided to (Law Enforcement Action Partnership, n. d.):

> Abolished criminal penalties for the use and possession of small amount of all drugs...[and instead] the government invested heavily in treatment for those who were ready to quit. For those still using drugs, the government encouraged them to come out of hiding by removing the threat and arrest and mobilizing social workers and doctors to provide support services, health care, and education. Drug use did not increase, and crime, drug-related infections, and overdose deaths fell dramatically (para 1).

Portugal, by far is leading the world in public health initiative by decriminalizing drugs of all category. This pioneering enterprise removed social barriers for accessing treatment, thus resulting in greater public funding towards health services (such as education and prevention) and supporting their sense of humanity to those who need help. Therefore, within their population, they appear to have a significant reduction in mental health stigma and consequently, more people are likely to make changes in their life.

Drug Harm

Are prohibited drugs really harmful? Nutt, King, Philips (2010) analyzed this and summarized their findings in the graph below. Figure (#) depicts a graph of potential drug harm ranging exploring alcohol, heroin, crack cocaine, methamphetamine, cocaine, tobacco, amphetamine, cannabis, GHB (gamma-hydroxybutyric acid), benzodiazepine, ketamine, methadone, mephedrone, butane, khat, anabolic steroids, ecstasy, LSD, buprenorphine, and mushroom.

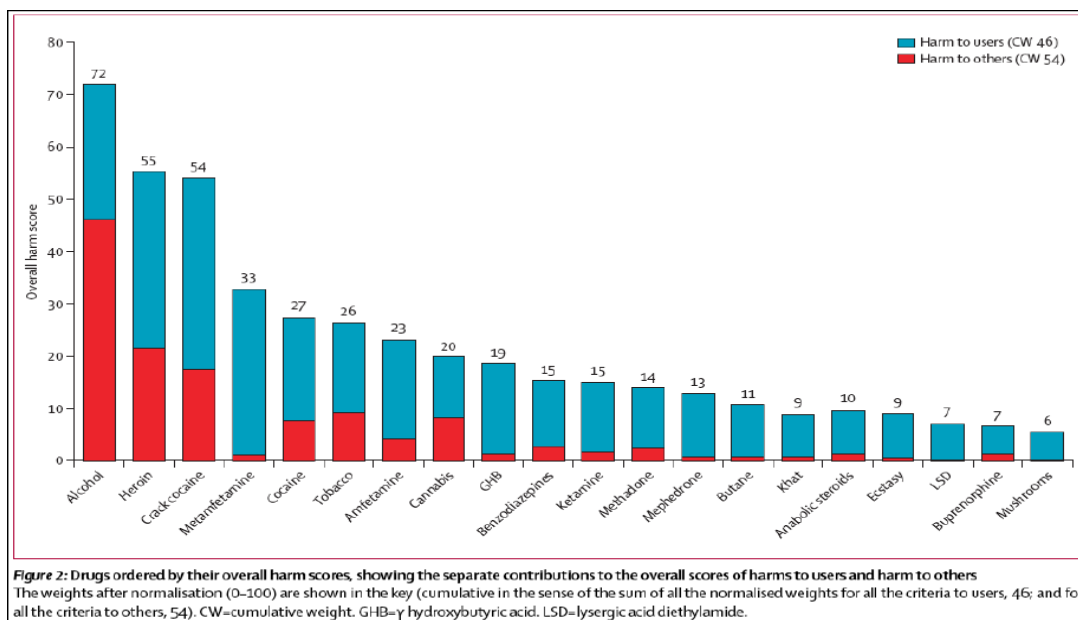


Figure 2: **Drugs ordered by their overall harm scores, showing the separate contributions to the overall scores of harms to users and harm to others**
The weights after normalisation (0–100) are shown in the key (cumulative in the sense of the sum of all the normalised weights for all the criteria to users, 46; and for all the criteria to others, 54). CW=cumulative weight. GHB=γ hydroxybutyric acid. LSD=lysergic acid diethylamide.

Figure # 3 Drug Harm (Nutt, King, Philips, 2010, p. 1561)

Examining Figure #3 - It appears that the ones that are categorized as legal such as alcohol and tobacco pose the greatest harm, whereas, mushroom and LSD are generally less harmful to human beings.

Drug Harm and Benefits

TABLE 1
Users Rank Harms and Benefits

	Median number of occasions used	Ranked *harms*. 1 = most & 13 = least harmful	Ranked *benefits*. 1 = most & 13 = least beneficial
Alcohol	NA	1 (2.5)	12 (9.2)
Tobacco	NA	2 (3.7)	13 (11.3)
Heroin	2–10	3 (3.8)	7 (7.8)
Cocaine	51–100	4 (4.8)	9 (8.9)
Amphetamine	51–100	5 (5.6)	8 (8)
GHB	2–10	6 (6.9)	11 (9.1)
Benzodiazepines	51–100	7 (7)	5 (5.1)
Mephedrone	11–50	8 (7.4)	10 (8.9)
Ketamine	11–50	9 (7.7)	6 (7.4)
MDMA	51–100	10 (8.9)	1 (3.4)
LSD	11–50	11 (9.9)	3 (4.6)
Cannabis	100+	12 (10.4)	2 (3.8)
Magic mushrooms	2–10	13 (10.9)	4 (5)

Figure: # 4 Drug harm and benefits table comparison (Carhart-Harris & Nutt, 2013, p. 324).

Equasy and Debate on Drug Harm

Professor David Nutt, chairman of the Advisory Council on the Misuse of Drugs (ACMD) outlined his viewpoint regarding drug harm "taking the drug ecstasy is no more dangerous than riding a horse...there is not much difference between horse-riding and ecstasy " (BBC News, 2009, para 1); this line of thinking contributed to the development of the terminology: easy. According to Nutt (2009) and his report on BBC News (2009)

Horse-riding accounted for about 10 deaths a year and was associated with more than 100 road accidents. This attitude raises the critical question of why society tolerates – indeed encourages – certain forms of potentially harmful behaviour but not others such as drug use. Ecstasy use is linked to around 30 deaths a year, up from 10 years in the early 1990's. [Similarly], fatalities are caused by massive organ failure from overheating or the effects of drinking too much water (p. 6; para 2).

It appears that Professor Nutt's viewpoint conflicts with his role as the chairman of ACMD, yet he is entitled to his personal opinion. There's a question whether how often does this occur, where one's professional viewpoints conflict with one's personal viewpoints?

Clinical Understanding of Entheogens Therapeutic Process

Classification

Psychedelics are the 'oldest class of psychopharmacological agents known to man' (Nichols, 2016, p. 268). Serotonin is an important neurotransmitter that regulates one's mood, appetite, sex, and sleep. Serotonergic hallucinogens – are classified as indoleamines and phenylalklamines; these two classes of hallucinogens produce similar subjective effects in humans and show cross-tolerance.

Mechanism of action in the brain

Hallucinogen effects are primarily mediated by the serotonin 5-hydroxytryptamine (5-HT) 2A receptors - 5HT2a receptor and many of these hallucinogens are "mediated in the prefrontal cortex" (Halberstadt, 2015, p. 99). The classical serotonergic hallucinations are substances that apply their effects by an agonist (or partial agonist) action on brain serotonin 5HT2a receptor (Nichols, 2016). This appears to be the primary mechanism of action in the brain. Carhart-Harris et al. (2014) suggests disrupting the default mode network (DMN) within

the brain is responsible for the mind expanding properties of entheogens.

Philosophy

Does one really have to fret about enlightenment?
No matter what road I travel
I'm going home
-Shino (as cited from Villodlo, 1977, p. 45)

Why do we attempt to explore alternative states of consciousness? What are the driving forces behind this? Harvard theologian Paul Tillich (1952) towards the end of his life and career was working on bridging world religions together. He created a faith called 'the courage to be' - In this framework, "one must have a self to lose a self" which he explains why a mature person with a firm vocational identity are likely to gravitate towards mystical states as opposed to others (as cited from Richards, 2017, p. 333). Spiritual disciplines such as meditation that tend to kill the ego may actually cause more depression; the ego is best transformed through "acceptance, forgiveness when appropriate and unconditional love" (Richards, 2017, p. 331).

As it is mentioned, once taking a glance at the peak of a mountain, it is easier "for many to maintain the motivation to struggle through the swamps, thickets and rocky terrain on the path that leads to the summit...once you get the message, you hang up the phone" (Watts, 1962; Richards, 2017, p. 333).

Salvador Roquet, an innovative psychedelic therapist in Mexico believed the origin of most human suffering is rooted in childhood, parents and educational system experiences (Villoldo, 1977). He added the greatest job in the world is raising creative, healthy, loving children (Villoldo, 1977).

Therapeutic Use

Krebs & Johansen (2016) reported psychedelics may accelerate the psychotherapeutic process for a different population. The literature queries whether psychedelics can be used for

personality disorders such as those with strong sociopathic traits (Richard, 2017, p. 335). More commonly, it can be used for addiction and mood disorders (Krebs & Johansen, 2016); for chronic treatment-resistant PTSD (Mithoefer, Wagner, Mithoefer, Jerome, Martin, Yazar-Klosinski, Doblin, 2013); self-exploration, religious insight, or relief of neurotic and somatic tension (Grinspoon & Doblin, 2001); alcoholism, obsessional neurosis, and sociopathy (Grinspoon & Doblin, 2001).

Moreover, Sessa (2007) expressed that entheogens have an existential quality and "encourages exploration of repressed feelings, recall hidden memories and [fosters] a deep connectedness with oneself, environment and past" (p. S215).

Psycholytic therapy versus Psychedelic therapy

There are two types of therapy for entheogens depending on the dosage taken: (a) psycholytic therapy (mind-loosening); or (b) psychedelic therapy.

The first type, psycholytic therapy involves "smaller dose or several or even many sessions with LSD, mescaline or psilocybin - it is mainly used for neurosis and or psychosomatic symptoms" (Grinspoon & Doblin, 2001, p. 680). Richards (2017) reported psycholytic experience bring forth abreaction, catharsis and meaningful suffering that often lead to a positive feeling of resolution, forgiveness, and rebirth (p. 331).

The second type, psychedelic therapy involves "larger dose (200 micrograms of LSD or more) in a single session" – potentially more helpful for addiction and criminals and another normal human (Grinspoon & Doblin, 2001, p. 680). Richards (2017) stated at a higher dosage in a supportive setting, profound visionary/archetypal/or mystical forms of experience may occur; appears to have little connection with the everyday historical life of the ego who may behold the vision become encompassed within" (Richards, 2017, p. 331). Technically, variations of both

small or large dose, psycholytic or psychedelic therapy are deemed effective in applications for various intentions (Richards, 2017).

Preparation

Salvador Roquet conducted many studies regarding the therapeutic effect of psychedelic. In his studies, an assistant therapist would guide either yoga or meditative sitting one hour prior to commencing their therapeutic session. Yoga and meditation allowed individuals to "relax and sensitize the [client] by quieting the conscious mind so that unconscious material can surface and become more readily accessible during the session itself" (Villoldo, 1797, p. 51).

Some therapist may spend time developing a therapeutic relationship with the individual prior to administering the psychedelic. For example, one therapist spends eight hours developing a therapeutic rapport and relationship, also after days and weeks after each psychedelic therapy to integrate content from the experience (Richards, 2017).

The mantra "trust, let go and be open" (Richards, 2017, p. 324) developed in preparing the individual for the psychedelic experience. Researchers, guides or therapist encourage the person to trust the process, unconditionally trust their own minds, intent to be open, the courage to approach, confront frightening content (Richards, 2017, p. 329). Watts (1962) stated 'knowing who you are' is emphasized as we tend to fear too much knowledge about the mysteries of our own mind and being (Richards, 2017, p. 326).

Set and Setting

According to Grof (1980), the context of the therapeutic process refers to the term set and setting (as cited in Phelps, 2017). Refer to table 6.3 for the definition and example for set and setting.

Table 6.3 Set and Setting		
Terminology	Set	Setting
Definition	■ Expectation, motivation, and intention of the subject	■ Actual environment
Example	■ Therapist or guide's concept and nature of experience ■ Agreed upon the goal of the psychedelic procedure ■ The specific technique of guidance used during the experience	■ Physical environment ■ Interpersonal environment ■ The circumstance under which psychedelic is administered

Note: data for set from Phelps (2017, p. 460), for setting from Phelps (2017, p. 460).

Regarding the intention, researchers rarely suggest setting a specific intention such as 'regressing to a particular age or exploring a particular area of personal conflict' (Richards, 2017, p. 329). This part of the process involves learning to trust that every human mind has remarkable innate wisdom. There are "wise, healing and intentional forces within human consciousness beyond the limits of the everyday personality...It is common after a session for a volunteer to say, I didn't experience what I wanted, but the experience I needed" (Richards, 2017, p. 329).

Music

Music is an important part of the psychedelic psychotherapeutic process (Grinspoon & Doblin, 2001, p. 680). Especially in high dose psychedelic therapy. When carefully selected, it has been found to increase the chances of constructive outcome and decrease chances of unproductive anxiety states (Bonny & Pahnke, 1972). Particularly, music is important when the intention relates towards transcendental states. With this in mind, music played during the inception, incline towards the peak, and during the peak of experience is most significant - music in the beginning part of the session appears to function as a nonverbal support role (Richards, 2017). Music that is strong, flowing and reliable without any changes to its cadence is favored; music with words can activate the intellectual functions. In the latter part of the session, any type of music played can be appreciated.

Music preference differs based on individual life experience, ethnicity, background, age,

religious practice. Some examples of used that can be used to facilitate transcendental or mystical states includes classical music (Bach, Brahms, Barber and Gorecki) (Richards, 2017), world music - Chinese, Hindi, Jewish, Russian, spiritual or religious music (Zen, Buddhist), indigenous music (folk, drumming, flute) (Villoldo, 1977). Music selected can potentially deepen and expand the psychedelic experience.

Kaelen, Barrett, Roseman, Lorenz, Family, Bolstridge, Carhart-Harris (2015) studied LSD's emotional response to music. They found a range of emotional experience as a response to music as depicted in figure # 5. The top five emotions experienced on LSD psychedelic are peacefulness, wonder, tenderness, nostalgia, and transcendence. Sadness and tension were noted less activated than the top five emotions experienced.

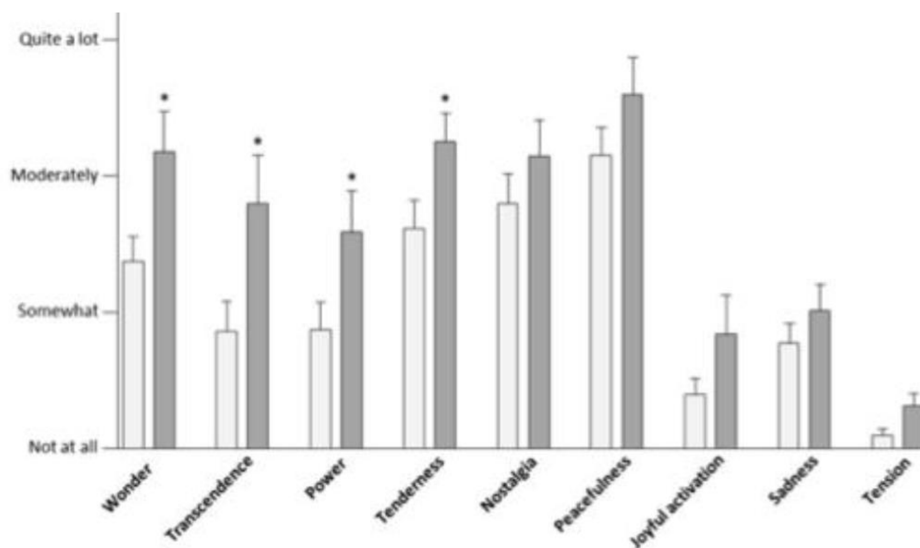


Figure # 5: graph depicting a range of emotional response on LSD (dark grey) versus placebo (light grey); every emotion scored higher on LSD (Kaelen et al., 2015).

Art

Figure # 6: Whimsical tales of the untold peculiarity, Uy (2017).

Sometimes art is also utilized as a therapeutic aid – the use of abstract, psychedelic art helps to embody different themes, fear, dramas, weakness, strengths, and hope (Villoldo, 1977). Some of the themes that commonly arises are death (traumatic or peaceful deaths), births, religion, sexuality, love, pain, destruction, children (Villodlo, 1977).

Psychedelic Therapeutic Process

Table 6.4 Psychedelic Therapeutic Process

Stages	Description	Example
1	Time ingestion of hallucinogen Most superficial stage, a person is expectant, many times anxious	∀ State of suspense, manifest fear ∀ many stimulated by laughing and joking, appear self-assured ∀ sit quietly; reflecting inwards ∀ nausea or vomiting may occur ∀ confusion, perceptual alterations, and euphoria
2	Pleasant; escape and evasion of conflictive material	∀ Visual hallucinations appear to deviate from the path and become lost in fantasy and illusion
3	Vivid and lucid experience	∀ The naked pitiless vision of reality, difficult to avoid ∀ the vision of life, all that is loved, meaningful ∀ observer or one observed, the walker and the path itself

4	Crucial, cathartic, cleansing, dramatic and painful, followed by much abreaction	∀ Experiential process of free associations, situations project before him, emerging freely from the unconscious. ∀ Entering deeply into self is the most fascinating, comforting, nourishing, and vitalizing experiences in life ∀ Consciousness becomes the observer unable to intervene or repress in any way.
5	Disintegrate entire structure Ego loss, spiritual death, rebirth	∀ Experiences of satori (seeing one self's truest nature), illumination, truly religious, mystical encounter ∀ Effect change and reinvestment of the personality facilitated through synthesis

Note: data for the psychedelic therapeutic process from Villoldo (1977, p. 54-56).

The time it takes from stage one to five is unknown; each time varies depending on many factors. From stage one to four, the amount of suffering the individual experience depends on their ego defences (neuroses or repression) that are impeding the process.

After the psychotherapeutic session

Majić et al., (2015) discussed experiences or afterglow phenomena, as differentially mediating therapeutic action, figure #7 depicts a graph of the stages of peak experience, afterglow and residual effect from the time of taking the psychedelic to effect years later.

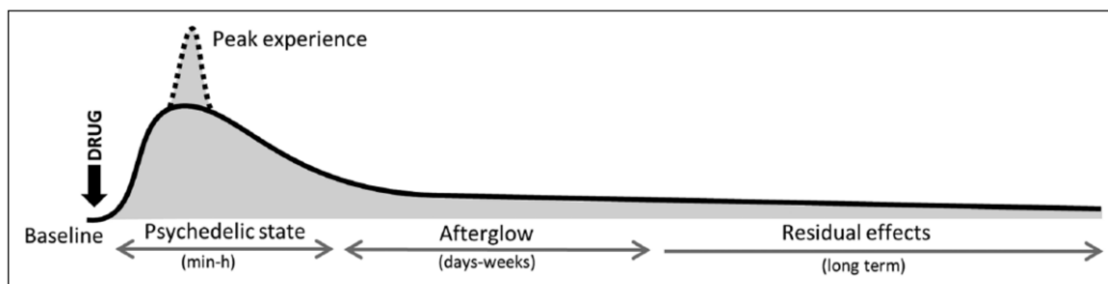


Figure 1. Time course of subjective experiences induced by psychedelics.
Psychotropic effects of psychedelic substances unfold over a timescale of several hours, which is dependent on the drug and dosage. Most therapeutic approaches make use of this window for psychotherapeutic interventions. On some occasions, subjective experiences include the so-called 'peak experience' (indicated by the dashed line), which is characterized by intense states, including mystical experiences. A persisting feeling of elevated and energetic mood is termed 'afterglow' and may persist for several days or even weeks. Long-term residual effects include therapeutically valuable changes of mindset as well as changes in personality traits, which have been often reported.

Figure #7: Peak experience, afterglow and residual effects from majic et al., 2015, p. 243).

After the psychotherapeutic session, the afterglow phenomenon occurs several weeks after the experience and is characterized by enhanced mood, reprieved from emotional burdens,

feelings of connectedness and openness (Majic et al., 2015).

Follow-up and Integration Phase

Regarding after the psychotherapeutic process, at least one follow-up meeting is suggested with the guide or counselor. Fadiman (2011) reported “follow-ups provides an opportunity for integration” (as cited from Tully, 2017, p. 21). Accordingly, it is not the psychedelic that catalysts the change, rather it is in the way it’s interpreted, analyzed and integrated into that person’s life (Sagath, 2014; Tully, 2017).

Psychedelic Research For Anxiety

The next part of the paper investigates five psychedelic research articles by describing the background, methods, results, and conclusion. Let us examine how psychedelics in the clinical setting are helpful in psychotherapy (healing potential) for anxiety issues.

Safety, Tolerance, and Efficacy of Psilocybin in 9 Patients with OCD

Background. Moreno, Wiegand, Taitano & Delgado (2006) investigated the safety, tolerability, and clinical effects of psilocybin in patients with OCD. According to anecdotal evidence of this study, it’s believed that psychedelics may alleviate symptoms of OCD.

Methods. This study involved nine subjects diagnosed with OCD who were administered 3 doses (low 100µg/kg, medium 200µg/kg, high 300µg/kg) of psilocybin and were assigned randomly in a double-blind manner, while doses were administered in one-week intervals over an 8-hour period in an outpatient clinic. In addition, the “Yale-Brown Obsessive Compulsive Scale and a visual scale measuring overall obsessive-compulsive symptom severity were administered at 0, 4, 8, and 24 hours post-ingestion”; while “the Hallucinogen Rating Scale was administered at 8 hours, and vital signs were recorded at 0, 1, 4, 8, and 24 hours after ingestion” (p. 1735).

Results. This study discovered an overall safety and tolerability of its subjects, although one subject reported intermittent hypertension without anxiety or somatic symptoms. No further side effects were observed. Moreover, this study found a "marked decrease in OCD symptoms of variable degree in all subjects during 1 or more of the testing session" (p. 1738).

Conclusion. This study confirmed anecdotal proof of lessening OCD symptoms with psilocybin intake. Moreno et al. (2006) acknowledged that since "OCD is associated with great human suffering and societal burden, and that [intractable] OCD represents a valid indication for irreversible brain surgery, it is reasonable to consider psilocybin, with its potential benefit, a less burdensome alternative and worth further investigating" (p. 1740). Overall, there was a 23–100% reduction in the Yale-Brown Obsessive Compulsive Scale score in the study (Nichols, Johnson & Nichols, 2017).

Psilocybin-Induced Decrease in Amygdala Reactivity Correlates with Enhanced Positive Mood in Healthy Volunteers

Background. This pharmacological functional magnetic resonance imaging (fMRI) study evaluated "the neural effects of psilocybin on brain activity in the amygdala during emotion[al] processing" (Kraehenmann et al., 2015, p. 573). Additionally, this study hypothesized that "a single dose of psilocybin would decrease amygdala reactivity to negative stimuli and increase positive mood state" (p. 573).

Methods. This study appraised administration of psilocybin (16µg/kg) to 25 healthy volunteers using blood oxygen level-dependent (BOLD) response to recognizing amygdala reactivity in the fMRI (p. 573). The design of this study involved "a double-blind, randomized, crossed-over with volunteers counterbalanced to receive psilocybin and placebo in two separate sessions at least 14 days apart" (p. 572). The mood changes in this study were assessed "using

the Positive and Negative Affect Schedule and the state portion of the State-Trait Anxiety Inventory" (p. 572).

Results. The results of this study showed "amygdala reactivity to negative and neutral stimuli was less after psilocybin administration than after placebo administration" (p. 574). Moreover, the study found "a significant relation between (psilocybin-placebo) amygdale reactivity change and (psilocybin-placebo) positive affect change; [while the] psilocybin-induced attenuation of amygdala reactivity significantly correlated with an increase of positive mood" (p. 576).

Conclusion. Kraehenmann et al (2015) revealed "an increased of positive mood" which "decreased amygdala activity during emotion[al] processing when psilocybin was administered (p. 578). Researchers also noted that "these findings are [along the lines] with previous models of antidepressant action, which pose a decrease of amygdala reactivity as a necessary change associated with treatment response and remission from neuroaffective disturbance" (p. 578). Kraehenmann et al (2015) suggested that "these findings may be relevant to the normalization of amygdala hyperactivity and negative mood states in patients with major depression" (p. 572).

Pilot study of psilocybin treatment for anxiety in patients with advanced-stage cancer

Background. Grob, Danforth, Chopra, Hagerty, Mckay, Halberstadt & Green (2011) examined psilocybin's medicinal properties helpful for reducing anxiety for individuals with advanced cancer. Individuals were diagnosed with the following anxiety issues: "acute stress disorder, GAD, anxiety disorder related to cancer or adjustment disorder with anxiety" (p. 72).

Methods. The study consisted of 12 clients diagnosed with advanced cancer and anxiety in a double-blind placebo-controlled method. Each client was administered 0.2mg/kg of psilocybin during the experiment. Their safety and subjective experience were observed. Clients

were tested with the Beck Depression Inventory (BDI), the Profile of mood states (POMS), and STAI.

Results. At one and three-month post-treatment, clients displayed significant improvement in mood and reduction in anxiety. Figure # 8 reveals the subjective experience of psilocybin versus placebo (Halberstadt, 2015) for this study.

Conclusion. Authors suggested it was safe and viable to utilize psilocybin to relieve person anxiety with advanced cancer. However, more research is required to fully acknowledge its efficacy.

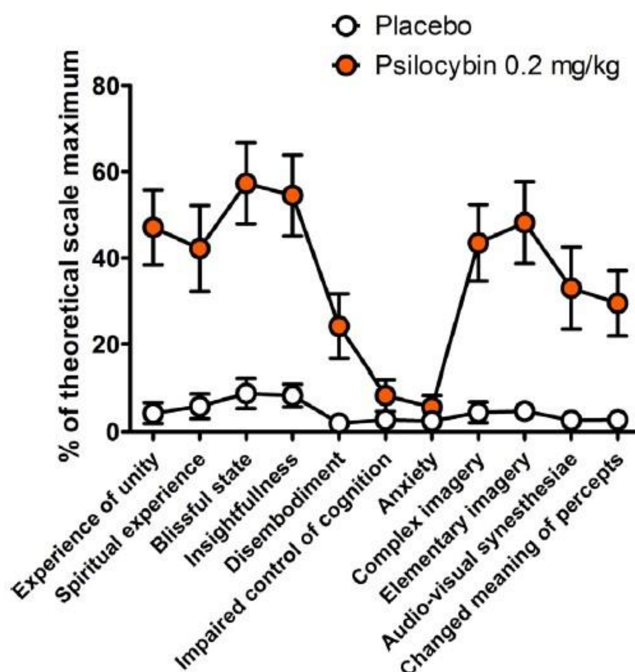


Fig. 5. Subjective effects of psilocybin as measured by the 5-Dimension Altered States of Consciousness instrument (5D-ASC). The values reported by Grob et al. [56] were re-analyzed using the 11 new homogenous APZ subscales developed by Studerus et al. [65]. Values are the mean (SEM) percentages of the total possible score. The placebo was niacin.

Figure #8: Subjective Experience of Psilocybin versus Placebo (Halberstadt, 2015, p. 103).

LSD-assisted psychotherapy for anxiety associated with a life-threatening disease: A qualitative study of acute and sustained subjective effects

Background. Gasser, Kirchner & Passie (2015) conducted the first LSD-assisted psychotherapy in over 40 years. Researchers experimented and analyzed LSD's effect with anxiety related to the life-threatening disease. Follow up sessions were conducted post session to assess LSD's safety and efficacy.

Method. One year after experiencing the LSD psychotherapy, anxiety for 10 participants were evaluated through a semi-structured interview. The Quality Content Analysis (QCA) was administered. This instrument tested the person's subjective LSD experience and its long-term psychological effects.

Results. All the participants did not report any significant adverse reactions to LSD psychotherapy. There were significant benefits overall and a reduction of anxiety was noted. "In the QCA participants consistently reported insightful, cathartic and interpersonal experiences, accompanied by a reduction in anxiety (77.8%) and a rise in quality of life (66.7%) Evaluations of subjective experiences suggest facilitated access to emotions, confrontation of previously unknown anxieties, worries, resources and intense emotional peak experiences à la Maslow as major psychological working mechanisms. The experiences created led to a restructuring of the person's emotional trust, situational understanding, habits and worldview. (p. 57). More study is required regarding LSD's treatment efficacy.

Conclusion. This study revealed a significant reduction in anxiety even one year after two LSD psychotherapy session. The findings of this study are similar to Grob et al. (2011) suggesting that classical psychedelic such as LSD or psilocybin are potentially effective in treating anxiety related to the terminal or advanced illness (Letheby, 2017).

Acute Experience of LSD in Healthy Subjects

Background. According to Schmid et al (2015) there are no current studies on the "subjective, autonomic and endocrine effects of LSD", and effects of LSD on prepulse inhibition (PPI) in humans: In animals, LSD [disturbs] PPI of the acoustic startle response, and patients with schizophrenia [show] similar disruptions in PPI" (p. 544). According to Halberstadt (2015) PPI refers to "the phenomenon where a weak pre-stimulus presented prior to a startling stimulus will attenuate the startle response; PPI is used as an operational measure of sensorimotor gating and reflects central mechanisms that filter out irrelevant or distracting sensory stimuli" (p. 106).

Methods. Schmid et al (2015) gathered participants via "word of mouth or an advertisement placed on the web market platform of the University of Basel" (p. 545). Furthermore, he utilized a "double-blind, randomized, placebo-controlled, crossover study, while LSD (200 μg) and placebo were administered to 16 healthy subjects (8 women, 8 men; age range, 25–51 years)" (p. 545). In addition, researchers collected their data through "psychometric scales; investigator ratings; PPI of the acoustic startle response; and autonomic, endocrine, and adverse effects" (p. 545).

Results. "Administration of LSD to healthy subjects produced [obvious] alterations in waking consciousness that lasted 12 hours". Figure # 8 reveals subjects reported experiences such as increased in feelings of "well-being, happiness, closeness to others, openness, and trust by LSD; similarly, these effects are associated with the empathogen MDMA" (p. 546-9). Moreover, this study found that LSD increased blood pressure, heart rate, body temperature, pupil size, plasma cortisol, prolactin, oxytocin, and epinephrine with drug intake; and the "somatic and endocrine effects of LSD did not differ between sexes" (p. 548-9). The research also found that after 72 hours LSD's adverse effects completely subside and no other adverse effects were observed" (p. 549).

Conclusion. These research findings point out that LSD had significant "effects on perception and subjective effects on mood that were similar to effects reported for MDMA and increased plasma oxytocin, suggesting empathogenic properties may be useful in psychotherapy" (p. 551). This study illustrated that "LSD can be safely administered in an experimental research setting in humans, forming a basis for further psychopharmacological studies" however careful consideration should be taken in "patients with hypertension or heart disease" (p. 551).

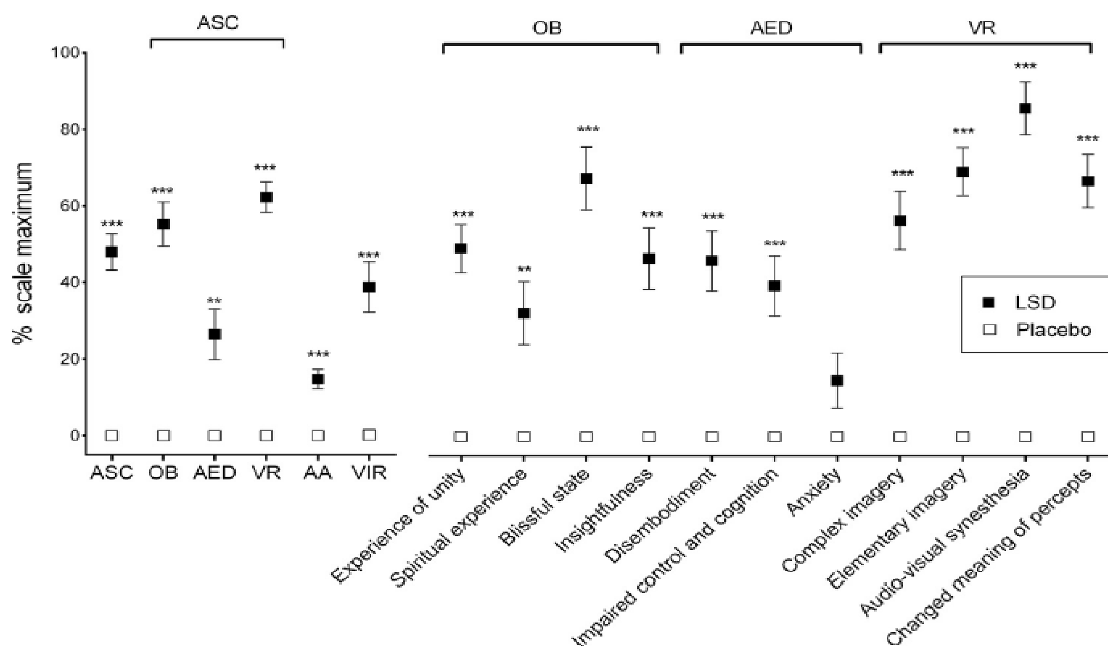


Figure #9: LSD subjective experience (Schmid et al., 2015, p. 546).

Considerations for Therapist

Limitations of Therapy

There are several limitations to psychedelic therapy. One of them is with central nervous disorders because psychedelics have a profound impact on one's state of consciousness (Nichols et al, 2017). Serious mental health disorders such as bipolar, schizophrenia, severe depression are also contraindicated for psychedelic therapy. This is due to their unstable psychological

intrapsychic well-being. Psychedelics combined with severe mental health issues may exacerbate their presenting symptoms. Likewise, a personality disorder such as borderline personality is another specific population that warrants caution. For example, a person with borderline personality disorder who takes psychedelics may worsen or destabilize their psychological and emotional state.

Possible Adverse Reaction to Psychedelic Therapy

Table 6.5 Possible Adverse Reaction to Psychedelic Therapy

Possible Adverse Reaction	Description and Example
Hallucinogen Persisting Perception Disorder (HPPD)	• Flashbacks known as 're-experiencing' of one or more of perceptual effect induced by hallucinogen after acute drug effect has worn off • Composed of afterimages, the perception of movement in peripheral visual fields, blurring of small patterns, halo effect, macro/micropsia long after the drug has been used
Serotonin Syndrome	• The result of interaction with contraindicated medications • Symptoms include an increase in anxiety, fear, heart rate, blood pressure, potentially dangerous behaviour resulting from fearful response
Pseudo-Experience **(Pseudo-vision, pseudo-religious experiences, and pseudo-mystical experiences)**	• Person's hallucination reinforces individual to escape into fantasy and the main theme is evaded • Maintains person's neurotic structure and avoids real conflict • In pseudo-religious experience, a person experiences a god that is a projection of self – mirages and deceptions are probable and person clings to the fantasy

Note: data for hallucinogen persisting perception disorder from Nichols (2016, p. 277-8) and Tully (2017, p. 19), for serotonin syndrome from Tully (2017, p. 19) and Tupper, Wood, Yensen & Johnson (2016), for Pseudo-Experience from Villoldo (1977, p. 55).

Six Competencies of Psychedelic Psychotherapy

According to Phelps (2017) there is six therapeutic dimensions therapist embody to carry out safe and effective psychedelic psychotherapy. This includes (1) empathetic abiding presence; (2) trust enhancement; (3) spiritual intelligence; (4) knowledge of the physical and psychological effects of psychedelics; (5) therapist self-awareness and ethical integrity; (6) proficiency in complementary techniques. Table 6.7 briefly provides an explanation for each competency (Phelps, 2017, p. 458-472).

Table 6.6 Six Competencies of Psychedelic Psychotherapy

Competencies	**Description**	**Example**
Empathetic and Calm Abiding Presence	• Empathy as key to the positive therapeutic outcome • Witnessing mystery of life in action during therapy • Verbal communication, establishing rapport, communicating safety and support, eliciting pertinent information, addressing questions and concerns, empathetic presence and non-directive approach • "Balance of protection, permission, and connection" (Taylor, 2007, p. 133).	• Empathetic responsivity • Patience, openness, trust in the process • Composure evenly suspended attention, mindfulness, empathetic listening • "doing by not doing", responding to distress with calmness, equanimity • The client is susceptible to mood and tone of voice of the therapist • Knowledge of set and setting • Therapist confidence and competence
Trust Enhancement	• Therapist saw as a trustworthy guide • Consistently trustworthy during the process • Participants trust in their own inner healing capacity • Ability to normalize paradoxical transformation and unexpected moments of the session to be expected • Remind participants difficult emotions (grief, rage, fear, panic) arise and normal	• Trust as key to creating a safe environment and building a therapeutic relationship • Optimize set and setting • Welcoming attitude and openness towards a range of emergent affective states • A personal embodiment of multiple ways of knowing is essential for trust
Spiritual Intelligence	• Knowledge and values beyond conventional psychological development • Transcendent relationship to others, to earth and all beings • Openness to internal awareness, free to accept oneself, relaxed detachment, feeling what love is, felt contact with the inner core, awareness of a nonmaterial aspect of happiness • Transcendence into the nature of self, cultivation of equanimity, acceptance of change and impermanence and experience of love	• Embodied experience of entelechy and existential meaning-making capacities • Familiarity with mystical states of consciousness • The reality of spiritual dimension of consciousness • Agape as ultimate energy and core of reality • Interrelatedness within the unity of beings and all life forms • Appreciation of the mysterious transpersonal realm
Knowledge of the Physical and psychological effects of psychedelics	• Knowledge of anthropology of shamanism, neurobiology, neuropharmacology, drug disposition, anatomy and physiology, pharmacology and interactions • Skill in the creation of safe, artful set and settings (music, flower, art, lighting, decor) • Knowledge from subjective, phenomenological experience of personal psychedelic therapy; knowledge through first-hand experience • Ancient and contemporary indigenous practices of ceremonial use of plant medicine (time-honored set and settings)	• Current best practices for creating an appropriate set and setting for safe and optimal outcomes • Informed knowledge of contraindications and assessment for eligibility for clients • Knowledge regarding risk (distress, somatic, emotional, existential experiences) • Knowledge of medical and psychological markers for an adverse reaction to medicine • Theories of child and adult development

	• Learn from psychedelic scholars of theory and experiential knowledge across a cross-cultural and global use of plant medicine	• Legal status of psychedelics and research process
Therapist self-awareness and ethical integrity	• Self-awareness of personal motives for this work – capacity to reflect • Integrity in protecting boundaries of client • Well-developed capacities for building therapeutic alliances • Skills in attachment theories • Transference-countertransference analysis - Transferential issue arise in higher dosage • Personal self-care (protect both therapist and client) prevents compassion fatigue • Self-awareness of power dynamic when supporting the underrepresented population (for example: coloured or LGBTQ people) • Skills of integrity and ethical behaviour protect both therapist and client	• Training for psychedelic therapy demands high requirements which require a great deal of personal integrity • Awareness of potential grandiosity and over-idealizing perception of meaningful states of consciousness with psychedelic therapy • The therapist does own inner work and debriefs with co-therapist • Acting with the ethical code of profession • Code of ethics for spiritual guidelines • Code of ethics for entheogen guides in a research setting • Ethics for holotropic breathwork practitioners (Grof Transpersonal training) • Interprofessional Professionalism Collaborative (client-family centered)
Proficiency in complementary techniques	• Skills and knowledge that develop a toolbox of complementary therapeutic methods used in the various phase of therapy and research • Somatic oriented – holotropic breathwork, stress inoculation, therapeutic bodywork, and touch; Somatic experiencing and sensorimotor therapies • Techniques of eye-gazing at the mirror with a therapist • Felt sensing and focusing • Meditation during the integration phase • Guided affective imagery	• Bonny method of guided imagery and music and expressive art therapy • Logotherapy, existential, narrative therapy • Posthypnotic suggestions • Family-oriented techniques with a photo or analytic inquiry such as internal family system work • Hakomi, gestalt, voice dialogue and psychosynthesis • Shadow work • Psychoanalysis

Note: data for Six Competencies of Psychedelic Psychotherapy (Phelps, 2017, p. 458-472).

12 domains of study for training psychedelic-assisted psychotherapy

Phelps (2017) described 12 domains of study for training psychedelic-assisted psychotherapy (p. 474-475); It will be listed only, further study is needed to explore each domain in greater depth.

1. The history of clinical research and current legal status of psychedelic-assisted therapy
2. Neurobiology, neuropharmacology, drug disposition, and drug interaction
3. Best practices in sets and settings: preparation, psychedelic session, and integration
4. Psychedelics and therapeutic relationship: transference, boundaries, ethics, and self-care

5. Supervised observation of psychedelic session videos
6. Variations in therapeutic models: client-centered and psycholytic psychedelic therapy
7. Complementary therapeutic techniques in psychedelic-assisted therapy
8. Co-therapy methods and interprofessional skills for working on a multidisciplinary team
9. Current models of consciousness, spiritual intelligence, and mystical experiences
10. Ceremonial use of psychedelics in religious and community settings
11. Individual and group clinical supervision during an internship as a psychedelic therapist in FDA-approved clinical trials or expanded access clinical research programs
12. Personal experience of being guided as research participants in an FDA-approved study

Holotropic breathwork

Taylor (2007) speaks of this presence as a capacity for a 'widening the focus of awareness' and 'doing by non-doing' during holotropic breathwork – a non psychedelic means of inducing a non-ordinary state of consciousness (p. 21). Stan and Christina Grof (2010) developed holotropic breathwork as a method of inquiry and transformation based on elements of yogic breathing practice. The word holotropic means 'moving towards wholeness; oriented towards wholeness' (holos greek for whole and trepein for moving towards or in the direction of something (Grof & Grof, 2010). Table 6.7 notes several dimensions are experienced during holotropic breathing.

Table 6.7 Possible Experiences of Holotropic Breathwork	
Perinatal	Close connection with the trauma of biological birth Unconscious memories of fetus experience in consecutive birth process (emotion and physical sensation involved) called Basic Perinatal Matrices (BPM)
BPM I	Memories of advanced prenatal state just before the onset of delivery.
BPM II	The first stage of delivery when the uterus contracts, but the service is not yet open.
BPM III	Reflects struggle to be born after uterine cervix dilates
BPM IV	Holds the memory of emerging into the world, the birth itself
Transpersonal	Rich array of experience in which consciousness transcends the boundaries of the body/ego and the usual limitations of linear time and three-dimensional space. Results in experiential identification with other people, groups of people, other life forms, elements of the inorganic world, - provides experiential access to ancestral, racial, collective, phylogenetic and karmic memories
Archetypal	Collective unconscious that harbors mythological figures, themes, realms of all culture, ages Reach farthest into individual consciousness, identify with the universal mind or cosmic consciousness – the creative principle of the universe

Note: data for perinatal, transpersonal and archetypal from Grof & Grof (2010, p. 13).

Summary

In this chapter, we attempted to understand psychedelic psychotherapy for anxiety. There were four main categories of inquiry for this chapter (a) understanding the background of entheogens (definition, historical usage, background and first discovery, banning of research, war on drugs, drug harm and benefits); (b) clinical understanding and therapeutic usage of enthogens (classification, mechanism in brain, philosophy, therapeutic use, psycholytic versus psychedelic therapy, preparation, set and setting, music, art, psychedelic process, after session, follow-up and integration); (c) psychedelic research (five articles pertaining to treatment of anxiety); (d) therapist considerations (limitations, possible adverse reaction, competencies of psychedelic psychotherapy, domains of training for psychedelic psychotherapist, and holotropic breathwork).

Conclusion and Reflection

Chapter One

Identifying which risk or protective factors the person experiences may guide decision-making process in prevention and intervention strategies [in psychotherapy] (Youth.gov, n.d.). A person reporting experiences of fearfulness, distress, discord, or lack of mastery/adverse events are signified themes that elicits a counselor attention; these may be key to providing supportive therapy for their health and well-being - providing the person with autonomy during the therapeutic process negates risk factor experienced in childhood.

Quality parental (or caregiver) relationship serves as an antidote towards possible future harm. A quality relationship rooted in early childhood that offers trust, love, care, protection, assurance, reliance, consistency, responsiveness, support, discipline, autonomy, balance, structure, and communication - are stabilizing means that cultivate healthy secure attachment. Attachment styles affect all relationships (interpersonal and intrapersonal) in one’s past, present,

and future interactions. Understanding how these dynamics set the foundational building blocks for healthy relationships with self and other; and likewise, as a therapist, we can utilize this information to create a warm, life-affirming environment that continues to supports and strengthens a person's foundation for successful and healthy relationships. Creating a safe environment may be pivotal to helping others learn about themselves and possibly facilitate transformation in their lives.

Chapter Two

It appears that the common pattern amongst these types of anxiety is fear-based thinking and feeling which results in affecting one's behavior and beliefs. Moreover, it seems that adults and older adults are aware of their anxiety yet are unable to fully manage or control it. The inability to manage or control one's anxiety leads to generating more anxiety. And the greater an individual's anxiety level is the greater propensity towards avoidance as a coping mechanism against discomfort and fear. This repetitive cycle of experiencing anxiety and then avoiding anxiety eventually affects every aspect of their life such as personal, occupational and social functioning.

Depending on the child's developmental age, children may not have the verbal or language skills to express their thoughts and feelings. Hence, special attention towards their physical symptoms and behavior is required. Their somatic and behavioral experiences act as a means of communicating their needs. As counselors, we can be sensitive, perceptive and discerning of these symptoms to better understand their lived experiences.

It appears that childhood anxiety listed in table 2.1 is not limited to childhood experiences, they can also be experienced in adulthood and in later life. These clusters of thoughts, feelings, sensations, and behaviors may persist into adulthood and in later life if left

unattended. These arrays of symptoms experience can have a snowball effect. It can begin as one or two symptoms experienced, and over time it grows and can have a deleterious effect on one's overall health and well-being.

Chapter Three

With regards to combination of emotions experienced associated with anxiety, it seems that for one to experience complex emotions such as wonder (happy and fear), awe (fear and happiness), gratitude (satisfaction and happiness with aversion and fear), and reverence (aversion and fear with satisfaction and happiness) – one must experience fear in the process. Fear appears to be part of the pathway to experiencing emotions beyond the basic range.

The study that articulates the nuanced sequential stress response indicates that both the SNS and PNS are activated as a result of experiencing stress. It seems that it is a natural cycle that one experience when enduring stress. There's a question whether one experiences similar cycle with regards to eustress (stress that is beneficial for us, for example, during attempts for personal growth through goal-oriented activities).

Here is a quick summary of the fear pathway; also related to the biological-neurological-psychological-physiological stress response complex (as cited from Layton, 2018):

Stimulus enters sense

- senses (eyes, ears, mouth, skin) take information to the brain
- brain relays information to the thalamus
- sensory cortex receives sensory input
- hippocampus process and understands data
- amygdale decodes the emotional data
- the hypothalamus decides if the stimulus is a threat
- a threat activates the stress response
- activates the sympathetic nervous system via nerves
- activates the adrenal-cortical system via the bloodstream
- chemical (epinephrine and noradrenaline) is released into the bloodstream
- the chemical reaction causes increased blood flow to vital organs

- ∞ increased blood flow to the eyes, heart, muscles, and lungs; prepares a person to fight or flight
- ∞ increased heart rate and blood pressure muscles tense up
- ∞ rest and digest system (parasympathetic nervous system) shuts down allowing more energy
- ∞ for emergency purpose

Somatic symptoms were commonly affecting individuals across the lifespan (child, youth, adults and older adults) as described in chapter two; and this makes sense in terms of the chemical reaction released by the body when under threat (as activated by the nervous system). When chemicals such as epinephrine and noradrenaline are released, it causes a cascade of reaction to occur in the body. Thus these chemical release signal the body to respond to the stimuli activating the stress. What would happen if the body did not release these chemicals? What would occur?

Listing various possibilities of anxiety in the list of inventory indicate that anxiety seems to be experienced on a day to day basis; it is normal for many situations in life to cause anxious feelings to arise, however, similarly to what Dabrowki mentioned, anxiety could be beneficial for our personal growth and development when recognized and celebrated.

Chapter Four

Psychotherapy appears to be collaborative process between the therapist and the client. They work together to recognize specific concerns and develop skills and tools for coping with anxiety. Common patterns that aroused from the literature for psychotherapy and anxiety is reassurance seeking and developing courage to face their fears.

Although many people experience fear of the unknown - this chapter has allowed us to frame our beliefs regarding how we interpret stress. Stress may actually help develop our

physical and mental performance. The symptoms experienced is the body's natural response to coping with stressful circumstances.

With regards to alexithymics – is there a critical period when developing the ability to express emotions? Since these patterns are created in childhood, could long term psychodynamic therapy be beneficial for these individuals? Could they benefit from group therapy in which they learn how to express emotions through activation of mirror neurons from peer interactions?

We briefly examined TRE's benefits with regards to PTSD, however could TRE be used for all clients experiencing any form of anxiety or stress?

Chapter Five

What factors contributed to the government's decision to halt all psychedelic research? Was it due to cultural, political, societal or financial factors? Psychedelic research findings from 40 years ago indicated inconclusive and conflicting results (Paknke, 1970, p. 1862). Nonetheless, I recognized that these early trials and tribulation created a foundation for research which contributed to the growing interest in this field. (Uy, 2016)

Uy (2016) was astonished to find an abundance of studies emerging from its novelty research conducted over 40 years ago. The gap of research attributed to the government's (political) prohibition towards psychedelic research possibly indicates that "control, not cure, is their agenda" (Sessa, 2014, p. 60). It is a pleasant thought to have the patient's best interest at heart and to find ways to completely eradicate the human suffering in this world; Conversely "without the financial support of pharmaceutical companies encouraging the public to look at psychedelics, the press is free to propagate [any] message they [wish]… as money dictates medical research" whereas researchers and Doctors do not want to challenge those that subsidize their funding (Sessa, 2014, p. 60; Uy, 2016).

Since emotional response create top five emotions induced by psychedelics were peacefulness, wonder, tenderness, nostalgia, and transcendence. Can psychedelics also help with other types of anxiety such as generalized, social, panic, phobia?

REFERENCE

Acarturk, C., Cuijpers, P., Van Straten, A., & De Graaf, R. (2009). Psychological treatment of social anxiety disorder: A meta-analysis. *Psychological Medicine*, 39, 241-254. doi:10.1017/S0033291708003590.

All about counseling. (2018). Glossophobia. Retrieved from https://www.allaboutcounseling.com/library/glossophobia/

Allgulander, C. (2012). Generalized anxiety disorder: a review of recent findings. *Journal of Experimental & Clinical Medicine, 4*(2), 88-91. doi: 10.1016/j.jecm.2012.01.006

American Psychiatric Association (2013). Diagnostic and statistical manual of mental disorders. (5th ed.). Author: Washington, DC.

American Psychiatric Association. (1995*). Diagnostic and statistical manual of mental health disorders, fourth edition.* Washington, DC: American Psychiatric Association.

American Psychiatric Association. (2000). Anxiety Disorders. In Diagnostic and statistical manual of mental disorders, (4th ed.). Washington, D. C.

American Psychological Association. (2017). *Data on behavioural health in the united states*. Retrieved from http://www.apa.org/helpcenter/data-behavioral-health.aspx

American Psychological Association. (2008). *Anxiety Disorders: The Role of Psychotherapy FYI in Effective Treatment*. Retrieved from https://www.apa.org/practice/programs/campaign/fyi-anxiety.pdf

American Psychological Association. (2016). *Beyond worry: how psychologists help with anxiety disorders*. Retrieved from http://www.apa.org/helpcenter/anxiety.aspx

Anderson, K., Wickramariyaratne, T, & Blair, A. (2017). Help-seeking intentions for anxiety

among older adults. *Australian Journal of Primary Health, 23*(5), 489-195. doi: 10.1071/PY15185

Anxiety and Depression Association of America (2016). *Facts and statistics*. Retrieved from https://adaa.org/about-adaa/press-room/facts-statistics

Anxiety BC. (2017). Childhood anxiety. Retrieved from https://www.anxietybc.com/parenting/childhood-anxiety

Anxiety Disorders Association of America. (2016). *School refusal.* Retrieved from https://adaa.org/living-with-anxiety/children/school-refusal

Anxiety Disorders Association of Canada. (2003). *Mental health and mental illness*. Retrieved from http://anxietycanada.ca/english/pdf/kirby.pdf

Anxiety Disorders Association of Canada. (2007a). *Childhood anxiety*. Retrieved from http://www.anxietycanada.ca/english/childhood.php

Anxiety Disorders Association of Canada. (2007b). *Generalized anxiety disorder.* Retrieved from http://www.anxietycanada.ca/english/GAD.php

Anxiety Disorders Association of Canada. (2007c). *Social anxiety disorder*. Retrieved from http://www.anxietycanada.ca/english/SAD.php

Anxiety Disorders Association of Canada. (2007d). *Obsessive-compulsive disorder*. Retrieved from http://www.anxietycanada.ca/english/OCD.php

Anxiety Disorders Association of Canada. (2007e). *Panic disorder.* Retrieved from http://www.anxietycanada.ca/english/panic.php

Anxiety Disorders Association of Canada. (2007f). *Specific phobia*. Retrieved from http://www.anxietycanada.ca/english/specific_phobia.php

Anxiety Disorders Association of Canada. (2007g). *Post-traumatic stress disorder*. Retrieved

from http://www.anxietycanada.ca/english/ptsd.php

Anxiety Disorders Association of Canada. (2007h). Treatment. Retrieved from http://www.anxietycanada.ca/english/treatment.php

Anxiety.org. (2017a). Social anxiety disorder. Retrieved from https://www.anxiety.org/social-anxiety-disorder-sad

Anxiety.org. (2017b). *Types of therapy for anxiety*. Retrieved from https://www.anxiety.org/types-of-therapy-for-anxiety

Arthurs, C. (2015*). Healing Highs: The clinical potential for the use of lysergic acid diethylmide [LSD-25] and 3, 4-methylenedioxymethamphetamine (MDMA)MDMA in the treatment of psychological trauma* (Unpublished master's thesis). City University of Seattle, Vancouver, BC.

Austin, C. (2016). HR C-suite: Glossophobia: Potential consequences and suggested remedies. Chatham: Newstex.

Baker, D. (2014). Harm reduction, public health, and social policy. Workshop conducted by Pacific Spirit Community Health Center.

Ballenger, J., Davidson, J., Lecrubier, Y., Nutt, D., Borkivec, T., Rickels, K.,... & Wittchen, H. (2001). Consensus statement on generalized anxiety disorder from the International Consensus Group on Depression and Anxiety. *Journal of Clinical Psychiatry*, 62, 53-58

Baloglu, M., & Zelhart, P. F. (2007). Psychometric properties of the revised mathematics anxiety rating scale. *The Psychological Record, 57*(4). doi:10.1007/BF03395597

Barlow, D. H., Rapee, R. M., & Brown, T. A. (1992). Behavioral treatment of generalized anxiety disorder. *Behavior Therapy*, 23, 551— 570

Barnes, S. (2015). Drugs and addiction. Lecture conducted from the University of British

Columbia, Vancouver, B.C, Canada.

Barrett, P., Farrell, L., Pina, A., Peris, T., & Piacentini, J. (2008). Evidence-based psychosocial treatments for child and adolescent obsessive-compulsive disorder. Journal of Clinical Child and Adolescent Psychology, 37, 131-155.

BBC News. (2009). Ecstasy 'not worse than riding'. Retrieved from http://news.bbc.co.uk/2/hi/uk/7876425.stm

Beesdo, K., Knappe, S., & Pine, D. S. (2009). Anxiety and Anxiety Disorders in Children and Adolescents: Developmental Issues and Implications for DSM-V. *The Psychiatric Clinics of North America*, *32*(3), 483–524. http://doi.org/10.1016/j.psc.2009.06.002

Beidel, D. C., Turner, S. M. (2007). *Shy children, phobic adults: nature and treatment of social anxiety disorder* (2nd ed.). doi:10.1037/11533-000.

Beidel, D. C., Turner, S. M., & Morris, T. L. (1999). Psychopathology of childhood social phobia. *Journal of the American Academy of Child & Adolescent Psychiatry, 38*(6), 643-650. doi:10.1097/00004583-199906000-00010.

Beidel, D. C., Turner, S. M., Sallee, F. R., Ammerman, R. T., Crosby, L. A., Pathak, S. (2007). Set-C versus fluoxetine in treatment of childhood social phobia. *Journal of the American Academy of Child and Adolescent Psychiatry, 46*(12), 1622-1632. doi:10.1097/chi.0b013e318154bb57.

Bell Canada (2015). Bell Let's Talk: The first 5 years (2010-2015). Retrieved from http://letstalk.bell.ca/letstalkprogressreport

Belloch, A., Del Valle, G., Morillo, C., Carrio, C., & Cabedo, E. (2009). To seek advice or not to

seek advice about the problem: The help-seeking dilemma for obsessive-compulsive disorder. Social Psychiatry and Psychiatric Epidemiology, 44, 257–264. doi:10.1007/ s00127-008-0423-0

Berenbaum, H., & James, T. (1994). Correlates and retrospectively reported antecedents of alexithymia. Psychosomatic Medicine, 56, 353-359.

Bergland, C. (2018). Researchers map body areas linked to specific emotions. Retrieved from https://www.psychologytoday.com/blog/the-athletes-way/201401/researchers-map-body-areas-linked-specific-emotions

Blazer, D., George, L. K., & Hughes, D. (1991). The epidemiology of anxiety disorders: An age comparison. In C. Salzman & B. D. Lebowitz Eds.), *Anxiety in the elderly: Treatment and research* (pp. 17–30). NewYork: Springer.

Bobes, J., Gonzalez, M. P., Bascaran, M. T., Arango, C., Saiz, P. A., & Bousono, M. (2001). Quality of life and disability in patients with obsessive-compulsive disorder. *European Psychiatry, 16*(4), 239-245. doi: 10.1016/S0924-9338(01)00571-5.

Bogels, S. M., Voncken, M. (2008). Social skills training versus cognitive therapy for social anxiety disorder characterized by fear of blushing, trembling or sweating. *International of Cognitive Therapy, 1*(2), 138-150. doi:10.1521/ijct.2008.1.2.138.

Bögels, S.M., Alden, L., Beidel, D.C., Clark, L.A., Pine, D.S., Stein, M.B., Voncken, M. (2010). Social anxiety disorder: questions and answers for the DSM- V. *Journal of Depression and Anxiety* 27, 168–189.

Bonny, H. L., & Pahnke, W. N. (1972). The use of music in psychedelic LSD psychotherapy. *Journal of Music Therapy, 2*, 64-87.

Borkovec, T. D., & Costello, E. (1993). Efficacy of applied relaxation and cognitive-behavioral

therapy in the treatment of generalized anxiety disorder. *Journal of Consulting and Clinical Psychology*, 61, 611-619.

Bracha, H. (2004). Freeze, flight, fight, fright, faint: adaptationist perspective on the acute stress response spectrum. *CNS Spectrums, 9*(9); 679-685. doi: 10.1017/S1092852900001954

Bracha, H., Ralston, T., Matsukawa, J., Williams, A, & Bracha, A. (2004). Does 'fight or flight' need updating? *Psychosomatics, 45*(5), 448-449.

Bretherton, I. (1985). Attachment theory: Retrospect and prospect. Monographs of the Society for Research in Child Development, 50 (1-2, Serial No. 299).

Brodie, R. (n. d.). Mary Ainsworth and attachment theory. Retrieved from http://www.childdevelopmentmedia.com/articles/mary-ainsworth-and-attachment-theory/

Brown, L. J. (1985). On concreteness. *Psychoanalytic Review*, 72, 379-402.

Bryant, R. A. (2003). Early predictors of posttraumatic stress disorder. Biological Psychiatry, 53(9), 789-795. doi:10.1016/S0006-3223(02)01895-4.

Bubel, M., Jiang, R., Lee, C., Shi, W., & Tse, A. (2016). AwareMe: addressing fear of public speaking through awareness. Paper presented at the 68-73. doi:10.1145/2851581.2890633

Bucci, W. (1997). Symptoms and symbols: a multiple code theory of somatization. Psychoanalytic Inquiry, 17, 151-172. doi:10.1080/07351699709534117

Buckman, J. (1977). Brainwashing, LSD, and CIA: historical and ethical perspective. *International Journal of Social Psychiatry, 23*(1), 8-19. doi:10.1177/002076407702300103

Buzzell, L., & Chalquist, C. (2009). Psyche and nature in a circle of healing. In L. Buzzell & C. Chalquist (Eds.), *Ecotherapy: Healing with nature in Mind* (pp. 17–21). San Francisco: Sierra Club Books

Cairney, J., McCabe, L., Velduizen, S., Corna, L. M., Streiner, D., & Herrmann, N. (2007). Epidemiology of social phobia in later life. *The American Journal of Geriatric Psychiatry, 15*(3), 224-233. doi:10.1097/01.JGP.0000235702.77245.46

Canadian Medical Association (2008). 8th annual National Report Card on Health Care. Retrieved from https://www.cma.ca/multimedia/CMA/Content_Images/Inside_cma/Annual_Meeting/2008/GC_Bulletin/National_Report_Card_EN.pdf

Canadian Mental Health Association. (2017). *Fast facts about mental illness*. Retrieved from https://cmha.ca/media/fast-facts-about-mental-illness/

Canadian Mental Health Association. (2018). Panic disorder. Retrieved from https://cmha.bc.ca/documents/panic-disorder-2/

Cannon, W. B. (1929). Bodily changes in pain, hunger, fear and rage: an account of recent research into the function of emotional excitement (2nd ed.). New York: Appleton-Century-Crofts.

Carhart-Harris, R. L., & Nutt, D. J. (2013). Experienced drug users assess the relative harms and benefits of drugs: A web-based survey. *Journal of Psychoactive Drugs, 45*, 322-328. doi:10.1080/02791072.2013.825034

Carod-Artal, F. J. (2015) Hallucinogenic drugs in pre-Columbian Mesoamerican cultures. Neurologia 30:42–49.

Centre for addiction and mental health (2012). *Facts and statistics*. Retrieved from http://www.camh.ca/en/hospital/about_camh/newsroom/for_reporters/Pages/addictionmentalhealthstatistics.aspx

Clark, D. A. (2014). Psychology works fact sheet obsessive-compulsive disorder.

Retrieved from http://www.cpa.ca/docs/File/Publications/FactSheets/PsychologyWorksFactSheet_ObsessiveCompulsiveDisorder.pdf

Clark, D.M. (2005). A cognitive perspective on social phobia. The essential handbook of social anxiety for clinicians (pp. 193-218). West Sussex, England: John Wiley and Sons.

Cooper, H. (2010). *Research synthesis and meta-analysis: A step-by-step approach* (4th ed.). Thousand Oaks, CA: Sage.

Craigie, M. A., Rees, C. S., March, A., & Nathan, P. (2008). Mindfulness-based cognitive therapy for generalized anxiety disorder: A preliminary evaluation. *Behavioural and Cognitive Psychotherapy,* 36, 553-568.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches (4th* ed.). Los Angeles: Sage.

Critis-Christoph, P., Newman, M., Rickels, K., Gallop, R., Gibbons, M., Hamilton, J, Pastva, A. (2011). Combined medication and cognitive therapy for generalized anxiety disorder. *Journal of Anxiety Disorders, 25*(8), 1087-1094. doi:10.1016/j.janxdis.2011.07.007

Crittenden, P. M. (1994). Peering into the black box: An explanatory treatise on development of self in young children. In D. Cicchetti & S. L. Toth (Eds.), Rochester Symposium on Developmental Psychopathology: Vol. 5. Disorders and dysfunctions of the self (pp. 79-158). Rochester, NY: Rochester University Press

Crome, E., & Baillie, A. (2014). Mild to severe social fears: ranking types of feared social situations using item response theory. *Journal of Anxiety Disorder*, 28, 471–479

Cyr, N. R. (2007). Obsessive compulsive disorder. *AORN Journal, 86*(2), 277-280. doi:10.1016/j.aorn.2007.07.016

Dalbudak, E., Evren, C., Aldemir, S., Coskun, K. S., Ugurlu, H., & Yildirim, F. G. (2013). Relationship of internet addiction severity with depression, anxiety and alexithymia, temperament and character in university students. *Cyberpsychology, Behavior, and Social Networking, 16*(4), 272-278. doi:10.1089/cyber.2012.0390.

Dalrymple, K. L., & Herbert, J. D. (2007). Acceptance and commitment therapy for generalized social anxiety disorder. *Behavior Modification*, 31, 543-568

Daniels, S., & Piechowski, M. M. (2009). Living with intensity. Tuscon, AZ: Great Potential Press Inc.

DeBeck, K., Wood, E., Montaner, J., & Kerr, T. (2009). Canada's new federal 'national anti-drug strategy': An informal audit of reported funding allocation. *International Journal of Drug Policy, 20*(2), 188-191. doi:10.1016/j.drugpo.2008.04.00

Dewa, C. (2010). Examining the comparative incidence and cost of physical and mental health-related disabilities in an employed population. *Journal of Occupational and Environmental Medicine,* 52, p. 758-62.

Dewa, C (2014). Worker attitudes towards mental health problems and disclosure. *International Journal of Occupational and Environmental Medicine*, 5: 175-86.

Dictionary. (2016). Entheogen. Retrieved from: http://www.dictionary.com/browse/entheogen

Drug Enforcement Administration. (n d.). Drug Schedules. Retrieved from https://www.dea.gov/druginfo/ds.shtml

Duffy, J. T., Guiffrida, D. A., Araneda, M. E., Tetenov, S. M. R., & Fitzgibbon, S. C. (2017). A qualitative study of the experience of counseling students who participate in mindfulness-based activities in a counseling theory and practice course. *International Journal for the Advancement of Counseling, 39*(1), 28-42. doi:10.1007/s10447-016-9280-9

Dugas, M (2015*). Psychology works fact sheet generalized anxiety disorder*. Retrieved from http://www.cpa.ca/docs/File/Publications/FactSheets/PsychologyWorksFactSheet_GeneralizedAnxietyDisorder.pdf

Dummit, E. S., Klein, R. G., Tancer, N. K., Asche, B., Martin, J., & Fairbanks, J. A. (1997). Systematic assessment of 50 children with selective mutusm. *Journal of the American Academy of Child & Adolescent Psychiatry, 36*(5), 653-660. doi:10.1097/00004583-199705000-00016

DuPont, R. L., DuPont, C. M. & Rice, D. P. (2002). Economic costs of anxiety disorders. In D. J. Stein & E. Hollander (Eds.). Textbook of Anxiety Disorders. American Psychiatric Publishing: Washington, D.C.

Eddy, K. T., Dutra, L., Bradley, R., & Westen, D. (2004). A multidimensional meta-analysis of psychotherapy and pharmacotherapy for obsessive-compulsive disorder. *Clinical Psychology Review, 24*(8), 1011-1030. doi:10.1016/j.cpr.2004.08.004

Evans, S., Ferrando, S., Findler, M., Stonewell, C., Smart, C., & Haglin, D. (2008). Mindfulness-based cognitive therapy for generalized anxiety disorder. *Journal of Anxiety Disorders*, 22, 716-721.

Fadiman, J. (2011). *The Psychedelic Explorers Guide*. Rochester, VT: Park Street Press.

Fireman, B., Koran, L. M., Leventhal, J. L., & Jacobson, A. (2001). The prevalence of clinically recognized obsessive-compulsive disorder in a large health maintenance organization. American Journal of Psychiatry, 158, 1904-1910

Fischer, F. (2015). *Therapy with Substance*. London, UK: Muswell Hill Press.

Fisher, P. L., & Durham, R. C. (1999). Recovery rates in generalized anxiety disorder following

psychological therapy: An analysis of clinically significant change in the STAI-T across outcome studies since 1990. *Psychological Medicine, 29,* 1425–1434.

Flaxington, B. (2015). Overcoming fear of public speaking. Retrieved from https://www.psychologytoday.com/blog/understand-other-people/201503/overcoming-fear-public-speaking

Flint, A. (2005). Generalised anxiety disorder in elderly patients: Epidemiology, diagnosis and treatment Options. *Drugs and Aging*, 22, 101-114.

Flint, A., Bradwejn, J., Vaccarino, F., Gutkowska, J., Palmour, R., & Koszycki, D. (2002). Aging and panicogenic response to cholecystokinin tetrapeptide: An examination of the cholecystokinin system. *Neuropsychopharmacology, 27*(4), 663-671. doi:10.1016/S0893-133X(02)00330-5.

Fusar-Poli, P., Borgwardt, S. (2008). Albert Hofmann, the father of LSD (1906-2008). *Neuropsychobiology, 58*, 53-54.

Gasser, P., Kirchner, K., & Passie, T. (2015). LSD-assisted psychotherapy for anxiety associated with a life-threatening disease: A qualitative study of acute and sustained subjective effect. *Journal of Psychopharmacology, 29*(1), 57-68. doi:10.1177/0269881114555249

Gasser, P., Dominique, H., Yvonne, M., Rick, D., Berra, Y...and Rudolf, B. (2014). Safety and Efficacy of Lysergic Acid Diethylamide– Assisted Psychotherapy for Anxiety Associated with Life-Threatening Diseases. *Journal of Nervous and Mental Disease,* 202, p. 513–20.

Gauthier, J. (2014). Panic disorder. Retrieved from https://www.cpa.ca/docs/File/Publications/FactSheets/PsychologyWorksFactSheet_PanicDisorder.pdf

Goleman, D. (1995). Emotional intelligence why it can matter more than IQ. New York, NY:

Bantam Books.

Goodwin, R., Koenen, K. C., Hellman, F., Guardino, M., & Struening, E. (2002). Help-seeking and access to mental health treatment for obsessive-compulsive disorder. Acta Psychiatrica Scandinavica, 106, 143–149. doi:10.1034/j.1600-0447.2002.01221.x

Government of Canada. (2017). *The burden of generalized anxiety disorder in Canada*. Retrieved from https://www.canada.ca/en/public-health/services/reports-publications/health-promotion-chronic-disease-prevention-canada-research-policy-practice/vol-37-no-2-2017/burden-generalized-anxiety-disorder-canada.html

Grabe, H., Frommer, J., Ankerhold, A., Ulrich, C., Groeger, R., Franke, G, . . . Spitzer, C. (2008). Alexithymia and outcome in psychotherapy. *Psychotherapy and Psychosomatics, 77*(3), 189-194. doi:10.1159/000119739.

Gradus, J. L. (2017). Epidemiology of PTSD. Retrieved from https://www.ptsd.va.gov/professional/PTSD-overview/epidemiological-facts-ptsd.asp

Greenleaf, A. T., Bryant, R. M., & Pollock, J. B. (2014). Nature-based counseling: Integrating the healing benefits of nature into practice. *International Journal of the Advancement of Counseling, 36*(2), 162-174. doi:10.1007/s10447-013-9198-4.

Grinspoon, L., & Doblin, R. (2001). Psychedelics as catalyst of insight-oriented psychotherapy. *Social Research, 68*(3), 677-695.

Grob, C. S., Danforth, A. L., Chopra, G. S., Hagerty, M., McKay, C. R., Halberstadt, A. L., & Green, G. R. (2011). Pilot study of psilocybin treatment for anxiety in patients with advanced-stage cancer. *Archives of General Psychiatry, 68*(1), 71-78. doi:10.1001/archgenpsychiatry.2010.116

Grof, S., & Grof, C. (2010). Holotropic breathwork a new approach to self-exploration and

therapy. New York, Albany: Excelsior Editions.

Guttman, H., Laporte, L. (2002). Alexithymia, empathy, and psychological symptoms in a family context. *Comprehensive Psychiatry* 43, 448–455

Halberstadt, A. L. (2015). Recent advances in the neuropsychopharmacology of serotonergic hallucinogens. *Behavioural Brain Research, 277*, 99-120.

Hale, L., Strauss, C., & Taylor, B. L. (2013). The effectiveness and acceptability of mindfulness-based therapy for obsessive compulsive disorder. A review of the literature. *Mindfulness, 4*(4), 375-382. doi:10.1007/s12671-012-0137-y

Hanrahan, F., Field, A., Jones, F., & Davey, G. (2013). An meta-analysis of cognitive therapy for worry in generalized anxiety disorder (vol 33, p. 120, 2013). *Clinical Psychology Review, 33*(3), 500-500.

Hawkins, D. R. (1994). *Power vs. force: the hidden determinants of human behavior,* Hay House Inc.

Hays, D. G. (2013). Assessment in counseling a guide to the use of psychological assessment procedures (5th ed.). Alexandria, VA: American Counseling Association.

Herold, Andreas. (2015). Neurogenic tremor through TRE tension, stress and trauma releasing excercises according to D. Berceli in the treatment of Post-Traumatic Stress Disorder (PTSD). Retrieved from https://traumaprevention.com/wp-content/uploads/2018/04/pscp_2015_2_1-2_9.pdf

Hettema, J. M. Prescott, C. A., Myers, J. M., Neale, M. C., & Kendler, K. S. (2005). The structure of genetic and environmental risk factors for anxiety disorders in men and women. *Archives of General Psychiatry, 62*(2), p. 182-189. doi:10.1001/archpsyc.62.2.182

Hietanen, J. K., Glerean, E., Hari, R., & Nummenmaa, L. (2016). Bodily maps of emotions across child development. *Developmental Science, 19*(6), 1111-1118. doi:10.1111/desc.12389.

Hoehn-Saric, R., Mcleod, D., Funderburk, F., & Kowalski, P. (2004). Somatic symptoms and physiologic response in generalized anxiety disorder and panic disorder – an ambulatory monitor study. *Archives of General Psychiatry, 61*(9), 913-921.

Hoffman, 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), 169-183.

Hollander, E. (1997). Obsessive-compulsive disorder: The hidden epidemic – introduction. *Journal of Clinical Psychiatry, 58*, 3-6.

Hollander, E., Kwon, J., Stein, D., Broatch, J., Rowland, C. T., & Himelein, C.A. (1996). Obsessive-compulsive and spectrum disorders: Overview and quality of life issues. Journal of Clinical Psychiatry, 57 (suppl. 8), 3-6.

Hope, D. A., Heimberg, R. G., & Bruch, M. A. (1995). Dismantling cognitive-behavioural group therapy for social phobia. *Behaviour Research and Therapy*, 33, 637-650.

Horton, P. C, Gewirtz, H., & Keutter, K. J. (1992). Alexithymia— State and trait. Psychotherapy and Psychosomatics, 58, 91-96

Houghton, S., Saxon, D., Bradburn, M., Ricketts, T., & Hardy, G. (2010). The effectiveness of routinely delivered cognitive behavioural therapy for obsessive-compulsive disorder: A benchmarking study. *British Journal of Clinical Psychology, 49*(Pt4), 473-489. doi: 10.1348/014466509X475414.

Howland J, Peterson EW, Levin WC, Fried L, Pordon D, Bak S. (2013). Fear of falling among

the community-dwelling elderly. J Aging Health. 1993;5:229-243

Hoyer, J., Gloseters, A. T. (2009). Psychotherapy for generalized anxiety disorder: don't worry, it works! *Psychiatric Clinics of North America, 32*(3), 629-640. doi: 10.1016/j.psc.2009.05.002

Hudson, J. & Dodd, H. (2011). Introduction to special issue on social phobia in children. *Journal of Experimental Psychotherapy*, 2, 449-453.

Hunot, V., Churchill, R., Teixera, V., & Silva de Lima, M. (2010). Psychological therapies for generalised anxiety disorder. *Cochrane Database of Systematic Reviews*, (1). doi:10.1002/14651858.CD001848

Hunsley, J., & Lee, C. M. (2007). Research-informed benchmarks for psychological treatments: Efficacy studies, effectiveness studies, and beyond. *Professional Psychology: Research and Practice*, 38, 21- 33

Hunsley, J., Elliott, K., Therrien, Z. (2013). *The efficacy and effectiveness of psychological treatments*. Retrieved from http://www.cpa.ca/docs/File/Practice/TheEfficacyAndEffectivenessOfPsychologicalTreatments_web.pdf

Hunt, C., Issakidis, C., Andrews, G. (2002). DSM-IV generalized anxiety disorder in the Australian national survey of mental and well-being. *Psychological Medicine, 32*(4), 649-59. doi: 10.1017/S003329170205512.

Hyer, L., Woods, M. G., Summers, M. N., Boudewyns, P., & Harrison, R. (1990). Alexithymia among Vietnam veterans with post-traumatic stress disorder. Journal of Clinical Psychiatry, 51, 243-247.

In-Albon, T., & Schneider, S. (2007). Psychotherapy of childhood anxiety disorders: A meta-

analysis. *Psychotherapy and Psychosomatics*, 76, 15-24

Institute of Health Economics. (2007). Mental health economics in your pocket. Edmonton: IHE. Number of absent workers calculated using Statistics Canada work absence rates. Retrieved from http://www.statcan.gc.ca/pub/71-211-x/71-211-x2011000-eng.pdf

Jamieson, J. P., Nock, M. K., & Mendes, W. B. (2013). Changing the conceptualization of stress in social anxiety disorder. *Journal of Affective and Physiological Consequences, 1*(4), 363-374. doi:10.1177/2167702613482119.

Johnsson, H., Hougaard, E., & Bennedsen, B. E. (2011). Randomized comparative study of group versus individual cognitive behavioural therapy for the obsessive compulsive disorder. Acta Psychiatrica Scandinavica, 123, 387-397.

Johnson, M., Richards, W. & Griffiths, R. Human hallucinogen research: guidelines for safety. J. Psychopharmacol. 22, 603–620 (2008).

Kabat-Zinn, J. (1994). *Whenever you go there you are: Mindfulness meditation in everyday life.* New York: Hyperion.

Kaelen, M., Barrett, F. S., Roseman, L., Lorenz, R., Family, N., Bolstridge, M., . . . Carhart-Harris, R. L. (2015). LSD enhances the emotional response to music. *Psychopharmacology, 232*(19), 3607-3614. doi:10.1007/s00213-015-4014-y

Kamitsis, I. & Simmonds, J. G. (2007). Using resources of nature in the counselling room: Qualitative research into ecotherapy practice. *International Journal for the Advancement of Counselling, 39*(3). 229-248. doi:10.1007/s10447-017-9294-y

Kashdan, T. B., & Rotternberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review, 30*(7), 865-878. doi:10.1016/j.cpr.2010.03.001

Kasper, S. (1998). Social phobia: The nature of the disorder. *Journal of Affective Disorders, 50*,

S3-S9. doi:10.1016/S0165-0327(98)00094-9

Keeley, M. L., Storch, E. A., Dhungana, P., & Geffken, G. R. (2007). Pediatric obsessive-compulsive disorder: a guide to assessment and treatment. *Issues in Mental Health Nursing, 28*(6), 555-574.

Kessler RC, Chiu WT, Demler O, Walters EE. (2005). Prevalence, severity, and comorbidity of twelve-month DSM-IV disorders in the National Comorbidity Survey Replication (NCS-R). *Archives of General Psychiatry, 62*(6):617-27.

Kessler, R. & Wittchen, H. (2002). Patterns and correlates of generalized anxiety disorder in community samples. *Journal of Clinical Psychiatry*, 63, 4-10.

Kessler, R. C. (2003). The impairment caused by social phobia in the general population: implications for intervention. *Acta Psychiatrica Scandinavia, 108*(s417), 19-27. doi:10.1034/j.1600-0447.108.s417.2.x

Kessler, R. C., McGonagle, K.A., Zhao, S., Nelson, C. B., Hughes, M., Eshleman, S., Kendler, K. S. (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: results from the National Comorbidity Survey. *Archives of General Psychiatry, 51(1)*, 8-19. doi:10.1001/archpsych.1004.03950010008002

Kessler, R. C., Nelson, C.B., McGonagle, K. A., Edlund, M. J., Frank, R. G., & Leaf, P. J. (1996). The epidemiology of co-occurring mental disorders and substance use disorders in the National Comorbidity Survey: implications for prevention and service utilization. *American Journal of Orthopsychiatry, 66*(1), 17-31. Doi:10.1037/h0080151

Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the national comorbidity survey. *Archives of General Psychiatry, 52*(12), 1048-1060. doi:10.1001/archpsych.1995.03950240066012

Kessler, R. C., Stein, M. B., & Berglund, P. (1998). Social phobia subtypes in the national comorbidity survey. *American Journal of Psychiatry. 155*(5), 613-619. doi:10.1176/ajp.155.5.613

Khan, A., Leventhal, R. M., Khan, S., & Brown, W.A. (2002). Suicide risk in patients with anxiety disorders: a meta-analysis of the FDA database. *Journal of Affective Disorders*, 68, 183-190.

King, J. L., & Mallinckrodt, B. (1998). Family environment and alexithymia in clients and non-clients. Manuscript submitted for publication.

Kluger, J. (2001). *Phobias: Fear not* (Canadian ed.). Toronto: Time Incorporated.

Kobak, K. A., Greist, J. H., Jefferson, J. W., Katzelnick, D. J., & Henk, H. J. (2004). Behavioural versus pharmacological treatments of obsessive compulsive disorder: A meta-analysis. Focus, 2, 462-474.

Koch, W. J. (2015). Psychology works fact sheet post traumatic stress disorder. Retrieved from https://cpa.ca/docs/File/Publications/FactSheets/PsychologyWorksFactSheet_PTSD.pdf

Kocovski, N. L., Fleming, J.E., & Rector, N. A. (2009). Mindfulness and acceptance-based group therapy for social anxiety disorder: An open trial. *Cognitive and Behavioral Practice*, 16, 276-289. doi:10.1016/j.cbpra.2008.12.004.

Kraehenmann, R., Preller, K. H., Scheidegger, M., Pokorny, T., Bosch, O. G., Seifritz, E., & Vollenweider, F.X. (2015). Psilocybin-induced decrease in amygdala reactivity correlates with enhanced positive mood in healthy volunteers. *Biological Psychiatry, 78*(8), 572-581.

Krebs, T. S. & Johansen, P. (2012). Lysergic acid diethylamide (LSD) for alcoholism: Meta-analysis of randomized controlled trials. *Journal of Psychopharmacology, 26*(7), 994-

1002. doi:10.1177/0269881112439253

Krohn, M. (2007). Robert Plutchik's Psychoevolutionary Theory of Basic Emotions. Retrieved from https://dragonscanbebeaten.files.wordpress.com/2010/06/robert-plutchiks-psychoevolutionary-theory-of-basic-emotions-poster.pdf

Krystal, H. (1988). Integration and self-healing: Affect, trauma, alexithymia. Hillsdale, NJ: Analytic Press.

Ladouceur, R., Dugas, M. J., Freeston, M. H., Leger, E., Gagnon, F., & Thibodeau, N. (2000). Efficacy of a cognitive–behavioral treatment for generalized anxiety disorder: Evaluation in a controlled clinical trial. *Journal of Consulting and Clinical Psychology*, 68, 957–964.

Lane, R.D. (2008). Neural substrates of implicit and explicit emotional processes: a unifying framework for psychosomatic medicine. *Psychosomatic Medicine* 70, 214–231.

Lane, R.D., Schwartz, G.E. (1992). Levels of emotional awareness: implications for psychotherapeutic integration. *Journal of Psychotherapy Integration* 2, 1–18.

Lang, P.J. (1985). The cognitive psychophysiology of emotion: fear and anxiety. In: Tuma, A. Hussain, Maser, Jack D. (Eds.), *Anxiety and the anxiety disorders* (pp. 131-170). Hillsdale, NJ, England: Lawrence Erlbaum Inc.

Larsen, D.K., Norton, G.R., Walker, J.R., Stein, M.B. (2002). Analysis of startle responses in patients with panic disorder and social phobia. *Journal of Cognitive Behavioral Therapy*. 31, 156–169.

Law Enforcement Action Partnership (n d.). LEAP CC. Retrieved from https://lawenforcementactionpartnership.org/

Layton, J. (2018). How fear works. Retrieved from https://science.howstuffworks.com/life/inside-the-mind/emotions/fear.htm

Lenze, E. J., & Wetherell, J. L. (2011). A lifespan view of anxiety disorders. *Dialogues in Clinical Neuroscience, 13*(4), p. 381.

Letheby, C. (2017). Naturalizing psychedelic spirituality. *Zygon, 52*(3), 623-642. doi:10.1111/zygo.12353

Lewis, K. S. (2016). You, at the podium. *ASHA Leader, 21*(1), p. 38.

Lieb, R., Becker, E., Altamura, C. (2005). The epidemiology of generalized anxiety disorder in Europe. *Journal of European Neuropsychopharmacology, 15*(4), 445-52. doi: 10.1016/j.euroneuro.2005.04.010

Lochridge, L. (2011). Got stage fright? Let's talk. *Florida Grower, 104*(9), 38.

Mackay, G. J., & Neill, J. T. (2010). The effect of 'green exercise' on state anxiety and the role of exercise duration, intensity, and greenness: A quasi-experimental study. *Journal of Sport and Exercise,* 11, 238–245. doi:10.1016/j.psychsport.2010.01.002.

Magee, W. J., Eaton, W. W., Wittchen, H., McGonagle, K. A., & Kessler, R. C. (1996). Agoraphobia, simple phobia, and social phobia in the national comorbidity survey. *Archives of General Psychiatry, 53*(2), 159-168. doi:10.1001/archpsyc.1996.0183002007700

Majic, T., Schmidt, T. T., & Gallinat, J. (2015). Peak experiences and the afterglow phenomenon: When and how do therapeutic effects of hallucinogens depend on psychedelic experiences? *Journal of Psychopharmacology, 29*, 241-253.

Mallinckrodt, B., King, J. L, & Coble, H. M. (1998). Family dysfunction, alexithymia, and client attachment to therapist. *Journal of Counseling Psychology, 45*(4), 497-504. doi:10.1037/0022-0167-45.4.497

Marques, L., LeBlanc, N. J., Weingarden, H. M., Timpano, K. R., Jenike, M., & Wilhelm, S. (

2010). Barriers to treatment and service utilization in an internet sample of individuals with obsessive–compulsive symptoms. Depression and Anxiety, 27, 470–475. doi:10.1002/ da.20694

McCabe, R. E. (2015). Psychology works fact sheet phobia. Retrieved from http://www.cpa.ca/docs/File/Publications/FactSheets/PsychologyWorksFactSheet_Phobias.pdf

Mendaglio, S. (2008). Dabrowski's theory of positive disintegration: A personality theory for the 21st century. In S. Mendaglio (Ed.), Dabrowski's theory of positive disintegration (pp. 13-40). Scottsdale, AZ: Great Potential Press.

Metzner, R. (2005). *Sacred Mushroom of Visions: Teonanacatl*. Rochester, VT: Park Street Press.

Mithoefer, M., Wagner, M., Mithoefer, A., Jerome, L., Martin, S., Yazar-Klosinski, B., . . . Doblin, R. (2013). Durability of improvement in post-traumatic stress disorder symptoms and absence of harmful effect or drug dependency after 3, 4-methylenedioxymethampetamine-assisted psychotherapy: a prospective long-term follow-up study. *Journal of Psychopharmacology, 27*(1), 28-39. doi:10.1177/0269881112456611

Mitte, K. (2005). A meta-analysis of the efficacy of psycho and pharmacotherapy in panic disorder with and without agoraphobia. *Journal of Affective Disorders*, 88, 27-45.

Moreno, F, A., Wiegand, C, B., Taitano, E., Delgado, P. L. (2006) Safety, tolerability, and efficacy of psilocybin in 9 patients with obsessive-compulsive disorder. *Journal of Clinical Psychiatry, 67*, 1735–1740.

National assembly on school based health care. (n, d.). Anxiety: risk and protective factors. Retrieved from http://ww2.nasbhc.org/roadmap/public/mh_list_risk_factors.pdf

National Institute for Clinical Excellence. (2004). *Management of anxiety in adults in primary, secondary and community care: Clinical Guideline*. London: National Institute for Clinical Excellence.

National Institute of Mental Health. (2016a). *Generalized anxiety disorder*. Retrieved from http://www.nimh.nih.gov/health/publications/anxiety-disorders/generalized-anxiety-disorder-gad.shtml

National Institute of Mental Health. (2016b). *Anxiety disorders*. Retrieved from https://www.nimh.nih.gov/health/topics/anxiety-disorders/index.shtml

National Institute of Mental Health. (2016b). Anxiety disorders. Retrieved from https://www.nimh.nih.gov/health/topics/anxiety-disorders/index.shtml

National Institute of Mental Health. (2016c). *Social anxiety disorder more than just shyness.* Retrieved from https://www.nimh.nih.gov/health/publications/social-anxiety-disorder-more-than-just-shyness/index.shtml

National Institute of Mental Health. (2017a). *Generalized anxiety disorder*. Retrieved from https://www.nimh.nih.gov/health/statistics/prevalence/generalized-anxiety-disorder-among-adults.shtml

National Institute of Mental Health. (2017b). *Generalized anxiety disorder among children*. Retrieved from https://www.nimh.nih.gov/health/statistics/prevalence/generalized-anxiety-disorder-among-children.shtml

National Institute of Mental Health. (2017c). *Social phobia among children*. Retrieved from https://www.nimh.nih.gov/health/statistics/prevalence/social-phobia-among-children.shtml

National Institute of Mental Health. (2017d). *Social phobia among adults*. Retrieved from

https://www.nimh.nih.gov/health/statistics/prevalence/social-phobia-among-adults.shtml

National Institute of Mental Health. (2017e). *Obsessive compulsive disorder among adults*. Retrieved from https:/www.nimh.nih.gov/health/statistics/prevalence/obsessive-compulsive-disorder-among-adults.shtml

National Institute of Mental Health. (2017f). *Post-traumatic stress disorder (PTSD).* Retrieved from https://www.nimh.nih.gov/health/statistics/post-traumatic-stress-disorder-ptsd.shtml#part_155467

National Institute of Mental Health. (2017g). *Post-traumatic stress disorder (PTSD).* Retrieved from https://www.nimh.nih.gov/health/publications/post-traumatic-stress-disorder-ptsd/ptsd-508-05172017_38054.pdf

National Institute of Mental Health. (2017h). *Panic disorder.* Retrieved from https://www.nimh.nih.gov/health/statistics/panic-disorder.shtml

National Institute of Mental Health. (2017i). *Specific phobia*. Retrieved from https://www.nimh.nih.gov/health/statistics/specific-phobia.shtml

National Research Council and Institute of Medicine. (2009). Preventing mental, emotional and behavioral disorders among young people: progress and possibilities. Washington, DC: The National Academies Press.

Nemeroff, C. B., Bremner, J. D., Foa, E. B., Mayberg, H. S., North, C. S., & Stein, M. B. (2006). Posttraumatic stress disorder: A state-of-the-science review. *Journal of Psychiatric Research, 40*(1), p. 1-21. doi:10.1016/j.jpsychires.2005.07.005

Nichols, D. E. (2016). Psychedelics. *Pharmacological Reviews*, *68*(2), 264–355. doi:10.1124/pr.115.011478.

Nichols, D., Johnson, M., & Nichols. C. (2017). Psychedelics as medicines: An emerging new

paradigm. *Clinical Pharmacology & Therapeutics, 101*(2), 209-219.

Nichols, M. (2018). Anxiety two general types found in the brain. Retrieved from https://anxietypanichealth.com/2008/07/08/anxiety-two-general-types-found-in-brain/

Nordhus, I., & Pallesen, S. (2003). Psychological treatment of late-life anxiety: An empirical review. *Journal of Consulting and Clinical Psychology*, 71, 643-651

Nummenmaa, L., Glerean, E., Hari, R., & Hietanen, J. K. (2014). Bodily maps of emotions. *Proceeding of the National Academy of Science of the United States of America, 111*(2), 646-651. doi:10.1073/pnas.1321664111

Nutt, D. J.(2009). Equasy--an overlooked addiction with implications for the current debate on drug harms. *Journal of Psychopharmacology, 23*, 3-5.

Nutt, D. J., King, L. A., & Nichols, D. E. (2013).Effects of schedule I drug laws on neuroscience research and treatment innovation. *Nature Reviews Neuroscience, 14*, 577-585.

Nutt, D. J., King, L. A., Philips, L. D. (2010) Drug harm in the UK: A multicriteria decision analysis. *Lancet, 376*(9752), 1558-1565. doi: 10.1016/S0140-6736(10)61462-6

Offord, D. R., Boyle, M. H., Campbell, D., Goering, P., Lin, E., Wong, M., & Racine, Y. A. (1996). One year prevalence of psychiatric disorders in Ontarians 15 to 64 years of age. *Canadian Journal of Psychiatry, 41*, 559-561.

Ogrodniczuk, J. S., Piper, W. E., & Joyce, A. S. (2010). Effect of alexithymia on the process and outcome of psychotherapy: a programmatic review. *Psychiatry Research, 190*(1), 43-48. doi:10.1016/j.psychres.2010.04.026

Olatunji, B. O., Davis, M. L., Powers, M. B., & Smits, J. A. (2013). Cognitive-behavioral therapy for obsessive-compulsive disorder: A meta-analysis of treatment outcome and moderators. Journal of Psychiatric Research, 47, 33-41.

Online Etymology Dictionary. (2018a). Anxiety. Retrieved from www.etymonline.com/word/anxiety

Online Etymology Dictionary. (2018b). Fear. Retrieved from https://www.etymonline.com/word/fear

Online etymology dictionary. (2018c). Psychedelics. Retrieved from https://www.etymonline.com/word/psychedelic

Pahnke, W. N., Kurland, A. A., Unger, S., Savage, C., Grof, S. (1970). The experimental use of psychedelic (LSD) psychotherapy. *Journal of American Medical Association, 212*(11), 1856-1863.

Panayiotou, G., Karekla, M., Georgiou, D., Constantinou, E., & Paraskeva-Siamata, M. (2017). Psychophysiological and self-reported reactivity associated with social anxiety and public speaking fear symptoms: effects of fear versus distress. *Psychiatry Research,* 255, 278-286. doi:10.1016/j.psychres.2017.05.044

Parker, J.D.A., Taylor, G.J., Bagby, R.M. (1998). Alexithymia: relationship with ego defense and coping styles. *Comprehensive Psychiatry* 39, 91–98

Pavlina, S. (2005*). Levels of consciousness*. Retrieved from https://www.stevepavlina.com/blog/2005/04/levels-of-consciousness/

Pearson, C., Janz, T., & Ali, J. (2013). Health at a glance: mental and substance use disorder in Canada. Ottawa (ON): Statistics Canada Catalogue No. 82-624-X.

Phelps, J. (2017). Developing guidelines and competencies for the training of psychedelic therapist. *Journal of Humanistic Psychology, 57*(5), 450-487. doi:10.1177/0022167817711304

Pini, S., Cassano, G. B., Simonini, E., Savino, M., Russo, A., & Montogomery, S. A. (1997).

Prevalence of anxiety disorders comorbidity in bipolar depression, unipolar depression and dysthymia. *Journal of Affective Disorders, 42*(2), 145-153. doi:10.1016/S0165-0327(96)04505-X

Psychedelic could relieve anxiety in patients with advanced cancer. (2010). *Alternative & Complementary Therapies, 16*(5), 251. doi:10.1089/act.2010.16511

Regier, D. A., Rae, D. S., Narrow, W. E., Kaelber, C. T., & Schatzberg, A. F. (1998). Prevalence of anxiety disorders and their comorbidity with mood and addictive disorders. *British Journal of Psychiatry, 173* (Suppl. 34), 24-28.

Reynolds, C. R., Richmond, B. O., Lowe, P. A. (n. d.). The Adult Manifest Anxiety Scale. Retrieved from https://www.wpspublish.com/store/Images/Downloads/Product/AMAS_Manual_Chapter_1.pdf

Reynolds, S., Wilson, C., Austin, J., & Hooper, L. (2012). Effects of psychotherapy for anxiety in children and adolescents: A meta-analytic review. *Clinical Psychology Review*, 32, 251-262

Richards, W. A. (2017). Psychedelic psychotherapy: insight from 25 years of research. *Journal of Humanistic Psychology, 57*(4), 323-337. doi:10.1177/0022167816670996

Rickels, K., & Rynn, M. (2001). Overview and clinical presentation of generalized anxiety disorder. *Psychiatric Clinics of North America, 24*(1), 1-17. doi:10.1016/S0193-953X(05)70203-3.

Roberts, T. B. (2016). The entheogen reformation. *Journal of Transpersonal Psychology, 48*(1), 26.

Robinson, E., Titoy, N., Andrews, G., McIntyre, K., Schwenche, G., Solley, K. (2010). Internet

treatment for generalized anxiety disorder: a randomized controlled trial comparing clinicians vs. technician assistance. *Plos One, 5*(6), e10942.doi:10.1371/journal.pone.0010942.

Robinson, K. J., Rose, D., & Salkovskis, P. M. (2017). Seeking help for obsessive compulsive disorder (OCD): A qualitative study of the enablers and barriers conducted by a researcher with personal experience of OCD. *Psychology and Psychotherapy: Theory, Research and Practice, 90*(2), 193-211. doi:10.1111/papt.12090.

Rosa-Alcazar, A., Sanchez-Meca, J., Gomez-Conesa, & Marin-Martinez, F. (2008). Psychological treatment of obsessive-compulsive disorder: A meta-analysis. Clinical Psychology Review, 28, 1310-1325

Ross, S., Bossis, A., Guss, J., Agin-Liebes, G., Malone, T., Cohen, B., . . . Schmidt, B. (2016). Rapid and sustained symptom reduction following psilocybin treatment for anxiety and depression in patients with life-threatening cancer: A randomized controlled trial. Journal of Psychopharmacology, 30, 1165-1180. doi:10.1177/0269881116675512

Roszak, T. (1992). The voice of the earth an exploration of Ecopsychology. Grand Rapids: Phanes Press, INC..

Roszak, T. (1995). Where psyche meets gaia. In T. Roszak, M. E. Gomes, & A. D. Kanner (Eds.), *Ecopsychology; restoring the earth healing the Mind* (pp. 1–17). San Francisco: Sierra Club Books.

Rowa, K., Antony M. M., & Swinson R. P. (2000). Behavioural treatment of obsessive compulsive disorder. *Behavioural and Cognitive Psychotherapy,* 28, p. 353-360.

Rowney, J., Hermida, T., & Malone, D. (2010). Anxiety disorders. Retrieved from

http://www.clevelandclinicmeded.com/medicalpubs/diseasemanagement/psychiatry-psychology/anxiety-disorder/

Rufer, M., Albrecht, R., Zaum, J., Schnyder, U., Mueller-Pfeiffer, C., Hand, I., & Schmidt, O. (2010). Impact of alexithymia on treatment outcome. A naturalistic study of short-term cognitive behavioural group therapy for panic disorder. *Psychopathology, 43*(3), 170-179. doi:10.1159/000288639.

Sagath, (2014). The value of integrating psychedelic perspectives. *The Nexian*. Retrieved from http://the-nexian.me/home/knowledge/75-the-value-of-integrating-psychedelic-perspectives

Salzer, S., Jaeger, U., Kreische, R., Kachele, H., Leichsenring, F., Leweke, F., . . . Winkelbach, C. (2009). Short-term psychodynamic psychotherapy and cognitive-behavioural therapy in generalized anxiety disorder: a randomized, control trail. *Americal of Journal Psychiatry, 166*(8), 875-881. doi:10.1176/appi.ajp.2009.09030441.

Sasson, Y., Zohar, J., Chopra, M., Lustig, M., Iancu, I., & Hendler, T. (1997). Epidemiology of obsessive-compulsive disorder: A world view. *Journal of Clinical Psychiatry, 58*, 7-10.

Schauer, M, & Elbert, T. (2010). Dissociation following traumatic stress etiology and treatment. *Zeitschriff Fur Psychologie-Journal of Psychology, 218*(2), 109-127. doi:10.1027/0044-3409/a000018

Schmid, Y., Enzler, F., Gasser, P., Grouzmann, E., Preller, K. H., Vollenweider, F. X., Brenneisen, R., Muller, F., Borgwardt, S., Liechti, M, E. (2015). Acute effects of lysergic acid diethylamide in healthy subjects. *Biological Psychiatry, 78*(8), 544-553.

Segool , N.K. & Carlson, J. S. (2008). Efficacy of cognitive-behavioral and pharmacological

treatments for children with social anxiety. *Depression and Anxiety*, 25, 620-631. doi:10.1002/da.20410.

Seip, R. (2006). Speaking freely: take the terror out of giving presentations with these tips. *Journal of Kitchen and Bath Business, 53*(10), p. 42.

Sempic, J., Aldrige, J., & Becker, S. (2003). *Social and therapeutic horticulture: Evidence and messages from research*. Leicestershire: Centre for Child and Family Research, Loughborough University

Sessa, B. (2007). From sacred plants to psychotherapy: The history and re-emergence of psychedelics in medicine. Paper presented at the, *17* S215-S216.

Sessa, B. (2014). Why psychiatry needs psychedelics and psychedelics need psychiatry. *Journal of Psychoactive Drugs, 46*(1) 57-62.

Shaw, L. (2016). How to overcome a fear of public speaking. *People Management,* 52.

Shields, M. (2004). Social anxiety disorder – beyond shyness. *How healthy are Canadians? Statistics Canada Annual Report*. Retrieved from https://www.statcan.gc.ca/daily-quotidien/041026/dq041026b-eng.htm

Sisgold, S. (2011). *Are you glossophobic*? Retrieved from https://www.psychologytoday.com/blog/life-in-body/201108/are-you-glossophobic

Slade, A., & Aber, J. L. (1992). Attachment, drives and development: Conflicts and convergences in theory. In J. W. Baron, N. M. Eagle, & D. L. Wolitzky (Eds.), Interface of psychoanalysis and psychology (pp. 154-185). Washington, DC: American Psychological Association.

Stanley, M., Beck, J. G., Novy, D., Averill, P., Swann, A., Diefenbach, G., & Hopko, D. (2003).

Cognitive-behavioral treatment of late-life generalized anxiety disorder. *Journal of Consulting and Clinical Psychology*, 71, 309-319

Statistics Canada. (2004). Panic disorder. Retrieved from https://www.statcan.gc.ca/daily-\ quotidien/041129/dq041129b-eng.htm

Statistics Canada. (2015). *Section b anxiety disorders*. Retrieved from http://www.statcan.gc.ca/pub/82-619-m/2012004/sections/sectionb-eng.htm

Stein, M. B., & Kean, Y. M. (2000). Disability and quality of life in social phobia: epidemiologic findings. *American Journal of Psychiatry, 157*(10), 1606-1613. doi:10.1176/appi.ajp.157.10.1606

Stein, M. B., Gorman, J. M. (2001). Unmasking social anxiety disorder. *Journal of Psychiatry & Neuroscience, 26*(3): 185-9.

Stewart, R., & Chambless, D. (2009). Cognitive-behavioral therapy for adult anxiety disorders in clinical practice: A meta-analysis of effectiveness studies. *Journal of Consulting and Clinical Psychology* 77, 595-606. doi:10.1037/a0016032.

Stobie, B., Taylor, T., Quigley, A., Ewing, S., & Salkovskis, P. M. (2007). ‘Contents may vary’: A pilot study of treatment histories of OCD patients. *Behavioural & Cognitive Psychotherapy*, 35, p. 273– 282. doi:10.1017/S135246580700358X

Stuart-Hamilton, I. (2007). *Dictionary of Psychological Testing, Assessment and Treatment* (2nd ed.). London, Philadelphia: Jessica Kingsley Publisher.

Swiller, H.I. (1988). Alexithymia: treatment utilizing combined individual and group psychotherapy. *International Journal of Group Psychotherapy* 38, 47–61.

Tapper, J. (2011). Psychedelic healing: the promise of entheogens for psychotherapy and spiritual development. *Library Journal*, *136*(2), 80.

Taylor, G.J. (1976). Alexithymia and the counter-transference. *Psychotherapy and Psychosomatics* 28, 141–147

Taylor, G. J. (1977). Alexithymia and the counter-transference. Psychotherapy and Psychosomatics, 28, 141-147.

Taylor, K. (2007). *Considering holotropic breathwork.* Santa Cruz, CA: Hanford, Mead.

Taylor, S., Asmundson, G. J. G., & Wald, J. (2007). Psychopathology of panic disorder. *Psychiatry, 6*(5), p. 188-192. doi:10.1016/j.mppsy.2007.02.004

Ted. (2016, December 1). Simeon Keremedchiev: psychedelics: effects on the human brain and physiology. Retrieved from https://www.youtube.com/watch?v=FyAgx_tzh80

Ted. (2012, March 14). Sandra Ingerman: experiencing the shamanic journey. Retrieved from https://www.youtube.com/watch?v=nQYvFvmkvvU

The National Academies Press; and U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (2009). *Risk and protective factors for mental, emotional, and behavioral disorders across the life cycle. Retrieved from* http://dhss.alaska.gov/dbh/Documents/Prevention/programs/spfsig/pdfs/IOM_Matrix_8%205x11_FINAL.pdf

Thesaurus. (2018a). Anxiety. Retrieved from http://www.thesaurus.com/browse/anxiety?s=t

Thesaurus. (2018b) Fear. Retrieved from http://www.thesaurus.com/browse/fear?s=t

Tillich, P. (1952). The courage to be. New Haven, CT: Yale University Press.

Thompson, K., Hannan, S., & Miron, L. (2014). Fight, flight, and freeze; threat sensitivity and emotion dysregulation in survivors of chronic childhood maltreatment. *Personality and Individual Differences, 69*, 28-32. doi:10.1016/j.paid.2014.05.005

Traumadissociation.com (n. d.). complex post traumatic stress disorder. Retrieved from http://traumadissociation.com/complexptsd

Tully, S. (2017). *Down the rabbit hole: a look at the therapeutic healing potential of psychedelics.* Published masters thesis. City University of Seattle, Vancouver, B.C.

Tupper, K., Wood, W., Yensen, R., & Johnson, M. (2016). Psychedelic medicine: A re-emerging therapeutic paradigm. *Canadian Medical Association Journal, 187*(14): 1054-1059.

Turner, J. H. (1996a). The evolution of emotions in humans: A Darwinian-Durkheimian analysis. Journal for the Theory of Social Behaviour, 26, 1–34.

Turner, J. H. (1996b). Toward a general sociological theory of emotions. Journal for the Theory of Social Behavior, 29, 132–162.

Tyls, F., Palenicek, T., & Horacek, J. (2014). Psilocybin --summary of knowledge and new perspectives. *European Neuropsychopharmacology, 24*, 342-356.

Uy, S. (2017). Whimsical tales of the untold peculiarity. Unpublished art.

Uy, S. (2016). Psychopharmacology literature review: psychedelic therapy. Unpublished Work, City University of Seattle in Vancouver.

Vanin, J., & Vanin, S. (1999). Blocking the cycle of panic disorder – ways to gain control of the fear of fear. *Postgraduate Medicine, 105*(5), 141-146. doi:10.3810/pgm.1999.05.1.740.

Villoldo, A. (1977). An introduction to the psychedelic psychotherapy of Salvador roquet. *Journal of Humanistic Psychology, 17*(4), 45-58. doi:10.1177/002216787701700406

Vollenweider, F., R. Jones, and M. Baggott. (2001) Caveat Emptor: Editors Beware. Neuropsychopharmacology 24(4), p. 461

Wallach, H. S., Safir, M. P., & Bar-Zvi, M. (2009). Virtual reality cognitive behavioural therapy

for public speaking anxiety: a randomized clinical trial. *Behaviour Modification, 33*(3), 314-338. doi:10.1177/0145445509331926

Watts, A. (1962). The joyous cosmology. New York, NY: Pantheon.

Watson, H. & Rees, C. (2008). Meta-analysis of randomized, controlled treatment trials for pediatric obsessive-compulsive disorder. Journal of Child Psychology and Psychiatry and Allied Disciplines, 49, 489-498.

Weissman, M. M., Wickramaratne, P., Warner, V., Nomura, Y., Pilowsky, D., & Verdeli, H. (2006). Offspring of depressed parents: 20 years later. *American Journal of Psychiatry, 163*(6), p. 1001-1008. doi:10.1176/ajp.2006.163.6.1001

Wittchen, H., & Fehm, L. (2003). Epidemiology and natural course of social fears and social phobia. *Acta Psychiatrica Scandinavica, 108*(s417), 4-18. doi:10.1034/j.1600-0447.108.s417.1.x

Wittchen, H. & Fehm, L. (2001). Epidemiology, patterns of comorbidity, and associated disabilities of social phobia. *Psychiatric Clinics of North America, 24*(4), 617-641. doi:10.1016/S0193-953X(05)70254-9.

Wittchen, H. U., Kessler, R. C., Pfister, H., & Lieb, M. (2000). Why do people with anxiety disorders become depressed? A prospective-longitudinal community study. *Acta Psychiatrica Scandinavica, 126*(6), 411-425. doi:10.1111/j.1600-0447.2012.01886.x

World Health Organization. (2016). Complex post traumatic stress disorder – ICD-11 Beta Draft (joint linearization for mortality and morbidity statistics. Retrieved from https://icd.who.int/dev11/l-m/en#!/http%3A%2F%2Fid.who.int%2Ficd%2Fentity%2F585833559

World health organization. (2017). *Depression and Other Common Mental Disorders Global*

Health Estimates. Retrieved from http://apps.who.int/iris/bitstream/10665/254610/1/WHO-MSD-MER-2017.2-eng.pdf

Yehuda, R. (2004). Risk and resilence in posttraumatic stress disorder. *Journal of Clinical Psychiatry,* 65, 29-36.

Youth.Gov. (n. d.). Risk and protective factors. Retrieved from https://youth.gov/youth-topics/youth-mental-health/risk-and-protective-factors-youth

Zeitlin, S. B., McNally, R. J., & Cassiday, K. L. (1993). Alexithymia in victims of sexual assault; An effect of repeated traumatization? American Journal of Psychiatry, 150, 661-663.

Zohar, J., Sasson Y., Chopra, M., Amiaz, R., Nakash, N. (2003). Obsessive-compulsive disorder. In: Nutt D, J., Ballenger, J. C., Editors. Anxiety Disorders. Malden, MA, USA: Blackwell Science Ltd, p.83-94.