Practices that Facilitate the Experience of Post-Traumatic Growth (PTG) for Therapists Working with Clients Who Have Complex Trauma

By

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Abstract

This literature review introduces the emerging concept of post-traumatic growth (PTG) in contrast to the extensively studied post-traumatic stress disorder (PTSD). While PTSD has been the focal point in trauma research, PTG is gaining recognition for its potential to transform negative experiences into positive growth. This review explores PTG through the theoretical lens of Polyvagal Theory, with additional insights from resilience portfolios, poly-strengths, and ecological systems theory. The review examines the impact of adverse childhood experiences (ACEs) and complex trauma on long-term health and psychological well-being, highlighting the gaps in research related to PTG. By synthesizing existing studies and identifying limitations in the current literature, I aim to provide mental health practitioners with strategies through my interpretation of facilitating PTG among individuals who have experienced complex trauma. Ultimately, the paper seeks to enhance therapeutic practices and contribute to the broader field of counseling psychology by offering a new perspective on fostering resilience and growth in the face of adversity.

Keywords: post-traumatic growth, trauma, polyvagal theory, adverse childhood experiences, bottom-up processing, top-down processing

Dedication

To my parents, whose unwavering support for their children continues to this day. I am deeply grateful for all you both sacrificed in immigrating to a foreign country. I recognize not only the joy this experience has brought you but also the suffering you endured. To my brothers, who have always encouraged me and guided me to reach my potential—I can always count on you both to have my back, no matter the decisions I make in life. To my niece, your presence in my youth influenced my awareness and inspired me to focus on being a positive role model. To my loved ones and friends, I am thankful for your words of encouragement and love. Finally, to those who have taught me valuable life lessons—your influence has been pivotal in shaping my relentless drive and motivation. I wouldn't be who I am today without the growing pains. To those reading this who have faced ACEs and complex trauma, remember you are not alone; many share similar stories. You can overcome the suffering you've endured—continue healing, releasing, and growing, one step and one day at a time.

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To all my undergraduate professors at Mount Royal University and graduate professors at City University of Seattle—your mentorship and passion have been key in developing a more objective understanding of the world and myself. To my spiritual teachers and gurus, I am deeply grateful for your guidance during my times of darkness; through many moments of rebuilding the self, I have been reborn with a new cognitive perspective on how to perceive this world through a lens of compassion and unconditional love. To my colleagues and the new friends, I've met along the way, I am fortunate to have shared this journey with you, and I eagerly anticipate seeing how our lives unfold as we advance in our careers.

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Chapter One: Introduction

In contemporary literature, the focus on posttraumatic stress disorder (PTSD) has been prominent, overshadowing the emerging concept of post-traumatic growth (PTG). As PTG continues to gain recognition as a valuable area of study, it is imperative to explore its significance. While PTSD has been extensively researched, PTG remains a relatively newer concept with gaps in research. I will address these gaps through the theoretical lens of the Polyvagal Theory and, at times, cross into the resilience portfolios and poly-strengths and ecological systems theory. By synthesizing previous research findings and identifying areas of limitation in the existing literature, this literature review aims to provide valuable insights into practices that could facilitate PTG and contribute to the well-being of individuals who have gone through adverse experiences.

Overview of the Topic

According to the World Health Organization (WHO, 2020), adverse childhood experiences (ACE) encompass the complex stress and trauma that an individual experiences during childhood, which has the potential to affect multiple aspects of development negatively. ACEs are multiple facets of adversity that have been identified in "both direct child maltreatment (abuse and neglect) and a wider set of experiences related to family and household circumstances (termed 'household dysfunction'). The latter included living in an environment of adult domestic violence, mental illness or substance misuse, experiencing parental separation or having an adult household member in prison" (Walsh et al., 2019, para.1). The Joining Forces for Children (2021) website lists ten ACEs: physical abuse, emotional abuse, sexual abuse, physical neglect, emotional neglect, household substance abuse, household mental illness, parental separation or divorce, witnessing domestic violence, and incarceration of a household member. Gentile (2022) state that children who experienced more than four were at greater risk of forming behavioral

issues, future health complications, and even disease. ACEs are potential traumatic events that occur under the age of seventeen and can vary in duration.

Heidinger (2022) found that “three in ten (27%) Canadians over age 15 have experienced childhood victimization, that is, at least one instance of physical or sexual abuse by an adult before age 15” (para.1). The research showed that women were more likely to experience sexual abuse, yet both sexes showcased a greater risk of adverse adult outcomes. Heidinger noted that “the majority (69%) of Canadians who were physically abused as children reported that the most serious incident was perpetrated by a parent or step-parent” (para.1). As concluded by the WHO (2020), critical stages of brain development are compromised, leading to improper functioning of the central nervous system and immune system.

PTSD is a condition that results from either witnessing or experiencing a traumatic event. The Mayo Clinic (2022) highlighted that chronic stress that occurs post-incident results in four types of symptoms of PTSD, including “intrusive memories, avoidance, negative changes in thinking and mood, and changes in physical and emotional reactions” (para.2). Over the last few decades, there have been studies that have focused on strategies and methods to support clients with PTSD. However, in the previous decade, there have been new findings surrounding PTG in which adults have surpassed their ACEs.

Complex trauma is described as chronic, long-term exposure to interpersonal events which often occur within a caregiving relationship and have more profound effects on the individual’s overall development and psychological health (Substance Abuse and Mental Health Services Administration, 2014). Complex trauma can significantly impact child development due to severe and pervasive interpersonal traumatic events. Occurring during critical developmental periods, long-term exposure—typically involving a parent or caregiver—leads to challenges with attachment, dysfunctional regulation, and impaired cognitive functioning (Matte-Landry et al.,

2023). Beyond the core symptoms of PTSD, Gidzgier et al. (2023) observed that “the diagnosis of complex PTSD includes three additional groups of symptoms: emotion regulation difficulties, difficulties maintaining relationships and negative self-concept” (para.1).

Therefore, ACEs are categories of specific adverse experiences that happen to the individual under the age of 18 and have shown to have significant long term negative impacts on health and wellbeing. Meanwhile complex trauma is known to be more broad, chronic in nature and has a greater focus on interpersonal relationships and environments. An individual can have both ACEs and complex trauma, but if an individual is an adult experiencing a traumatic event for the first time, they would not be labeled as having ACEs, but rather, only having complex trauma. So, complex trauma has a more pervasive and deep-rooted effect on psychological and emotional functioning due to the high probability of early onset, chronic nature, and interpersonal context. It disrupts critical developmental stages, often involves betrayal by caregivers, and leads to insecure attachment. Due to the trauma being chronic in nature, an individual is overwhelmed and cannot build positive and proactive coping mechanisms and strategies, resulting in emotional dysregulation, dissociation, and negative self-perception. Neurobiological changes and a dysregulated stress response further impair cognitive and behavioral functioning, leading to maladaptive coping strategies and long-term health issues, including mental health disorders and chronic physical conditions.

Psychologists Richard Tedeschi and Lawrence Calhoun coined the term PTG in the mid-1990s, stating that individuals have the capability to transform their negative experiences into positive growth (Tedeschi et al., 2018). The Post-Traumatic Growth Inventory (PTGI) is a measurement tool administered to participants in a study to test for PTG. Assessing growth in multiple domains, such as: appreciation of life, relationships with others, new possibilities in life, personal strength, and spiritual change, researchers are able to distinguish how individuals have

grown through their adversity. Existence will have multiple moments of crisis and change due to the ever-evolving social landscape and environment. Thus, it is about learning new strategies and having a toolkit on how to cope with the dynamic development of the human brain and body.

Purpose Statement

This literature review aims to explore current practices and identify new perspectives that could facilitate PTG for therapists working with clients who have experienced complex trauma. By exploring the different methods to facilitate PTG through the lens of the Polyvagal Theory, I hope to synthesize existing research, highlight gaps in the literature, and provide a different perspective into new insights. Ultimately, the goal with this paper is to inform mental health practitioners about new and emerging evidence-based strategies that support the healing and growth of individuals affected by complex trauma. The research question is as follows: How do different therapeutic interventions facilitate PTG among individuals with complex trauma, and what are the underlying mechanisms, moderators, and mediators involved in this process?

Theoretical Frameworks

Polyvagal Theory and Its Application in Trauma Therapy

Polyvagal Theory provides a framework for understanding the autonomic nervous system (ANS) role in social behavior and individual emotional regulation. It provides a scientific perspective on vertebrate neuroanatomy and neurophysiology, specifically on understanding the neural mechanisms around threat reactions and feelings of safety. These triggers are viewed as cues which help us to understand what supports health, growth and interpersonal evolution (Porges, 2022). This includes the physiological responses to stress and trauma stored in the body (Sullivan et al., 2018). Polyvagal Theory proposes that the ANS is not only governed by the sympathetic and parasympathetic nervous system but is believed to have a third branch called the "social engagement system," called the "ventral vagal complex." This third branch is activated in

a safe and non-threatening social environment, allowing the individual the capacity for social interaction, connection, and communication. As explored in Sullivan et al.'s research (2018), mind-body therapies such as yoga practices facilitate bidirectional communication between the brain and body. Through the use of top-bottom and bottom-up processing techniques for self-regulation, yoga breeds resilience in the individual. The key concept of the theory poses that there is a hierarchy of responses through three neutral circuits: (1) the ANS responses to environmental cues, with the ventral vagal complex (social engagement system) being the most evolved and adaptable response system, (2) followed by the sympathetic nervous system (mobilization system), (3) and then the dorsal vagal complex (immobilization system). Sullivan et al. observed that Polyvagal Theory has significant implications for understanding trauma response, suggesting that an individual may shift between the three neural circuits depending on the perceived threat level. However, the goal is to return to safety to engage with the social environment.

In times of adversity, resilient portfolios include a range of psychological, emotional, and practical applications that can serve as a safety net (Hamby et al., 2018). It is the blend of an individual's current resources, skills, and coping strategies that can be utilized to recover from adversity. This is shaped by the individual's experience in a specific context, where they draw from their resilient portfolio toolkit and learn through trial and error how to maintain life balance. Hamby et al. noted that poly-strengths expand on this concept by considering an individual's unique strengths across various areas of life—physical, mental, emotional, social, and spiritual. Further, the researchers observed that it encompasses a diverse range of abilities that support the complex aspects of both mind and body, utilizing different coping strategies to not only cope but thrive in time. This concept and theory is evolving as new research is found, and the researchers noted that resilience from adversity can have positive adaptive results.

Ecological Systems Theory

Ecological systems theory provides a framework for understanding human development through various lenses that consider different environmental levels influencing the individual (Folke et al., 2001). Developed by Urie Bronfenbrenner, the theory encompasses everything from immediate surroundings to broader societal groups, forming a complex network of relationships. According to Folke et al., there are five rings of influence: Microsystem, Mesosystem, Exosystem, Macrosystem, and Chronosystem. Ecological systems theory goes on to highlight that our reality is shaped not only by immediate surroundings (microsystems) but also by socio-historical context. Clark (2024) argued that "there are social-ecological synergies between resilience and PTG, which, in turn, are highly relevant to how we think about and study growth" (para.1). When understanding PTG through the lens of ecological systems theory, being embedded in the larger system reveals more factors that are believed to contribute to resilience and the practices that facilitate growth after complex trauma. Resilience is a necessary ingredient of long-term sustainability, as it increases the ability to adapt with change. Explored through the interconnected systems of nature and nurture known as social-ecological resilience, Folke et al. (2001) observed that developing management strategies to further evolve and strengthen this internal perceived infrastructure is key.

Methodology

The literature review for this Capstone analysis was initially organized by following the table of contents, which was structured around my curiosity and inspiration drawn from the experiences of those I care about who have gone through similar challenges. The intention is to guide the reader through my interpretive thought process. The table of contents features themed sections followed by appropriate subthemes. References were identified through keyword searches. Peer-reviewed papers vary in research design, methods, and procedures, tailored to the

individual studies conducted. I aimed to select papers that gather and analyze data from relevant sample populations: individuals who have experienced trauma. Several colleagues, along with two faculty professors at the City University of Seattle, have proofread the paper. Also, the literature review went through final revisions through a third-party editor.

Contributions to the Field

The topic of PTG is a newer emerging concept. This literature review adds another piece to the puzzle, contributing to the field of counseling psychology by offering valuable insights into promoting resilience and PTG among individuals with complex trauma. By equipping mental health therapists with information on effective interventions and underlying mechanisms, it enhances practitioners' ability to foster resilience and growth, ultimately improving therapeutic outcomes and enriching the practice of counseling psychology. I also aspire to be among those who emphasize the critical importance of word choice in the therapeutic relationship when working with individuals who have experienced complex trauma. Therapists must reconsider and reshape their narratives about those who have endured multifaceted trauma, recognizing that clients need not just an advocate, but someone who truly believes in their ability to transcend past experiences. Our capacity for growth and change is continuous throughout life, and our experiences accumulate and shape us.

Positionality Statement

I am a first-generation Polish-Canadian and the first in my family to pursue a university degree, as previous generations lacked the opportunity and financial means to pursue education beyond a high school diploma. As a heterosexual white female, I recognize the potential biases and privileges I may hold in the geographical location where I currently reside. I am committed to remaining aware of my limitations and blind spots, engaging in continuous self-reflection to uncover these layers. Like the philosopher René Descartes, I practice ongoing introspection to

peel away layers of the self, seeking to understand the roots of my thoughts, emotions, and behaviors. Being in my mid-thirties, my perspective is shaped by my life experiences and the era I was born into, which have influenced my worldview. Other aspects of my social location that have affected the writing of this Capstone include being bilingual, having Catholic religious influences, and being the youngest in a family of three.

My personal experiences with ACEs and complex trauma have significantly shaped my approach to navigating environmental stressors positively, leading me to develop coping mechanisms and clinical interventions through only holistic methods. By incorporating a variety of strategies and therapeutic interventions, and leveraging my resilient portfolios and poly-strengths, I have experienced PTG in multiple areas of my life. This journey, which employs both bottom-up and top-down modalities from various theoretical frameworks, has not only helped me process past experiences but also fostered personal growth. As a result, I have developed greater emotional intelligence and a deep appreciation for various therapeutic approaches and coping strategies, all while considering my understanding of my social-ecological system. These experiences drive my commitment to researching and providing mental health professionals with a comprehensive roadmap for supporting individuals coping with complex trauma.

Outline of Capstone Project Chapters

The outline of the paper is as follows: Chapter Two is the literature review and consists of three sections. Section One begins by laying the foundation for the more prominent types of complex trauma, exploring subsections of chronic child abuse and neglect, domestic violence, and prolonged family dysfunction. Section Two delves into the conceptual framework of PTG, examining its mechanisms, moderators, and mediators. Section Three covers treatments and strategies to facilitate PTG in clients with complex trauma, including an understanding of

bottom-up and top-down processing models. Finally, Chapter Three concludes with a discussion that includes practical applications for therapists to facilitate and educate their clients. It explores therapeutic interventions through a polyvagal lens, considering poly-strengths, and examines how the ecological systems model influences the crystallization of PTG.

Chapter Two: Literature Review

Section One: Complex Trauma Types

1.1 Chronic Child Abuse and Neglect

Gonzalez et al. (2023) noted that "Child maltreatment encompasses all forms of physical and emotional ill-treatment, sexual abuse, neglect, and exploitation that cause actual or potential harm to a child's health, development, or dignity. The four main types of abuse are neglect, physical abuse, psychological abuse, and sexual abuse" (para.1). As explored in Gonzalez et al., neglect may include a lack of health care, education, and unmet basic needs; physical abuse can include beating, shaking, and even burning; psychological abuse includes verbal name-calling and humiliation; and sexual abuse involves crossing lines of consent that the child is too young to comprehend.

Abusive behavior results from a complex interplay of various factors, including parental, family, and community influences. Factors within caregivers include a history of their own childhood abuse, substance addiction which impairs judgment and increases aggression, mental health issues, and a lack of knowledge about proper childcare. Family factors often relate to domestic violence, social isolation, and stressors such as unemployment, financial problems, or illness. Community factors include economic hardship, which increases household stress, cultural norms that may condone abuse as a form of discipline, and a lack of social services. Child abuse and neglect are known across all races, ethnicities, and socioeconomic groups and are usually dependent on stressors that cause the negative event to unfold.

Prevalence and Statistical Data

Child abuse and neglect are pervasive issues that affect children across all demographics and cultures. As found in Cotter's (2021) review of a recent 2019 General Social Survey (GSS), 62% of respondents experienced harsh parenting (e.g., spanking, emotional abuse, physical

neglect), while 22% experienced physical abuse; 21% were exposed to physical violence committed by a parent or step-parent or guardian against another parent or guardian, caregiver, adult or child; and 6% experienced sexual abuse. These statistics alone reveal the necessity for comprehensive prevention and intervention strategies. According to Frank and Bader (2023), "Overall, about 6 in 10 individuals reported experiencing some type of child maltreatment before they were 15 years old (59.7%)." As evidenced by the significant rates of child maltreatment cases linked to economic hardship, we are observing an increase across different regions and communities, exacerbated by current world affairs and other stressors.

Psychological and Emotional Impacts

The psychological impact on a child can be profound and long-lasting. Emotional and behavioral issues are common, with an increased risk of developing mood disorders, PTSD, and boys being more likely to exhibit aggression and conduct disorders (Petersen et al., 2014). According to Petersen et al., abuse can lead to cognitive and academic problems due to impaired brain development, resulting in decreased cognitive functioning. This, in turn, affects the child's academic achievements, as they may have difficulty concentrating and experience higher levels of absenteeism. Relationally, insecure attachment issues can arise from difficulties trusting others. Petersen et al. noted that as the child grows up, they are at a higher risk of developing mental health issues and may turn to substance abuse to cope with emotional pain.

Childhood sexual abuse (CSA) often leads to common effects such as intrusive thoughts, hypervigilance, and avoidance behaviors. Survivors may experience persistent feelings of sadness, low self-worth, panic attacks, social anxiety, dissociation, substance abuse, and eating disorders, as well as sexual dysfunction or hypersexuality that can result in risky behavior such as sex work (Steil et al., 2022). Common emotions with CSA include shame, guilt, fear, mistrust, and emotional dysregulation.

Long-Term Outcomes

Child abuse and neglect can result in a lifelong array of emotional, psychological, and physiological issues (Petersen et al., 2014). Strathearn et al. (2020) brought attention to the long-term adverse outcomes related to maltreatment, which include "cognitive disability, anxiety and depression, psychosis, teen-aged pregnancy, addiction disorders, obesity, and cardiovascular disease" (para. 4). Additionally, the likelihood of repeating the cycles of abuse with their own children is high. However, little is known about the long-term effects of different types of child maltreatment, as the majority of research focuses on sexual abuse. Consequently, physical abuse, emotional abuse, and neglect are not fully understood due to the limited attention given to these types of maltreatment. Moreover, Strathearn et al. noted that "most current evidence comes from cross-sectional studies, which may be subject to recall bias, where an outcome status (such as depression) may influence the recall of exposure (i.e., previous maltreatment)" (para. 5). The researchers also remarked that few studies have adequately controlled for confounding variables that can predispose an individual to both child maltreatment and later adverse health outcomes. Long-term effects of CSA can include difficulties in forming and maintaining healthy relationships, an increased risk of revictimization, chronic health problems, impaired functioning in various aspects of life, and challenges with parenting.

1.2 Domestic Violence

Domestic violence is a pattern of behavior used to gain or maintain power and control over an intimate partner. The World Health Organization (WHO, 2021) defined intimate partner violence (IPV) as "behavior by an intimate partner or ex-partner that causes physical, sexual or psychological harm, including physical aggression, sexual coercion, psychological abuse and controlling behaviors" (para. 2).

IPV is influenced by various factors, including ACEs, socioeconomic factors, societal and religious norms, psychological factors, and substance abuse. IPV often has intergenerational roots. Through numerous studies, it seems that due to ACEs, many individuals repeat the cycle of pain and suffering (Shakoor et al., 2022). When a child is raised in a home where violence is present, they may grow up conditioned to see it as normal. Perhaps due to these heightened states of arousal caused by childhood conflict, children from dysfunctional homes could find comfort in repeating these familiar patterns.

Prevalence and Statistical Data

The World Health Organization (WHO, 2021) found that across 161 countries, 1 in 3 women has experienced IPV by an intimate partner or non-partner sexual violence. Specifically, women are more often seen in victim roles, while men are more likely to be perpetrators (Shakoor et al., 2022). Culture and society can also normalize this type of behavior and perpetuate gender inequality. The WHO has declared it a global health concern, affecting individuals across all educational, socioeconomic, and ethnic backgrounds (Government of Canada, 2022). When children are exposed to IPV, the Government of Canada has described it as a form of maltreatment due to its long-lasting psychological effects on their development.

Police-reported data revealed that in 2019 “of the 107,810 people aged 15 and over who experienced IPV, 79% were women” (Government of Canada, 2022, para. 13). The same Government of Canada report found that “Young women were five times more likely than women aged 25 years and older to have been sexually assaulted (5% versus 1% respectively), three times more likely to have been physically assaulted (6% and 2%, respectively), and almost three times more likely to have been emotionally, financially or psychologically abused by an intimate partner in the previous 12 months preceding the survey (28% versus 10%)” (para.15).

This statistic shows the sobering effects of ACEs and their impact on young girls and women entering a romantic relationship.

Psychological and Emotional Impacts

Women are more often seen in victim roles, while men are more likely to become perpetrators (Shakoor et al., 2022). Culture and society can also normalize this behavior and perpetuate gender inequality. As with any abuse, IPV can lead to numerous physiological, psychological, behavioral, and emotional issues for those who experience it. According to Smith et al. (2023), emotional abuse directed at the mother in cases of IPV negatively impacts the child's mental, physical, social, and cognitive development. The researchers observed that these negative outcomes were more prevalent in families that had experienced social adversity. Hussain et al. (2020) found that abused women reported generally low levels of psychological and mental well-being, leading to increased distress, anxiety, depression, and a loss of emotional and behavioral control. This is consistent with the findings of Gibbs et al. (2018), which showed that women who have experienced IPV have higher levels of depression and even suicidal ideation.

Long-Term Outcomes

Those exposed to IPV are at risk of long-term physiological, psychological, and emotional damage, perpetuating a cycle of dysfunction and abuse across generations. Along with the impairment to all facets of development in children exposed to domestic violence, disturbances of this nature increase the risk of individuals within the household developing PTSD (Han Almış et al., 2020). Additionally, behavioral and social effects can lead those in the household who have witnessed IPV to develop aggression or withdrawn behavior, substance abuse to numb the pain, and chronic health issues.

A woman who has experienced ongoing abuse from her intimate partner may develop a psychological condition called battered woman syndrome (BWS). This condition is characterized by patterns of behavior and psychological symptoms, such as learned helplessness and hypervigilance (Joseph & Canlas, 2023). In legal contexts, Joseph and Canlas noted that BWS has been used to defend women who have harmed or killed their abusers, arguing that their actions were in self-defense due to a perceived threat to their life from prolonged abuse by their partner.

1.3 Prolonged Family Dysfunction

Prolonged family dysfunction occurs when a family operates in maladaptive ways, significantly affecting the emotional, psychological, and physical well-being of its members. This dysfunction can manifest through chronic conflict, poor communication, neglect and abuse, substance abuse, mental health issues, and parenting problems (Agorastos et al., 2018). This literature review will focus on the challenges associated with alcoholism within a family unit.

As described by the National Institute of Alcohol Abuse and Alcoholism (NIAAA, 2020), "alcohol use disorder (AUD) is a medical condition characterized by an impaired ability to stop or control alcohol use despite adverse social, occupational, or health consequences" (para. 1). AUD is classified under substance-related and addictive disorders in the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5-TR*; American Psychiatric Association, 2022). The American Psychiatric Association has outlined 11 criteria to diagnose individuals with mild (2-3 criteria met), moderate (4-5 criteria met), or severe (6 or more criteria met) AUD.

Developing alcoholism is influenced by both genetic and environmental factors. Family members struggling with the disease increase the likelihood of children continuing the cycle due to genetic predisposition and the modeling and conditioning experienced during upbringing. Peer groups and sociocultural factors can also influence a person towards alcohol use. In their meta-

analysis, Pachito et al. (2021) found that working longer hours may increase alcohol consumption and dependency. Other contributing factors include mental health issues, stressors, and socioeconomic status.

Prevalence and Statistical Data

The negative outcomes of AUD are extensive (Singh & Bhattacharjee, 2022). If the individual is the sole provider for the family, the situation can become even more distorted. The cost of alcohol can create significant financial strain within the household. Depending on the severity of the disorder and the frequency of intoxication, there is often a substantial gap in the individual's ability to share family responsibilities. This leads family members to adopt different roles to manage the situation. Without accessing help, Singh and Bhattacharjee found that family members are at risk of developing their own addictions due to a lack of protective factors, such as effective self-care strategies, healthy role models, and a strong social support network.

A news release by the Government of Canada (2021) brought attention to data from Statistics Canada, which showed that "nearly 6 million Canadians aged 12 and over report heavy drinking at least once a month. One in 5 Canadians aged 15+ met the criteria for "alcohol abuse or dependence" over their lifetime" (para. 9). Moreover, "heavy alcohol consumption is linked to more than 200 diseases and health conditions" (para. 9).

Psychological and Emotional Impacts

The negative emotions associated with AUD inevitably strain relationships and can lead to family breakdowns (Le Berre, 2019). When an individual is under the influence, they may not remember their actions or words, often resulting in verbal and physical violence towards loved ones due to heightened aggression. The addiction can also affect one's career and professional network, as colleagues and employers may no longer see the individual as reliable or trustworthy, potentially leading to job loss and financial instability for both the individual and

their family (Singh & Bhattacharjee, 2022). This financial strain is closely linked to family dynamics, as Walsh et al. (2019) found a clear relationship between socioeconomic position in childhood and the risk of experiencing ACEs and maltreatment.

Alcoholism significantly disrupts family dynamics in various ways. All members of a household with an alcoholic experience emotional distress (Cambron et al., 2018). Reactions can range from anxiety about future episodes, anger and depression during intoxication, guilt during sobriety and withdrawal periods, to shame and embarrassment if others become aware. Families often feel helpless and hopeless watching a loved one struggle with addiction, as they may not know how to provide the necessary support for sobriety (Singh & Bhattacharjee, 2022). It's common for the entire household to suffer from stress-related health problems, including sleep disturbances, digestive issues, mental health challenges, and impaired coping skills. Some family members may withdraw from social events due to embarrassment and fear of judgment, leading to feelings of isolation and reluctance to seek help. This isolation can perpetuate the cycle, as children in these environments are at a higher risk of developing the disorder themselves (Cambron et al., 2018).

The dysfunction stemming from AUD affects the entire family. Singh and Bhattacharjee (2022) noted that family members often adopt different roles, such as caretaker or enabler, while others may withdraw or develop feelings of bitterness. Growing up in such an environment can lead to a lack of trust towards the alcoholic and sometimes a reality where deception becomes common. The researchers observed that with so many variables and most members walking on eggshells, communication often breaks down because the core issue is never addressed.

Long-Term Outcomes

AUD is so complex within the family system that the term children of alcoholics (COAs) was recognized in the 1980s due to the short- and long-term negative effects on the individual.

COAs face numerous challenges and consequences from growing up in environments marked by unpredictability and chaos due to AUD. Growing up in such a toxic environment often involves levels of neglect and criticism from the parent with AUD (Singh & Bhattacharjee, 2022). The lack of stability and nurturing from both parents can also lead to the development of anxiety and depression due to the immense tension (Omkarappa & Rentala, 2019). COAs may feel responsible for their parent's addiction, resulting in feelings of guilt and shame (Singh & Bhattacharjee, 2022). Additionally, the high levels of chaos can make it difficult for them to express themselves, leading to low self-esteem, suppressed anger and resentment.

Naturally inclined towards isolation, COAs often struggle to build trusting relationships with others. This difficulty extends to romantic relationships, where they may find it hard to open up and regulate their emotions during disagreements and misunderstandings (Singh & Bhattacharjee, 2022). Due to the lack of boundary-setting during childhood, COAs may form dysfunctional connections as a default. Research has shown that those from challenging households often experience negative impacts on their academic performance, leading to decreased motivation and drive (Omkarappa et al., 2019).

It is common for COAs to have an increased risk of continuing addictive behaviors (Timothy et al., 2019). Without positive role models to learn healthy coping mechanisms, COAs often follow in the footsteps of the parent who abused alcohol. Without intervention and proper support, the emotional scars are usually too deep for the child to make changes on their own, often resulting in binge drinking and relapse.

A pattern has been observed where family members often develop enabling behaviors towards individuals with AUD, unintentionally reinforcing the cycle of addiction (Salonia et al., 2021). These behaviors arise from the need to create a survival framework within the context of the disease. This living arrangement is complex and varies for each person. Both the individual

with alcoholism and their loved ones often resort to denial as a common response. Salonia et al. observed that enablers may shield the individual from facing the negative consequences of their actions by cleaning up after them and protecting them from authority figures. This behavior avoids direct confrontation and addresses the core issue. Additionally, depending on the relationship, financial and emotional support may be provided to the struggling individual, sometimes including money that indirectly supports the addiction. Further, the researchers noted that enablers might assume responsibilities on behalf of the individual out of frustration or agitation, perpetuating a cycle where the person avoids changing their actions and continues to succumb to their drinking urges. COAs often develop codependent behaviors, which stem from their childhood environment and involve prioritizing the needs of others while neglecting their own desires and well-being. As they grow older, these behaviors can evolve, with siblings potentially continuing to shift roles within the family dynamic. Common codependent behaviors include excessive caretaking, challenges in setting boundaries, fear of abandonment, difficulty expressing emotions, suppression of anger, and a strong need to control their lives (Singh & Bhattacharjee, 2022).

Section Two: Post-Traumatic Growth

2.1 Concept and Theoretical Framework

Definition and Overview of PTG

Bryngeirsdottir and Halldorsdottir (2022) observed that “PTG is a positive psychological change by a person following severe difficulties and trauma” (para. 5). Previously, the experience of hardship was typically viewed through the lens of PTSD, where individuals were often diagnosed with a mental disorder. In contrast, PTG emphasizes the positive outcomes and personal growth that can arise from facing adversity. Resilience is referred to as bouncing back from difficulties, whereas PTG involves significant growth and transformation. PTG can lead to

a fundamental shift in an individual's overall perspective on life. According to Bryngeirsdottir and Halldorsdottir, the theory of PTG states that individuals can experience an enhanced overall sense of personal strength, find greater depth in relationships and a renewed appreciation for life. In other words, PTG is an all-round positive shift in reality across all aspects of life, in which a person develops a greater sense of purpose, improved self-esteem and awareness of importance in personal priorities and sense of time (Tedeschi et al., 2018).

Theoretical Models of PTG

Richard G. Tedeschi and Lawrence G. Calhoun developed the model for understanding PTG, which suggested that individuals can achieve meaningful change and growth by effectively processing their trauma (Dell'Osso et al., 2023). Their framework identified five domains that are associated with PTG that are the primary areas of growth: personal strength and self-perception; relationships with others; new possibilities and life perspectives; appreciation of life; and spirituality and meaning (Tedeschi et al., 2018). According to Tedeschi et al., when individuals are given adequate time and space to heal through various top-down and bottom-up processing methods, they can develop new beliefs and perspectives about themselves and the world.

Taku et al. (2021) described how the global validation of the theoretical model identifies three primary components of PTG. First, experiencing a traumatic event challenges a wide set of fundamental core beliefs about the self, others, and the world, compelling the individual to rebuild their cognitive system. Second, the way the individual cognitively processes the trauma—through either intrusive or deliberate rumination—correlates with either a negative or positive impact on personal growth. Third, self-disclosure is believed to foster PTG, but only if the individual's story is positively received by the listener. However, this third aspect is still not well researched.

Distinction Between PTG and Resilience

Resilience is the ability to bounce back to the original baseline prior to hardship. PTG transcends this baseline by achieving a higher level of psychological and emotional functioning (Dell'Osso et al., 2022). In other words, resilience is the capacity of the body and mind to adapt and recover from an event. On the other hand, PTG involves creating new patterns of personal development and transformation. As found in Brooks et al.'s (2021) research, "as people try to make sense of their experience, effortful cognitive activity is triggered that not only allows individuals to recover but propels them to a higher level of functioning than that which existed prior to the trauma" (para. 3). Both concepts coexist with resilience and provide the foundational building blocks necessary for sustaining PTG.

Post-Traumatic Depreciation (PTD)

Negative changes that can occur alongside PTG are known as post-traumatic depreciation (PTD). PTD can happen concurrently within the five domains of PTG (Taku et al., 2021). Though less commonly discussed, PTD represents the adverse psychological and physiological experiences individuals may endure following trauma.

2.2 Domains of Post-Traumatic Growth

Personal Strength and Self-Perception

Personal strength involves a boost in confidence, making individuals feel more capable of handling challenges and believing in their abilities and skills. This leads to a sense of empowerment and personal agency. With this enhancement, individuals develop a revised self-image, viewing themselves more positively and recognizing their adaptation and growth. This positive reinforcement of their growth mindset leads to greater motivation and engagement in personal goals.

Relationships With Others

Individuals exhibit emotional intelligence, which helps them form deeper connections and relationships. These meaningful bonds encourage openness in sharing personal trauma, fostering empathy and rapport. Additionally, individuals often strengthen their social support networks, sometimes creating multiple unique groups with similar experiences. This growth can also lead to improved interpersonal skills, enabling them to better express their needs and desires to others.

New Possibilities and Life Perspectives

Traumatic experiences can provide an opportunity to reevaluate life goals, values, and priorities, ensuring alignment and driving greater achievements. Individuals may undergo career and life changes due to newfound awareness from their trauma. This altered worldview and broadened perspective help crystallize their understanding of themselves in the world. Some may also experience increased openness to new experiences, fostering continuous learning and enhancing personal development.

Appreciation of Life

Valuing life's present moments is another key aspect for individuals who have processed their trauma, as they recognize the precious nature of time and the fragility of life itself. They often experience increased gratitude for their health and life, which positively influences their relationships at work and home. This positive response naturally fosters mindfulness, leading to a greater appreciation of simple pleasures.

Spirituality and Meaning

Lastly, depending on the severity of the trauma, the spiritual growth that arises from processing the suffering can provide a profound sense of purpose and comfort by releasing one's pain to a higher power. Individuals may explore existential questions to discover new sources of

spiritual or philosophical insight. Through this inner work, they naturally organize their thoughts to create new narratives and belief systems that positively integrate into their transformation story. Some may also feel compelled to share what they've learned with the broader community, supporting others in experiencing resilience and post-traumatic growth.

2.3 Factors Influencing PTG

Individual Factors

Tedeschi et al. (2018) identified key individual factors that influence PTG. One important factor is personality traits such as optimism, resilience, and openness. When individuals perceive and process their experiences with a growth mindset, their ability to recover and establish a new baseline is enhanced. Additionally, the authors mentioned a willingness to explore and engage in self-discovery, even in adversity, further supports this growth.

Effective coping strategies also play a crucial role in PTG (Tedeschi et al., 2018). Viewing negative events through a lens of 'How did this experience create a positive effect in my life and what meaning can I draw from it?' contributes to overall growth. During these learning stages, individuals often manage their emotions better, improving their emotional regulation.

Another significant factor is the ability to cognitively process the traumatic event through reflection and integration (Tedeschi et al., 2018). Engaging in these practices helps individuals make sense of their trauma and incorporate it into their personal narratives, fostering growth.

Social Support and Community Resources

According to Tedeschi et al. (2018), social support and community resources are crucial for individuals overcoming trauma and experiencing PTG. Supportive family and friends significantly contribute to the overall well-being of trauma survivors. For those lacking a strong social network within their immediate circle, community programs, activities, and access to

therapy and services can be valuable tools for processing the event and finding meaning in the trauma. Positive relationships encourage healthy responses and development, so having a sense of belonging within a larger group leads to beneficial outcomes in healing after trauma.

Cultural and Societal Influences

Cultural beliefs and practices shape how individuals process trauma and find meaning, influencing their ability to experience PTG (Tedeschi et al., 2018). Depending on cultural and societal norms, expressing and letting go of trauma can either hinder or support PTG. Greater public awareness and education about trauma and PTG create a more supportive environment for lasting change. Community resources, such as mental health services, financial aid, and legal assistance, can significantly help individuals achieve PTG. Continued exposure and awareness can reduce stigma and promote acceptance, fostering an environment conducive to growth.

Nature and Severity of the Trauma

The final factors in the theory of PTG address the nature and severity of the trauma. The type and duration of trauma significantly influence PTG. For instance, more intense impacts may require longer periods to achieve growth and proper cognitive processing. This process is also linked to the individual's current environment and whether it is safe for them to heal, as ongoing threats and a constant state of fight or flight can hinder recovery (Tedeschi et al., 2018). How individuals perceive the threat can affect their healing and challenge their ability to foster PTG. Additionally, the timing of the traumatic event in the individual's developmental stage and the context in which it occurred can impact the healing period and the potential for positive growth.

2.4 Measurement and Assessment of PTG

Tools and Instruments for Measuring PTG

The PTGI, developed by Tedeschi et al. (2018), is a self-report questionnaire designed to understand and assess positive outcomes in individuals who have experienced trauma. It includes

21 items covering the five domains of PTG: relating to others, new possibilities, personal strength, spiritual change, and appreciation of life. Respondents rate each item on a scale from 0 (not at all) to 5 (very greatly). Other commonly used scales and tools to measure PTG in research studies include the Post-Traumatic Growth and Stress Scale (PTGSS), the Stress-Related Growth Scale (SRGS), and the Changes in Outlook Questionnaire (CiOQ).

Challenges in Assessing PTG

Like any self-reported questionnaire or qualitative research design, these tests are subject to interpretation. Each individual's experience and reporting of growth can vary widely. Additionally, there is a significant risk of self-report bias, where individuals may respond in ways they believe are socially desirable.

There is still a lack of research on how cultural differences affect the perception and reporting of PTG. Isolating specific traumas and their resulting growth is challenging due to the complex and interconnected nature of these experiences.

Moreover, participants in research may confuse resilience with PTG, which can influence their responses to the questionnaire. The absence of sufficient longitudinal studies means that researchers are still uncertain about the true impact of PTG—whether it represents temporary growth, a return to baseline, or long-lasting change.

Validity and Reliability of PTG Measures

PTG measurements strive to maintain validity by thoroughly covering all domains of PTG and accurately capturing the construct to distinguish it from related concepts such as resilience. However, overall validity studies are still somewhat sparse (Shakespeare-Finch et al., 2013). Shakespeare-Finch et al. noted that reliability is ensured through high internal consistency, which supports the assessment of each domain. As PTG gains popularity and more

research is conducted in the coming years, adapting and validating these measures across different cultural contexts will be essential.

2.5 PTG Across Different Populations

Children and Adolescent

PTSD manifests differently across various age groups due to differences in developmental stages, life experiences, and other factors. This variability also applies to PTG, affecting how therapeutic interventions and delivery methods are implemented. For children and adolescents, whose cognitive and emotional development is still ongoing, trauma is processed differently compared to adults (Tedeschi et al., 2018). In these stages of life, trauma often arises not only from familial issues but also from school and social environments, such as bullying, academic stress, and other disruptions. These experiences can significantly impact their self-esteem and identity, as outlined in Erikson's stages of psychosocial development.

Adults and Elderly

Erikson's stages of psychosocial development can also be applied when considering the adult and elderly populations. Each individual has a unique set of experiences, social networks, and personal and professional challenges that shape their ways of coping with trauma and their ability to experience PTG. While some may have developed sophisticated coping mechanisms that facilitate PTG, others might struggle with mental health issues or turn to addictions. For older adults, there is an added dimension of health concerns and the frequent experience of losing loved ones. Social support may be more limited for seniors, and cognitive decline can further hinder their ability to process trauma effectively.

Specific Groups

PTG in survivors of natural disasters often involves collective experiences within their communities, as they work together to rebuild and find shared meaning and growth (Tedeschi et

al., 2018). Veterans are thought to experience PTG by reflecting on their service and integrating their sense of pride and purpose into new ways of contributing to society. In contrast, Tedeschi et al. observed that abuse survivors often focus on reclaiming their agency and crafting new narratives about their experiences to forge a renewed path forward.

2.6 Therapeutic Approaches and PTG

Role of Therapy in Facilitating PTG

The developmental stage of an individual plays a role in facilitating PTG but therapy is not the sole contributing factor. Extensive research indicates that various therapeutic modalities can significantly support adults in their growth journey (Tedeschi et al., 2018). Among these, Cognitive-Behavioral Therapy (CBT), Narrative Therapy, Mindfulness-Based Therapies, and Acceptance and Commitment Therapy (ACT) are the most thoroughly studied. These therapies employ top-down strategies that assist individuals in cognitive restructuring by challenging negative thought patterns, addressing behavioral issues, and fostering emotional healing through compassion, self-love, and acceptance (Tedeschi et al., 2018). This process helps individuals let go of past grievances, forgive, and heal, enabling them to move forward. Through therapy, individuals can examine and revise their life narratives, promoting a sense of growth and transformation. This, in turn, enhances their abilities and skills, preparing them to handle future challenges with greater resilience.

Integrative Approaches Combining PTG with Trauma Treatment

An integrated approach is often the most beneficial therapeutic approach, because each individual requires different methods to navigate a lifetime of challenges. Personal coping strategies should include education on the importance of holistic and personalized care, which clients can implement immediately (Tedeschi et al., 2018). This may involve adopting healthy lifestyle choices and engaging in activities and hobbies that activate the parasympathetic

response, promoting healing for both the body and mind. Additionally, psychologists and other mental health professionals should collaborate with their peers to support the individual fully and connect them with a comprehensive social safety net, addressing all dimensions of their well-being.

2.7 Challenges and Criticisms of PTG

Potential for Misuse or Overemphasis on PTG

Excessive focus on PTG may diminish the perceived severity of an individual's trauma, especially in cases of more severe incidents. This can negatively impact the therapeutic alliance if the therapist fails to adequately validate the client's experience. Overemphasizing PTG when the individual may not yet be at that stage can result in a missed opportunity for the therapist to provide appropriate resources and essential interventions needed for recovery after trauma.

Furthermore, if a therapist pressures a client to achieve PTG, it may lead to negative outcomes, such as feelings of inadequacy or failure on the part of the client. Such pressure can also act as a trigger, particularly if there are underlying vulnerabilities or past experiences related to similar pressures, such as attachment styles or previous relationships. It is crucial for therapists to be sensitive to these factors and ensure that their approach aligns with the client's readiness and needs.

Limitations and Criticisms of the PTG Concept

The generalizability of PTG is affected by cultural and contextual variability, as well as individual differences. There is limited understanding of how PTG applies universally across different cultures, religious beliefs, and other factors that shape a person's identity. Existing tools and measures may not capture the full range of experiences since they often provide a snapshot at a single point in time without long-term follow-up or a comprehensive research design.

Additionally, an individual's history and the various systems that support their functioning are not always fully understood in a single study. This makes it challenging to accurately determine what facilitates PTG. Further research is needed to explore multiple aspects of growth and development. Furthermore, an overemphasis on PTG might overshadow the essential need to address trauma recovery, potentially neglecting the immediate needs of individuals as they process and heal from their trauma.

Addressing the Risk of Re-Traumatization

Another critical aspect is ensuring that interventions are safe and do not re-traumatize the individual. Therapists must be vigilant about potential risks and communicate them clearly to the client as part of a collaborative process before proceeding with any intervention. It is ethically crucial to inform clients that they can withdraw their participation at any time, upholding the highest standards of ethics and practice.

Adopting approaches that prioritize the client's safety and well-being is essential. This often involves tailoring strategies to meet the client's specific needs and preferences, taking into account their trauma history, coping mechanisms, and current perception of reality. Therapists should conduct regular check-ins and ongoing feedback sessions to ensure that the client's experience and consent are continuously validated. Adhering to ethical guidelines and standards will help safeguard against re-traumatization and maintain a strong therapeutic alliance.

2.8 Future Directions in PTG Research

Emerging Trends and Innovations

Since its introduction, PTG has steadily gained popularity. More research now focuses on various types of trauma and diverse demographic groups, embedding PTG deeply in public consciousness. Despite the growing interest and number of studies, there hasn't been enough time or research to cross-reference data and identify consistent patterns in PTG. For example,

many studies on abuse predominantly address sexual abuse, while there is limited knowledge about PTG related to domestic violence, psychological abuse, neglect, and other forms of trauma.

Positive reports of change are sometimes seen as a coping strategy used to lessen the negative psychological impact of traumatic events (Brooks et al., 2021). From this perspective, according to Brooks et al., growth may be part of broader coping mechanisms employed after trauma, meaning that any reported positive changes might not reflect significant or lasting personality shifts. It is possible, then, to view growth either as an outcome of the struggle with trauma or as a strategy to mitigate distress.

Areas for Further Research

Future research must expand into these various fields of trauma and incorporate longitudinal designs to determine whether PTG fluctuates or maintains a new baseline. Additionally, researchers need to integrate multiple theoretical modalities, as clients often experience a fusion of different methods. Further investigation is required to understand the underlying mechanisms of PTG and identify what can foster PTG across individuals with diverse and complex trauma histories.

Implications for Practice and Policy

With ongoing research in the field of PTG, new and more effective strategies for therapists will naturally emerge. According to the ecological systems theory, growth is influenced by multiple layers of an individual's environment. Connecting community resources and educating mental health professionals about available support services will be crucial in tailoring interventions to foster PTG. This approach builds a strong foundation for individuals to sustain positive changes and truly thrive. Insights from research can also influence policies related to trauma and recovery, particularly in areas like neglect, domestic abuse, and other

complex traumas that are under-researched. As public awareness grows, frameworks will be developed to reflect these findings in PTG.

Section Three: Therapeutic Interventions

3.1 Bottom-Up Processing

Eye Movement Desensitization and Reprocessing

Eye Movement Desensitization and Reprocessing (EMDR) is a psychotherapy approach that involves guiding the client through eye movements, auditory cues, or tactile taps while focusing on traumatic memories (Fernandez et al., 2018). The goal is to help the brain process these memories by engaging the prefrontal cortex to rationalize the emotional charge of distressing memories. Fernandez et al. noted that EMDR is particularly effective for complex trauma, as it addresses the underlying traumatic memories. A non-invasive and holistic approach, EMDR reduces symptoms of PTSD and helps the client integrate old neurological patterns into a new way of perceiving the trauma. This evidence-based approach has been effective in both adults and children, published in more than 30 randomized control trials (Jongh et al., 2024). As found by Yunitri et al. (2023), EMDR and cognitive processing therapies have the strongest long-term positive effects on clients. Clients who were treated with EMDR and cognitive processing therapies showed significant decline in anxiety and depressive symptoms, along with other mental health challenges (Jongh et al., 2024).

Somatic Experiencing

Somatic Experiencing (SE) focuses on helping clients tap into the body's natural ability to heal by addressing physical and physiological sensations (Kuhfuß et al., 2021). SE therapy posits that trauma is stored in the body and can be released through it. For individuals ready to reconnect with their bodies after a traumatic event, Kuhfuß et al. described that the SE process begins with becoming aware of sensations without getting entangled in cognitive thoughts.

Through regular movement and breathwork, individuals learn to regulate their nervous system, promoting a sense of safety and calm (Buckley et al., 2018). This approach fosters emotional intelligence and helps clients develop skills to emotionally regulate when triggered by their environment. According to Kuhfuß et al. (2021), SE has shown positive effects on PTSD symptoms.

Additionally, the practice enhances self-esteem and empowers clients to regain control over their bodies. SE's holistic, non-verbal processing method is gradual, exposing individuals to their trauma in small, manageable increments. As discussed in Tomaszewski et al. (2023), dance is also recognized as a therapeutic approach, in which a person uses nonverbal movement to express themself. Dance has been linked to improvements in sensory-motor perceptions and motor skills.

Trauma-Focused Yoga

Trauma-focused yoga integrates the body, mind, and spirit through alignment and stillness. It helps individuals reconnect with their core self and move beyond attachment to ego and suffering. This practice focuses on asana (body postures), pranayama (breath control), mantra (chanting), and meditation. Asana helps release tension and toxins, grounding the nervous system through muscle, organ, and joint movements. Breath control, or pranayama, regulates thoughts and emotions, promoting flexibility in the spine and nervous system. Forward bends activate the parasympathetic nervous system, calming the body and mind, while back bends invigorate and uplift. Twisting aids digestion and detoxification, and balancing enhances core strength and concentration. Mantra chanting releases oxytocin and stimulates the parasympathetic response through vibrations. Breathwork, essential in yoga, improves various bodily systems and enhances sleep, memory, and energy by recalibrating the central nervous system. As found in Jindani et al. (2015), PTSD symptoms greatly decreased along with

insomnia, anxiety, and depression scores. Meditation, particularly mindfulness, helps master the mind by focusing on present-moment awareness (Morrison and Dwarika, 2022). It decreases brain activity, respiration rate, and heart rate, leading to rest and relaxation. Practitioners often experience improved moods, reduced stress, and enhanced immune response. The meta-analysis by Taylor et al. (2020) looked at mindfulness-based practices, including yoga therapy, for treatment in people who have psychological trauma. The researchers concluded both interventions yielded comparable significant results as effective practices in reducing trauma-related symptoms. Unver and Tashan's (2021) study with postpartum mothers using the PTGI survey also showed corresponding results in that yoga had significant PTG results.

Kundalini Yoga is a practice that aims to awaken energy believed to be stored in the base of the human spine. This form of yoga has a broad range of techniques, such as incorporating dynamic movements, breathwork, chanting, and meditation. In the research study by Morrison and Dwarika (2022), "participants confirmed that Kundalini Yoga has promoted PTG in various domains of functioning in their lives, including an enhanced sense of gratitude, improved interpersonal relationships, personal strengths, the ability to recognize new possibilities, and spiritual changes" (para. 57). Known as the yoga of awareness, the researchers observed that Kundalini Yoga is thought to release emotional blockages and foster deeper healing compared to other yoga styles. As expressed with the polyvagal theory, prosocial behaviour is achieved with the regulation of the nervous system and as found in Morrison and Dwarika's research, through Kundalini practice participants reset their system resulting in positive neuroception and their interpersonal relationships greatly improved.

Neurofeedback

Neurofeedback involves learning to regulate brain activity through real-time feedback with a therapist. Using EEG (electroencephalogram) technology to track brainwave patterns,

clients can observe and adjust their brain activity. Given that complex trauma often disrupts normal brain function, neurofeedback aims to restore a healthy baseline of brain activity (Shaw et al., 2023). By training clients to manage their emotions, Shaw et al. found that this modality helps rewire the brain by shifting control from the limbic system to the executive functions. Earlier studies paved the way that neurofeedback had significant positive effects on chronic PTSD (Van der Kolk et al., 2016). Further research by Shaw et al. (2023) indicated that neurofeedback can reduce PTSD symptoms, while also enhancing cognitive functioning and improving self-regulation abilities.

Biofeedback

Like neurofeedback, biofeedback involves training clients to regulate their physiological responses. Instead of using EEG to monitor brainwaves, biofeedback sessions track other bodily responses, such as heart rate, skin temperature, or muscle tension (Blase et al., 2021). This approach enhances the client's somatic awareness, leading to improved overall self-regulation and emotional control. As found in Blase et al., heart rate biofeedback had significant improvement for those struggling with PTSD, depression and panic disorders. This aligns with Walker et al.'s (2017) research, where this mind-body technique supported military veterans with PTSD symptoms, especially when including pranayama techniques, specifically Sudarshan Kriya-Ujjayi breathing.

Art and Expressive Arts Therapy

Art therapy involves creative processes like painting, drawing, and sculpting, allowing clients to express themselves through external mediums. It helps individuals work through psychological blockages by using symbols and images to delve into deep emotions and thoughts. This approach can also include other artistic forms such as drama, dance, and singing. By providing a safe environment for emotional release, art therapy not only validates the

individual's struggles but also ensures that their pain and vulnerability are acknowledged (Woollett et al., 2020). In their study with children and mothers affected by domestic violence, Woollett et al. found that expressing emotions through art helped regulate intense emotional dysregulation, enabling individuals to achieve a rational and grounded state. This supportive community fosters a sense of belonging and allows individuals to process their emotions with greater agency and empowerment. As mentioned in Schouten et al. (2018), the experience of expressing themselves through art enhanced clients' relaxation, which in turn improved their ability to externalize memories and emotions. As a result of mindfulness practices, the researchers found that clients also experienced a reduction in intrusive thoughts.

Expressive arts is a broader approach that includes a variety of creative expressions such as visual arts, music, dance, singing, drama, writing, and acting. It emphasizes the process of creation rather than the final product, focusing on exploration and discovery. By engaging the body and voice, individuals can gain a sense of agency and externalize their internal experiences, allowing them to process these experiences at a cognitive level. This integration of body and mind facilitates the healing of trauma on multiple levels. Berghs et al. (2022) explored the positive impact of drama therapy on children with psychosocial issues, finding that it significantly improved social functioning, regulation abilities, and social identity, likely due to the externalization of internal problems.

Endurance Sports

Endurance sports encompass a variety of physical activities that demand sustained effort over extended periods, such as ultramarathons, cycling, and triathlons. These activities challenge athletes' cardiovascular and muscular endurance, training them to build resilience in the face of physical fatigue and stress. As found in Hoffman et al. (2015), exercise increased blood flow to the hippocampus and was associated with greater resiliency. Similar findings were presented in

Ley et al.'s (2018) research which focused on the effects of exercise on PTSD. The researchers observed that "the focus on bodily sensations related to an exposure effect, contributing to improvements in body awareness, coping behavior, and affect regulation, whereas the focus on playing related to an improved performance, presence, enjoyment, and mastery experiences, pointing toward distraction and motivational-restorative effects" (para. 1). Findings in both Hoffman et al.'s (2015) and Ley et al.'s (2018) studies were related to symptoms of PTG.

Endurance sports can facilitate cognitive processing and aid in trauma recovery by rewiring the body and nervous system in several ways. Similar to biofeedback therapy, heart rate regulation activates the parasympathetic nervous system, helping reduce perceived stress. Through increased self-awareness, athletes learn to regulate their bodies during high physical stress, promoting a strong mind-body connection. This embodied cognition encourages individuals to listen to their heart and gut, which symbolize their thoughts and emotions, aiding emotional processing and reducing negative behaviors linked to trauma. Moreover, endurance sports can help release pent-up emotions, serving as a form of active meditation that allows individuals to process their feelings. Rather than trauma being trapped in the body, leading to tension and pain - even disease, movement, stretching, and emotional expression promote the release of toxins and foster health and vitality. Athletes often experience a flow state, immersing themselves in the present moment, which enhances mindfulness and helps them distance themselves from traumatic thoughts, allowing for clearer and calmer processing. Thus, engaging in endurance sports increases individuals' sense of control and empowers them to reconnect with their bodies, enhancing positive self-concept, which is closely tied to PTG. Overall, endurance sports serve as a therapeutic outlet that promotes resilience and personal growth.

3.2 Top-Down Processing

Meditation and Mindfulness

Meditation is a cognitive practice that focuses on mastering one's mental state by intentionally directing attention to specific tasks and goals. It aids in emotional regulation, stress reduction, and provides a foundation for self-restructuring if needed. Meditation encompasses various techniques, including mantra work, visualization, and pranayama.

In contrast, mindfulness involves maintaining non-judgmental awareness in each moment, being conscious of one's inner thoughts, feelings, and bodily sensations. Originating from Buddhist philosophy, mindfulness is the continuous self-awareness of voluntarily bringing back wandering attention. According to Hawley et al. (2013), "Interventions such as mindfulness-based cognitive therapy (MBCT) and mindfulness-based stress reduction (MBSR) have demonstrated significant clinical efficacy in the treatment of various clinical presentations, including mood disorders, treatment resistant depression, and anxiety disorders, leading to significant improvements in psychological functioning" (p. 1). Further, Huffziger and Kuehner (2009) noted that "the core concept of mindfulness includes receptive attention to and non-evaluative and sustained moment-to-moment awareness of mental states and processes" (p. 225).

With many research studies, there have been multiple benefits reported for mindfulness, including clinical interventions such as Mindfulness-Based Stress Reduction, Mindfulness-Based Cognitive Therapy, Acceptance and Commitment Therapy, and Dialectical Behavior Therapy. Quickert and MacDonald (2020) argued that "a large body of research supports the benefits of mindfulness interventions for improving mood, emotion regulation abilities, physical health, and interpersonal relationships" (p. 2). Both practices can serve as top-down strategies, depending on their application and conceptualization. They require cognitive engagement, particularly in self-

observation and awareness, involving the prefrontal cortex, which is responsible for attention, self-awareness, and overall regulation.

Cognitive-Behavioural Therapy

Cognitive-behavioural therapy (CBT) is a type of psychotherapy that equips clients with skills and strategies through mindfulness-based training. By increasing awareness of cognitive distortions and behaviors, clients can apply personalized coping strategies to address specific issues, enhancing their emotional regulation and cognitive processing. Key aspects of using CBT to promote PTG include challenging and reframing negative beliefs and distorted thoughts about past trauma, shifting the focus to highlight personal growth and strength rather than the negative impacts of the experience.

A study by Levi et. al (2016) focused on the effectiveness of CBT and psychodynamic psychotherapy (PDT) with people experiencing PTSD. The results were that both CBT and PDT showed significant reduction in symptoms, and with improved functioning from pre-treatment to post-treatment - tested at follow-up. Another study by Hébert et al. (2020) focused on children who had experienced sexual abuse and found that CBT showed a significant reduction in dissociation, internalizing, and externalizing problems, along with reduced PTSD symptoms.

Dialectical Behavioural Therapy

Dialectical behavior therapy (DBT), a branch of CBT, is designed for individuals who experience intense emotions. It focuses on enhancing interpersonal relationships through mindfulness and acceptance strategies. DBT is especially beneficial for those with complex trauma, as it addresses high levels of distress and promotes emotional stability. This therapy helps individuals develop skills for managing crises, improves self-awareness, and positively impacts various aspects of their lives by fostering overall emotional well-being.

A study by Görg et al. (2019) applied DBT following childhood abuse and found that although anger did not improve, there were significant changes in feelings of guilt, shame, disgust, fear, helplessness, and radical acceptance when controlling for changes in core PTSD symptoms. Similar findings were observed by Michałowska and Chęć (2024) when studying children who had experienced sexual abuse and violence, leading to a co-occurrence with borderline personality disorder (BPD). The study showed that DBT significantly reduced PTSD symptoms, and incorporating other modalities such as CBT, cognitive processing therapy (CPT), and EMDR can further enhance overall well-being. The study by Steil et al. (2022) demonstrated that DBT assists individuals with complex trauma by supporting their self-appraisal and self-concept processes. It helps them examine their subjective reality to restructure the cognitive framework of their distorted beliefs and thinking.

Acceptance and Commitment Therapy

Acceptance and commitment therapy (ACT) is a psychotherapy approach that focuses on helping clients accept their experiences and commit to personal growth and change by developing psychological flexibility. Similar to practices in meditation, ACT encourages clients to experience their emotions and thoughts without reacting or becoming attached to them. Instead, clients learn to practice letting go. By fostering these skills, ACT helps individuals align with a value-driven life, ultimately enhancing their overall quality of life.

According to Spidel et al. (2018), mindfulness ACT was effective in reducing PTSD symptoms, managing psychosis in individuals with childhood trauma, and increasing help-seeking behaviors. These results aligned with Molavi et al.'s study (2020), which found that individuals who practiced ACT increased their psychological flexibility.

Emotionally Focused Therapy

Originally designed for couples, emotionally focused therapy (EFT) helps individuals address interpersonal issues to strengthen emotional connections with others. For clients with trauma, EFT focuses on developing secure attachments rather than reverting to old patterns like avoidance or anxious-ambivalent attachment. By processing deep-seated emotions related to trauma, clients can release suppressed feelings and move forward. EFT enhances clients' ability to articulate their emotions and communicate effectively, which improves relationship dynamics. Additionally, it fosters a sense of emotional safety within clients—something often lost due to trauma—allowing them to express themselves without fear of judgment in a space of acceptance and understanding.

The study by Ganz et al. (2022) indicated that EFT was effective in reducing relational distress and individual symptoms, such as PTSD, in veterans and their partners. MacIntosh and Johnson (2008) found that EFT was effective in helping individuals who experienced childhood sexual abuse by enhancing their interpersonal skills. This support enabled them to develop secure attachments with their partners, thereby rebuilding trust and confidence in their relationships.

Narrative Exposure Therapy

Narrative exposure therapy (NET) is a short-term approach designed for individuals who have experienced multiple traumatic events throughout their lives (Sparrow and Fornells-Ambrojo, 2024). It integrates elements of CBT and narrative therapy, allowing clients to share their life stories as they perceive them. The therapist helps the client process these memories by exploring the emotions that surface during sessions and assisting in cognitive restructuring and reframing. By organizing and reordering fragmented memories, NET helps alleviate symptoms of PTSD and confusion. As found by Sparrow and Fornells-Ambrojo, processing empowers the

individual to reclaim autonomy, take ownership of their narrative, and implement sustainable changes in their life.

A phenomenological study by Bryngeirsdottir and Halldorsdottir (2022) found that women who experienced IPV embraced an empowering mindset of “I’m a winner, not a victim.” The women took ownership of their stories and assumed responsibility for their future, thereby enhancing their overall well-being through lifestyle changes and setting healthy boundaries.

Chapter Three: Conceptualization

The Role of a Therapist

A strong therapeutic relationship is essential for PTG, ensuring clients feel safe, supported, and understood. Given their training, therapists often find it natural to establish this relationship as a starting point. The therapeutic environment should foster trust, allowing clients to feel comfortable enough to explore their trauma. The process of building this relationship can vary greatly—some clients may engage quickly, while others might take longer to feel safe sharing their stories. Therapists must practice patience, recognizing that healing takes time and cannot be rushed. Creating an atmosphere of exploration and curiosity is crucial, as it allows clients to process their trauma without feeling overwhelmed. Therapists should focus not only on understanding the type of complex trauma the client has experienced but also on identifying the developmental stage at which it occurred. This understanding helps them choose the most appropriate therapeutic modalities to best support the client's needs.

Facilitating PTG is a nuanced process, as each client's experience is unique. Exploring the domains of PTG theory with clients provides a structured framework for guiding them through their transformation after trauma. Understanding a client's hobbies, interests, and personal goals is equally important as exploring their trauma. Discovering what brings them joy, play, and a sense of accomplishment can be very revealing. This could result in highlighting clients' resilience portfolio and poly-strengths, which is a powerful way to acknowledge the steps they have already taken in processing their trauma. This light-hearted exploration helps clients become more aware of how to balance their body's sympathetic (fight-or-flight) and parasympathetic (rest-and-digest) responses, keeping them grounded during stressful moments. Encouraging clients to engage with their passions not only supports their mental well-being but also fosters their growth beyond trauma.

In cases of severe trauma, the initial focus should be on self-care and teaching emotional regulation skills before engaging in intense cognitive work. Rushing into processing trauma without proper preparation can lead to retraumatization. Clients need tools to help them regulate their bodies and mind so they can handle the emotional weight of their healing journey. This might involve practices like mindfulness, grounding exercises preferably in nature, or breathwork, all designed to foster a sense of safety in the body. Additionally, establishing basic maintenance practices—such as proper nutrition, a healthy sleep routine, and regular exercise—is essential. Other beneficial practices can include keeping a gratitude journal, practicing meditation or prayer, and engaging in creative expression. The journey of PTG is rarely a straight path. Setbacks are a natural part of the process, and clients will go through periods of regression and doubt. Therapists need to normalize these setbacks and emphasize that challenges are part of growth. Healing is seldom straightforward, and clients should be reminded that stumbling along the way does not mean they have failed.

When working with clients from diverse cultural backgrounds, therapists must take the time to understand their clients' cultural values, beliefs, and experiences, as these factors can significantly influence their healing journey. This aligns with ecological systems theory, which emphasizes the importance of external influences on a client's path to PTG. Different cultures have varying perspectives on trauma and coping strategies, so collaboration with clients may require unique approaches tailored to their specific needs. Therapists must remain culturally sensitive, especially regarding traditions or practices they may not be familiar with. To foster growth, therapists need to maintain an open dialogue with clients and focus on what resonates with them, enhancing the overall effectiveness of the healing process.

Therapists must stay mindful of their own biases, judgments, and emotional responses. Engaging in regular self-reflection, consulting with colleagues, and maintaining their mental

health through personal therapy are all essential practices for upholding the highest ethical and professional standards. Therapists must remain neutral, curious, open, and supportive, creating an environment that encourages the client to reflect these same qualities. It's crucial to avoid imposing personal beliefs or values on the client. Asking open-ended questions enables clients to explore what aligns with their true selves, ensuring that their decisions are genuinely client-directed. This method promotes a collaborative process, empowering clients to take ownership of their healing journey. Additionally, systematic questioning allows therapists to gather information, assess situations, and collaborate with clients to solve problems in a logical and grounded manner. Key types of systematic questioning include Socratic questioning, critical thinking questions, the 5 Whys, problem-solving questions, diagnostic questions, decision-making questions, and evaluation questions.

Self-awareness is just as essential for therapists as it is for their clients. Therapists must realistically manage their own well-being, recognizing the importance of being positive role models who "walk the talk." To prevent burnout or compassion fatigue, mental health professionals need to reflect on their long-term commitment to the field while ensuring their personal needs are met to maintain a sustainable work-life balance. Diversifying their roles—whether by exploring different professional opportunities or pursuing a side hustle—can help therapists broaden their sense of identity, reminding them that they are more than just their work. Engaging in hobbies, passions, and spending quality time with loved ones are crucial for personal growth and resilience. This is especially important when working with clients who have experienced ACEs and complex trauma, as maintaining a schedule that includes adequate breaks is vital to staying mentally sharp and emotionally balanced.

Discussion

The research question guiding this literature review was: How do various therapeutic interventions promote PTG in individuals with complex trauma, and what are the underlying mechanisms, moderators, and mediators involved in this process? The next two sections will summarize my perspective on this question for each therapeutic modality, organized according to bottom-up and top-down processing strategies. Please note that key moderators for both bottom-up and top-down interventions include a strong therapeutic relationship and the client's willingness to engage with a new modality that involves exploring their traumatic memories and emotions.

Key mediators of PTG include specific personality traits like openness to experience, optimism, and extraversion, which can enhance therapeutic effectiveness. From an ecological systems perspective, social support is crucial in determining whether individuals adopt healthy or maladaptive coping strategies during adversity. This support can stem from various layers of influence, such as family, friends, community organizations, and broader societal contexts. Cultural influences, generational context, and geographical location also play significant roles in shaping coping mechanisms and resilience. Within this framework, the individual is situated in a complex interplay of factors, including social norms, cultural values, and economic resources, which collectively impact their growth journey. Genetic predispositions and family dynamics further influence how one responds to trauma and engages in recovery. All these interconnected elements explain the complexities of how individuals can achieve PTG, and as imagined is not solely an individual process; rather, PTG is shaped by the dynamic interactions between the individual and their ecological context—a game of probabilities and the endless permutations and combinations of possibilities.

Bottom-Up Processing

The mechanisms through which EMDR promotes PTG involve desensitizing distressing symptoms and emotional responses, enhancing the capacity for adaptive information processing. From a polyvagal perspective, regulating the autonomic nervous system fosters feelings of safety and connection, which are essential for healing. The bilateral stimulation used in EMDR can activate the ventral vagal system, promoting social engagement. Mediators associated with EMDR include improved emotional regulation, cognitive shifts through the restructuring of old memories, and meaning-making that arises from viewing trauma from a new perspective, all of which facilitate PTG. Depending on when the trauma occurred, individuals may also gain a more systemic understanding of their experiences, considering how family dynamics, community influences, or cultural contexts have shaped their memory storage and current processing.

SE and yoga both emphasize embodied awareness, helping individuals connect with their physical sensations and identify where trauma is stored in their bodies. Clients learn self-regulation by recognizing their triggers and practicing the skill of shifting from rumination to mindfulness to stimulate the parasympathetic response in real-time. Naturally, the individual begins to understand the importance of boundary setting and time management, prioritizing more self-care and strategies to promote a stronger state of relaxation daily. Through these multilayers of mediators, individuals can remain more physically calm and collective, enabling them to process information and memories through the executive centers of the brain versus the limbic system. Through this practice, the guidance and decisions come from a deeper place and wisdom is felt within the cells of the body.

Neurofeedback is a specific type of biofeedback that provides real-time information about brain wave activity. Both interventions train individuals to monitor and adjust their physiological responses with the guidance of a coach and through consistent practice. Aligned

with Polyvagal Theory, the goal is to stimulate the parasympathetic response to achieve mental clarity and optimal functioning. As a bottom-up approach, the focus is on learning to regulate emotional responses to environmental and cognitive stimuli that may disrupt regular functioning.

With improved cognitive and hormonal balance, individuals can connect with social groups more mindfully. Creating space in the body also leads to mental clarity, allowing individuals to cultivate a renewed sense of purpose and identify what brings them fulfillment in life.

The primary mechanism of art therapy and expressive arts therapy lies in the ability to express thoughts and emotions nonverbally, facilitating communication and articulation of trauma. Engaging with various art forms—be it painting, sculpting, dancing, or vocal expression—activates the ventral vagal system, allowing individuals to enter a flow state, experience complete presence in the moment and most importantly, feel secure in their physical body and mind. By harnessing their unique creative talents, clients can strengthen their coping strategies and leverage their poly-strengths across multiple areas of their lives. Expressing oneself in vulnerable ways is a strong strategy to develop community and strengthen connections of belonging, support and purpose.

Endurance sports are a significant predictor of stress reduction, as they stimulate the release of endorphins, which lower cortisol levels (the stress hormone). Enhanced heart rate variability helps balance the nervous system and supports cognitive functioning by ensuring the brain receives adequate oxygen. By setting and achieving goals in endurance sports, individuals enhance their self-esteem and sense of control. There seems to be a connection between endurance sports and PTG, particularly in events like Ironman competitions, as individuals navigate through immensely challenging physical hardships. Key connections I perceive are: (1) Overcoming adversity: The discipline and persistence required to tackle challenges foster

intrinsic determination and a growth mindset; (2) Resilience: Learning to manage emotional responses enhances one's ability to regulate feelings, transforming inner dialogue to align with achieving personal potential; (3) Growth mindset: Viewing challenges as learning opportunities helps improve overall performance and overcome setbacks. In addition, it empowers clients to step outside of their comfort zones and confidently embrace new experiences; (4) Self-discovery and mastery: Increased self-awareness strengthens one's capacity to master their mind, aligning with PTG; and (5) Social support: Building community fosters a sense of connection and belonging, essential for trauma recovery, providing accountability and encouragement.

Top-Down Processing

Meditation and mindfulness promote PTG by enhancing self-awareness and present-moment focus. These practices train the mind to remain responsive to the environment, helping individuals shift away from feelings of overwhelm and dissociation (dorsal vagal shutdown). Mediators include the development of cognitive space between thoughts and emotions, allowing individuals to access a state of pure consciousness. This enables them to observe their maladaptive responses to trauma, fostering greater understanding and the capacity to make lasting behavioral changes. Additionally, this mindset cultivates compassion, self-love, and an openness to growth and acceptance.

CBT facilitates PTG by addressing cognitive distortions, negative thought patterns, and maladaptive behaviors that stem from trauma. Through various mechanisms, individuals can find relief from their suffering. Cognitive restructuring helps clients reflect on distorted beliefs, shifting their thought patterns toward more adaptive perspectives. Behavioral activation promotes positive actions, counteracting old response patterns, while exposure therapy gradually desensitizes trauma triggers, leading to improved emotional regulation. This cognitive balance directly influences bodily responses, bringing the nervous system into regulation from a top-

down approach. These interventions provide individuals with a greater sense of control and agency, boosting self-esteem and empowering them to live as their best selves.

Depending on the individual, different strategies are used to achieve balance and homeostasis. DBT mechanisms support clients in regulating their emotions, managing distress, and improving interpersonal skills, all grounded in mindfulness. By observing their thoughts and emotions without judgment, clients can more easily identify, label, and process intense emotions from a rational state of mind. This enables them to communicate their needs and set healthy boundaries. DBT provides practical tools that help clients develop healthier responses to trauma, facilitating healing and fostering personal growth toward a more evolved version of themselves.

What sets ACT apart is its emphasis on fostering psychological flexibility, allowing individuals to sit with discomfort rather than avoiding or suppressing it. This approach encourages growth by preventing the body from entering a panic response, which would otherwise trigger the limbic system—the emotional center of the brain—and shift focus into survival mode. ACT works through six core processes that support PTG: acceptance, cognitive defusion, being present, self-as-context, values, and committed action. Each layer encourages taking positive steps toward a life aligned with one's values and purpose. By engaging with these processes, clients connect more deeply with their authentic selves, attracting supportive relationships and social connections, which aligns with polyvagal theory by promoting safety and connection. Additional mediators include value-driven behavior and an increased sense of empowerment.

EFT is rooted in understanding an individual's attachment style to facilitate changes that promote secure attachment. By addressing attachment wounds, individuals not only heal their inner child but also foster healthier relationships with those around them. Letting go of emotional defenses activates the parasympathetic nervous system, helping to heal patterns that no longer

serve them. This shift gradually enhances overall well-being by reducing emotional isolation and encouraging social connection. By addressing these relational dynamics, EFT helps individuals build greater resilience and emotional strength.

NET is an intervention aimed at addressing complex trauma. Clients delve into their life experiences, recalling as much detail as they can process and desensitize those events while viewing their journey on a broader timeline. Through storytelling and exploration, individuals reconstruct their internal narratives, reframing their experiences to foster growth and resilience. Similar to how a screenwriter crafts characters from past experiences, clients rebuild their self-concept, rediscovering aspects of themselves that may have been lost due to trauma, as well as what brings them joy and fulfillment. Just as great stories have a moral, clients find meaning in their narratives, identify their strengths, and refocus on moving forward with newfound wisdom.

Promoting PTG in Therapy

The Upward Spiral theory, developed by Barbara Fredrickson, suggests that cultivating positive behaviors, thoughts, and emotions can form habits that sustain well-being and resilience throughout life. Small wins can generate a positive feedback loop, enhancing both mental and physical health. By integrating leisure activities, such as the performing arts, creative expression, or exercise, individuals can craft a fulfilling and balanced life that aligns passion with purpose (Anderson and Heyne, 2016).

The study by Brooks et al. (2021) was the first qualitative exploration of PTG from survivors exposed to multiple traumatic events. Participants in this research experienced massive cognitive, emotional, and social changes when perceiving their post-traumatic experiences. Specifically, the therapeutic process in this research involved managing subsequent traumas, changes in identity, and co-occurring negative and positive changes. Brooks et al. noted that most of the participants' behavior became more altruistic. Thus, therapists can encourage clients

to positively reinforce altruistic behavior as a way to connect with something larger than themselves and contribute to the broader community.

Ben Furman (1997), a Finnish psychotherapist, is renowned for his contributions to the expansion of solution-focused therapy (SFT). Rather than delving into the causes of a client's challenges, Furman advocates for focusing on present factors and resources in the client's life to find solutions and initiate change. This approach helps clients build positive habits using the strengths they already possess. Furman's work has played a key role in the development of solution-focused (brief) therapy (SFBT), which aligns with the principles of PTG. Both approaches emphasize adaptation, healing, and personal development, encouraging clients to set SMART (Specific, Measurable, Achievable, Realistic, Time-bound) goals. SFBT, much like PTG theory, suggests that individuals can experience positive transformation despite trauma. Therapists have a wide range of strategies under this umbrella approach to support clients, including CBT, SFT, Narrative Therapy, psychoeducation, strengths-based interventions, growth-oriented mindsets, and resilience training. Ben Furman's book *It's Never Too Late to Have a Happy Childhood* can benefit both therapists and clients by inspiring hope, emphasizing the possibility of healing from past wounds, helping clients reclaim autonomy and control, and offering practical strategies for creating lasting change.

Additional Client Driven Applied Practices

Rumination is considered a cognitive risk factor for the onset and maintenance of depression (Huffziger & Kuehner, 2009). Depression affects more than 300 million people worldwide and is the leading cause of disability (Jury & Jose, 2018). Rumination is linked with multiple mental health challenges and is associated strongly with individuals who have experienced ACEs and complex trauma. Individuals struggling with rumination may benefit from interventions like temporal distancing and self-distraction.

Self-rumination is “negative, chronic, and persistent self-focus motivated by perceived threats, losses, or injustices to the self; neurotic self-attentiveness” (Morin, 2017, p. 280) and is associated with different forms of negative consequences such as anxiety and depression. In some cases, chronic rumination is a strong symptom in clients who are diagnosed with PTSD. Rumination is one of the factors to the prolonging of negative mood states, interfering with problem solving and behavior. It’s known as a maladaptive coping response, whereas self-reflection is classified as correct adaptive behavior. Since rumination is focused attention on symptoms of distress, solutions are unable to surface because the consciousness is overrun by negative self-talk. Thus, as a consequence, rumination amplifies depressive states and increases cognitive vulnerability for future negative episodes.

According to Bruehlman-Senecal and Ayduk (2015), “Self-related processing is an umbrella term that covers a broad range of processes that have to do with the notion of the self” (p. 256). With self-awareness comes self-talk, where an individual partakes in the use of private and/or public speech. Two forms of self-talk emerge, self-reflection and self-rumination, where one is associated with positive coping and the other with negative coping. From ongoing self-rumination, many maladaptive responses emerge—self-criticism and self-doubt spirals into self-blame. This then results in escaping or destructive behavior. This entire process decreases self-worth and self-esteem, where an individual uses self-handicapping and self-enhancement to maintain their negative emotional and mental state (Morin, 2017).

One model to explain the relationship between rumination and negative affect is known as the emotional cascade model. It states that it is uniquely pernicious when it occurs in individuals who engage in impulsive behaviors. “In these individuals, rumination is one component of a feedback process called an “emotional cascade,” wherein negative emotion and rumination synergistically and progressively aggravate each other, resulting in an aversive

experience that escalates rapidly" (Selby et al., 2016, p. 139). Morrison and Dwarika's (2022) study found the importance of gratitude practice in meditation promotes PTG through deliberate rumination facilitating positive emotions and conceptualizations.

Temporal Distancing

Temporal distancing, also known as self-distancing, is the practice of creating psychological distance from one's own perspective in order to emotionally regulate a distressful situation. Bruehlman-Senecal and Ayduk (2015) noted that "temporal distancing and other perspective-broadening strategies are considered to be forms of reappraisal because they involve the act of construing a potentially emotion-eliciting situation in a way that changes its emotional impact" (p. 357). Research has suggested that temporal distancing supports self-controlled behaviors through one of the by-products of self-reflection, enhancing perceived value of long-term goals. This in turn is related to decentering, as it involves "the ability to shift one's attention away from identifying personally with thoughts and feelings" (Hawley et al., 2013, p. 7).

Résiboiset et al. (2018) observed "In a recent functional magnetic resonance imaging (fMRI) study, it was found that different neural regions underlie emotion explosiveness and accumulation... These findings are consistent with theoretical claims in the field of emotion dynamics and emotion regulation that emotion onset and offset are partially governed by different processes" (p. 2-3). Emotions are designed to last for 90 seconds, providing information to the consciousness to act and behave in a way that will sustain positive equilibrium. However, the by-product of rumination is long-term emotional distress, which results in negative sustained moods.

Self-Distraction

Self-distraction is another coping strategy that is more focused on passively dealing with a distressful situation through the use of time away from the stimulus in order to manage and

process negative cognitive responses. According to Huffziger and Kuehner (2009), “Distractive coping is defined as actively turning one’s attention away from one’s depressive symptoms on to pleasant or neutral thoughts and actions” (p. 224).

Response styles theory (RST) presumes that rumination and distraction are purposeful trait-like styles of responding to or trying to cope with negative mood, thus influencing the severity and duration of such symptoms. In the original theory, Nolen-Hoeksema (1991) posited that rumination would lead to increases in depressive symptoms, while distraction and problem-solving would lead to decreases in symptoms. Gómez-Baya and Mendoz (2018) noted that “a recent longitudinal study indicated that the increase in depressive symptoms in girls was related to an increase in rumination and a decrease in distraction after a 2-year follow-up during mid-adolescence” (p. 3).

Self-distracting is a technique that can keep an individual mentally and emotionally safe through the prevention of unhealthy behaviors and thought patterns. It’s common to actually forget what the mind was reminiscing about when distracting techniques are implemented, as these choices favor positive and healthy behaviors through mindfulness.

Accordingly, temporal distancing gives an individual mental space to make sense of their reaction, experience less emotional distress, and show fewer signs of physiological stress, thus, leading to more productive and adaptive self-reflection while processing negative experiences (Kross & Ayduk, 2011, p. 187). Self-distraction has been found to repair negative moods and reduce rumination in the act of changing focus and attention to a different task. While mindfulness seemed to have helped the individuals by not becoming entangled with negative emotions, but rather creating a distance to observe the state, accept the moment and then let it go.

Merging Eastern Ancient Wisdom With Western Science and Innovation

Educational institutions can enhance therapists' skill sets by offering specialized courses that dive deeply into different therapy modalities. Just as undergraduate programs require core courses before advanced electives, graduate programs can be extended to ensure students specialize in multiple approaches of their choice. This would help build new therapists' confidence as they enter the workforce and clarify the types of populations they wish to work with. A multidisciplinary approach can help students develop a broader, more integrated understanding of various fields, fostering creativity, critical thinking, and problem-solving skills essential to effective therapeutic practice.

With the rise of technology and global collaboration, higher education institutions can partner with other universities and organizations to create bridging programs that combine Eastern practices with Western advancements in health sciences and psychology. This integrative framework addresses both the physiological and psychological aspects of well-being, combining Eastern practices such as yoga, mindfulness, acupuncture, and Ayurveda—which emphasize the balance between body and mind—with Western psychological theories and data-driven approaches. These practices may also be paired with Indigenous healing traditions that focus on spiritual connection, in an approach that helps students grasp the interconnectedness of mind, body, and soul.

By integrating diverse learning models and immersive travel experiences, students can expand their perspectives and gain a deeper understanding of different cultures, belief systems, and political structures. This broader view helps them reflect on intergenerational patterns and better comprehend the factors shaping their clients' behaviors and experiences. This real-world exposure, including providing therapeutic services across borders, enriches their understanding

of the human condition, enhancing both logical and emotional intelligence. As Gestalt theory suggests, “the whole is greater than the sum of its parts.”

Reflections on Personal Learning

Viewing PTG through various theoretical frameworks—such as polyvagal theory, ecological systems theory, and resilience portfolios, and poly-strengths—has provided me with a comprehensive understanding of the complexities involved in healing from ACEs and complex trauma. Given the many layers of pain and suffering clients endure, relying on a single intervention or model is insufficient. Therapists must possess a diverse toolkit and be creative in crafting personalized programs that cater to each client’s needs. It’s essential to incorporate not only theoretical approaches but also lifestyle factors to enhance the likelihood of keeping clients mentally focused and clear, while also ensuring they remain physically strong enough to handle emotional releases. This holistic approach is crucial for guiding individuals toward a fulfilling life after healing and letting go of their past in order to create space to welcome an evolved version of themselves.

Therapists must commit to lifelong learning and continuous education in various theoretical frameworks, while adhering to the ethical code that prohibits offering services to client populations for which they are unqualified. Instead, they should refer clients to another therapist with the appropriate expertise. Therapists working with clients experiencing ACEs and complex trauma can integrate the theories discussed in this literature review, alongside a client-centered, strengths-based approach. By emphasizing safety, gradual exposure, and meaning-making, therapists can work with clients to incorporate lifestyle factors that empower them to move forward at their own pace.

As an emerging psychologist, facilitating PTG involves a multifaceted approach. It starts with establishing a strong therapeutic relationship and understanding each client’s unique story,

which serves as a foundation for resilience and strength. Clients will need to process their trauma using both bottom-up and top-down therapeutic methods. Promoting a solid mindfulness practice, healthy coping strategies, and avenues for expression will be essential components of individual health within the ecological systems model. Strengthening the client's microsystem and mesosystem—through social support and community groups—is also crucial. Given each individual's unique moderators and mediators, therapists must make informed decisions about which interventions might yield initial healing. This may require oscillating between somatic and cognitive techniques during sessions to keep the parasympathetic nervous system balanced for effective trauma processing. Clients need to feel calm and relaxed while being challenged to stretch their comfort zones; this balancing act is something therapists will refine through practice and by tuning into their own bodies during sessions.

Focusing on the domains of PTG—personal strengths, new possibilities, improved relationships, appreciation of life, and spiritual development—provides a valuable framework. Meeting clients where they are at can help them to navigate uncertainty, and using these domains as goals can offer stability during times when they feel numb or stuck. Continuous practice of healthy daily habits will be critical for long-term fulfillment and success. It's important to remind clients that this journey is not a sprint but rather an endurance race, encouraging them to prioritize self-care and downtime to maintain their pace.

It can be helpful for therapists to take a few moments before and after each session to reflect on how the client perceives their environment and experiences, taking into account their conditioning, learning style, and available resources—both past and present. When developing a plan of action, therapists should also consider the client's socioeconomic status. If a client is unable to afford certain resources due to financial constraints, guiding them toward public resources or nonprofit organizations can help bridge the gap.

Therapists must take the time to analyze a client's unique constitution in order to understand the factors that have shaped their behavior, thoughts, and emotions. Gaining insight into a client's multifaceted environmental upbringing and developmental stages requires examining their story through various theoretical lenses. This includes frameworks like Erikson's stages of development, Maslow's hierarchy of needs, the stages of change, attachment theory, family systems theory, the five-factor model, the psychodynamic model, and others. Therapists must also consider the historical and paradigm shifts in psychology, which have been influenced by not only psychologists, but also biologists, early scientists, and philosophers.

From the philosophical inquiries of Socrates, Plato, Aristotle, Descartes, and Kant into human nature, perception, and the mind-body relationship, to the birth of modern psychology with figures like Wilhelm Wundt, William James, and G. Stanley Hall, understanding human behavior has evolved through various phases. These include the psychoanalytic theories of Freud, Jung, and Adler, the behavioral theories of Watson, Skinner, Pavlov, and Thorndike, and the cognitive revolution led by Piaget, Vygotsky, Chomsky, and Bruner. The humanistic and existential movements, led by Carl Rogers, Abraham Maslow, and Rollo May, and the social and cultural insights of Albert Bandura, George Herbert Mead, and Erving Goffman have further shaped our understanding.

Additionally, integrating the biopsychosocial model, as developed by George Engel and Richard Lazarus, and perspectives from evolutionary psychology (Cosmides, Tooby, Pinker) and contemporary figures like Martin Seligman, Daniel Kahneman, Mihaly Csikszentmihalyi, and Jon Kabat-Zinn, helps expand our knowledge of human behavior. Therapists must also remain open to emerging trends in technology, artificial intelligence, and cross-disciplinary integration. Best practices for mental health professionals, from newcomers to seasoned clinicians, require

constant introspection to recognize and address biases shaped by factors such as generational background, geographic location, and personal experiences.

In Closing

Life is a beautiful journey, yet it presents its own unique challenges. Depending on the circumstances we face, the path to fulfillment and success can feel like a joyride or a nightmare. It's not a question of who will encounter adversity, but rather when each of us will face it. Personally, I believe that those who experience significant struggle and hardship can emerge as some of the strongest, wisest, and most talented individuals. The key lies in navigating through the layers of trauma, striving for growth, and never stopping. Writing this literature review has been a rewarding experience, and I am excited to have the honor of working with a diverse array of clients. I've come to realize that despite our different backgrounds, experiences, and histories, we all strive for the same fundamental human principles: unconditional love and connection.

References

Agorastos, A., Pervanidou, P., Chrousos, G. P., & Kolaitis, G. (2018). Early life stress and trauma: Developmental neuroendocrine aspects of prolonged stress system dysregulation. *Hormones, 17*, 507–520. https://doi.org/10.1007/s42000-018-0065-x

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). https://doi.org/10.1176/appi.books.9780890425787

Anderson, L., & Heyne, L. (2016). Flourishing through leisure and the upward spiral theory of lifestyle change. *Therapeutic Recreation Journal, 50*(2), 118–137. https://doi.org/10.18666/TRJ-2016-V50-I2-7333

Andersson, S.-O., Annerbäck, E.-M., Söndergaard, H. P., Hallqvist, J., & Kristiansson, P. (2021). Adverse Childhood Experiences are associated with choice of partner, both partners' relationship and psychosocial health as reported one year after birth of a common child. A cross-sectional study. *PloS One, 16*(1), Article e0244696. https://doi.org/10.1371/journal.pone.0244696

Barlow, D. H., Durand, V. M., Hofmann, S. G., & Lalumiere, M. L. (2018). *Abnormal psychology* (5th ed.). Nelson.

Berghs, M., Prick, A.-E. J. C., Vissers, C., & van Hooren, S. (2022). Drama therapy for children and adolescents with psychosocial problems: A systemic review on effects, means, therapeutic attitude, and supposed mechanisms of change. *Children, 9*(9), Article 1358. https://doi.org/10.3390/children9091358

Blase, K., Vermetten, E., Lehrer, P., & Gevirtz, R. (2021). Neurophysiological approach by self-control of your stress-related autonomic nervous system with depression, stress and anxiety patients. *International Journal of Environmental Research and Public Health, 18*(7), Article 3329. https://doi.org/10.3390/ijerph18073329

Brooks, M., Graham-Kevan, N., Robinson, S., & Lowe, M. (2021). "I get knocked down, but I get up again" – A qualitative exploration of posttraumatic growth after multiple traumas. *Traumatology, 27*(3), 274–284. https://doi.org/10.1037/trm0000299

Bruehlman-Senecal, E., & Ayduk, O. (2015). This too shall pass: Temporal distance and the regulation of emotional distress. *Journal of Personality and Social Psychology, 108*(2), 356–375. https://doi.org/10.1037/a0038324

Bryngeirsdottir, H. S., & Halldorsdottir, S. (2022). "I'm a winner, not a victim": The facilitating factors of post-traumatic growth among women who have suffered intimate partner violence. *International Journal of Environmental Research and Public Health, 19*(3), Article 1342. https://doi.org/10.3390/ijerph19031342

Buckley, T., Punkanen, M., & Ogden, P. (2018). The role of the body in fostering resilience: A sensorimotor psychotherapy perspective. *Body, Movement and Dance in Psychotherapy,* 13(4), 225–233. https://doi.org/10.1080/17432979.2018.1467344

Cambron, C., Kosterman, R., Catalano, R. F., Guttmannova, K., & Hawkins, J. D. (2018). Neighborhood, family, and peer factors associated with early adolescent smoking and alcohol use. *Journal of Youth and Adolescence, 47,* 369–382. https://doi.org/10.1007/s10964-017-0728-y

Clark, J. N. (2024). Post-traumatic growth, resilience and social-ecological synergies: some reflections from a study on conflict-related sexual violence. *Social Sciences, 13*(2), Article 104. https://doi.org/10.3390/socsci13020104

Cotter, A. (2021). Criminal victimization in Canada, 2019. *Juristat, 41*(1), 1–37. https://www150.statcan.gc.ca/n1/pub/85-002-x/2021001/article/00014-eng.htm

Dell'Osso, L., Carpita, B., Nardi, B., Bonelli, C., Calvaruso, M., & Cremone, I. M. (2023). Biological correlates of post-traumatic growth (PTG): A literature review. *Brain Sciences*, *13*(2), Article 305. https://doi.org/10.3390/brainsci13020305

Dell'Osso, L., Lorenzi, P., Nardi, B., Carmassi, C., & Carpita, B. (2022). Post traumatic growth (PTG) in the frame of traumatic experiences. *Clinical Neuropsychiatry*, *19*(6), 390–393. https://doi.org/10.36131/cnfioritieditore20220606

Doody, J. S., Burghardt, G., & Dinets, V. (2023). The evolution of sociality and the Polyvagal Theory. *Biological Psychology, 180*, Article 108569. https://doi.org/10.1016/j.biopsycho.2023.108569

Eames, C., & O'Connor, D. (2022). The role of repetitive thinking and spirituality in the development of posttraumatic growth and symptoms of posttraumatic stress disorder. *PloS One*, *17*(8), Article e0272036. https://doi.org/10.1371/journal.pone.0272036

Edwards, L., & Woollacott, M. H. (2022). Analysis of spiritual awakening in a Kundalini tradition: Psychological change and spiritual growth. *Journal of Transpersonal Psychology*, *54*(1). https://www.thesoulsjourney.com/wp-content/uploads/2023/01/tprs-54-22-01-056-Edwards-Woollacott-Analysis-of-Spiritual-Awakening-....pdf

Fernandez, I., Gonzalez-Vazquez, A. I., Garcia-Guerrero, F., Rodriguez-Lago, L., Seoane-Pillado, M. T., & Santed-German, M. A. (2018). The progressive approach to EMDR group therapy for complex trauma and dissociation: A case-control study. *Frontiers in Psychology*, *8*, Article 2377. https://doi.org/10.3389/fpsyg.2017.02377

Folke, C., Colding, J., & Berkes, F. (2001). Synthesis: Building resilience and adaptive capacity in social–ecological systems. In F. Berkes, J. Colding, & C. Folke (Eds.), *Navigating social-ecological systems* (pp. 352–387). Cambridge University Press. https://doi.org/10.1017/CBO9780511541957.020

Frank, K., & Bader, D. (2023, January 25). *What do we know about physical and non-physical childhood maltreatment in Canada? Economic and Social Reports*, *3*(1), 1–6. https://doi.org/10.25318/36280001202300100001-eng

Fullerton, D. J., Zhang, L. M., & Kleitman, S. (2021). An integrative process model of resilience in an academic context: Resilience resources, coping strategies, and positive adaptation. *PloS One, 16*(2), Article e0246000. https://doi.org/10.1371/journal.pone.0246000

Furman, B. (1997) *It's never too late to have a happy childhood.* BT Press.

Ganz, M. B., Rasmussen, H. F., McDougall, T. V., Corner, G. W., Black, T. T., & De Los Santos, H. F. (2022). Emotionally focused couple therapy within VA healthcare: Reductions in relationship distress, PTSD, and depressive symptoms as a function of attachment-based couple treatment. *Couple & Family Psychology*, *11*(1), 15–32. https://doi.org/10.1037/cfp0000210

Gentile, S. (2022). Horizons: Adverse childhood experiences (ACEs). *Queen's University, Family Medicine, 2022*(2), 1–4. https://familymedicine.queensu.ca/source/Family%20Medicine/Horizons%20Fall%202022FF.pdf

Gibbs, A., Dunkle, K., & Jewkes, R. (2018). Emotional and economic intimate partner violence as key drivers of depression and suicidal ideation: A cross-sectional study among young women in informal settlements in South Africa. *PloS One, 13*(4), Article e0194885. https://doi.org/10.1371/journal.pone.0194885

Gidzgier, P. A., Bari, M., López-Atanes, M., Lotzin, A., Grundmann, J., Hiller, P., Schneider, B., & Schäfer, I. (2023). Improving care for SUD patients with complex trauma-relationships between childhood trauma, dissociation, and suicidal behavior in female patients with PTSD and SUD. *Frontiers in Psychiatry, 13*, Article 1047274. https://doi.org/10.3389/fpsyt.2022.1047274

Gómez-Baya, D., & Mendoza, R. (2018). Trait emotional intelligence as a predictor of adaptive responses to positive and negative affect during adolescence. *Frontiers in Psychology, 9,* Article 2525. https://doi.org/10.3389/fpsyg.2018.02525

Gonzalez, D., Bethencourt Mirabal, A., & McCall, J. D. (2023, July 4). *Child abuse and neglect*. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK459146/

Görg, N., Böhnke, J. R., Priebe, K., Rausch, S., Wekenmann, S., Ludäscher, P., Bohus, M., & Kleindienst, N. (2019). Changes in trauma-related emotions following treatment with dialectical behavior therapy for posttraumatic stress disorder after childhood abuse. *Journal of Traumatic Stress, 32*(5), 764–773. https://doi.org/10.1002/jts.22440

Government of Canada. (2021, January 29). *Government of Canada supports first national guideline on high-risk drinking and alcohol use disorder*. https://www.canada.ca/en/health-canada/news/2021/01/government-of-canada-supports-first-national-guideline-on-high-risk-drinking-and-alcohol-use-disorder.html

Government of Canada. (2022, February 7). *Fact sheet: Intimate partner violence*. https://www.canada.ca/en/women-gender-equality/gender-based-violence/intimate-partner-violence.html

Hamby, S., Grych, J., & Banyard, V. (2018). Resilience portfolios and poly-strengths: Identifying protective factors associated with thriving after adversity. *Psychology of Violence, 8*(2), 172–183. https://doi.org/10.1037/vio0000135

Han Almış, B., Gümüştaş, F., & Koyuncu Kütük, E. (2020). Effects of domestic violence against Women on mental health of women and children. *Psikiyatride Güncel Yaklaşimlar, 12*(2), 232–242. https://doi.org/10.18863/pgy.567635

Hawley, L. L., Schwartz, D., Bieling, P. J., Irving, J., Corcoran, K., Farb, N. A. S., Anderson, A. K., & Segal, Z. V. (2014). Mindfulness practice, rumination and clinical outcome in

mindfulness-based treatment. *Cognitive Therapy and Research*, *38*, 1–9. https://doi.org/10.1007/s10608-013-9586-4

Hébert, M., & Amédée, L. M. (2020). Latent class analysis of post-traumatic stress symptoms and complex PTSD in child victims of sexual abuse and their response to Trauma-Focused Cognitive Behavioural Therapy. *European Journal of Psychotraumatology*, *11*(1), Article 1807171. https://doi.org/10.1080/20008198.2020.1807171

Heidinger, L. (2022, December 12). Profile of Canadians who experienced victimization during childhood, 2018. *Statistics Canada*. https://www150.statcan.gc.ca/n1/pub/85-002-x/2022001/article/00016-eng.htm

Hoffman, J. R., Ostfeld, I., Kaplan, Z., Zohar, J., & Cohen, H. (2015). Exercise enhances the behavioral responses to acute stress in an animal model of PTSD. *Medicine and Science in Sports and Exercise, 47*(10), 2043–2052. https://doi.org/10.1249/MSS.0000000000000642

Huffziger, S., & Kuehner, C. (2009). Rumination, distraction, and mindful self-focus in depressed patients. *Behaviour Research and Therapy*, 47(3), 224–230. https://doi.org/10.1016/j.brat.2008.12.005

Hussain, H., Hussain, S., Zahra, S., & Hussain, T. (2020). Prevalence and risk factors of domestic violence and its impacts on women's mental health in Gilgit-Baltistan, Pakistan. *Pakistan Journal of Medical Sciences, 36*(4), 627–631. https://doi.org/10.12669/pjms.36.4.1530

Jayawickreme, E., Infurna, F. J., Alajak, K., Blackie, L. E. R., Chopik, W. J., Chung, J. M., Dorfman, A., Fleeson, W., Forgeard, M. J. C., Frazier, P., Furr, R. M., Grossmann, I., Heller, A. S., Laceulle, O. M., Lucas, R. E., Luhmann, M., Luong, G., Meijer, L., McLean, K. C., … Zonneveld, R. (2021). Post-traumatic growth as positive personality change:

Challenges, opportunities, and recommendations. *Journal of Personality, 89*(1), 145–165. https://doi.org/10.1111/jopy.12591

Jindani, F., Turner, N., & Khalsa, S. B. S. (2015). A yoga intervention for posttraumatic stress: A preliminary randomized control trial. *Evidence-Based Complementary and Alternative Medicine, 2015,* Article 351746. https://doi.org/10.1155/2015/351746

Joining Forces for Children. (2021). *What are ACEs?* https://www.joiningforcesforchildren.org/what-are-aces/

Jongh, A., Roos, C., & El-Leithy, S. (2024). State of the science: Eye movement desensitization and reprocessing (EMDR) therapy. *Journal of Traumatic Stress, 37*(2), 205–216. https://doi.org/10.1002/jts.23012

Joseph, J., & Canlas, R. P. (2023). Differentiating factors of battered women syndrome and posttraumatic stress disorder among battered wives: A systematic literature review. *Indian Journal of Health and Wellbeing, 14*(1), 5–11. https://www.i-scholar.in/index.php/ijhw/article/view/222285

Jury, T. K., & Jose, P. E. (2019). Does rumination function as a longitudinal mediator between mindfulness and depression? *Mindfulness*, *10*(6), 1091–1104. https://doi.org/10.1007/s12671-018-1031-z

Kim, E., & Bae, S. (2019). Gratitude moderates the mediating effect of deliberate rumination on the relationship between intrusive rumination and post-traumatic growth. *Frontiers in Psychology, 10,* Article 2665. https://doi.org/10.3389/fpsyg.2019.02665

Kimbley, C. T., Cox, D. W., Kahn, J. H., & Renshaw, K. D. (2023). Feeling pressured to talk about trauma: How pressure to disclose alters the association between trauma disclosure and posttraumatic growth. *Journal of Traumatic Stress, 36*(3), 567–578. https://doi.org/10.1002/jts.22930

Kross, E., & Ayduk, O. (2011). Making meaning out of negative experiences by self-distancing. *Current Directions in Psychological Science*, *20*(3), 187–191. https://doi.org/10.1177/0963721411408883

Kuhfuß, M., Maldei, T., Hetmanek, A., & Baumann, N. (2021). Somatic experiencing - effectiveness and key factors of a body-oriented trauma therapy: A scoping literature review. *European Journal of Psychotraumatology, 12*(1), Article 1929023. https://doi.org/10.1080/20008198.2021.1929023

Le Berre, A.-P. (2019). Emotional processing and social cognition in alcohol use disorder. *Neuropsychology*, *33*(6), 808–821. https://doi.org/10.1037/neu0000572

Lee, D., Yu, E.-S., & Kim, N. H. (2020). Resilience as a mediator in the relationship between posttraumatic stress and posttraumatic growth among adult accident or crime victims: The moderated mediating effect of childhood trauma. *European Journal of Psychotraumatology*, *11*(1), Article 1704563. https://doi.org/10.1080/20008198.2019.1704563

Levi, O., Bar-Haim, Y., Kreiss, Y., & Fruchter, E. (2016). Cognitive-behavioural therapy and psychodynamic psychotherapy in the treatment of combat-related post-traumatic stress disorder: a comparative effectiveness study: CBT and PDT in PTSD. *Clinical Psychology and Psychotherapy*, *23*(4), 298–307. https://doi.org/10.1002/cpp.1969

Ley, C., Rato Barrio, M., & Koch, A. (2018). “In the sport I am here”: Therapeutic processes and health effects of sport and exercise on PTSD. *Qualitative Health Research, 28*(3), 491–507. https://doi.org/10.1177/1049732317744533

MacIntosh, H. B., & Johnson, S. (2008). Emotionally focused therapy for couples and childhood sexual abuse survivors. *Journal of Marital and Family Therapy*, *34*(3), 298–315. https://doi.org/10.1111/j.1752-0606.2008.00074.x

Mampane, R., & Bouwer, C. (2006). Identifying resilient and non-resilient middle-adolescents in a formerly Black-only urban school. *South African Journal of Education, 26*(3), 443–456. https://www.ajol.info/index.php/saje/article/view/25081

Matlin, S. L., Champine, R. B., Strambler, M. J., O'Brien, C., Hoffman, E., Whitson, M., Kolka, L., & Tebes, J. K. (2019). A community's response to adverse childhood experiences: Building a resilient, trauma-informed community. *American Journal of Community Psychology, 64*(3–4), 451–466. https://doi.org/10.1002/ajcp.12386

Matte-Landry, A., Grisé Bolduc, M.-È., Tanguay-Garneau, L., Collin-Vézina, D., & Ouellet-Morin, I. (2023). Cognitive outcomes of children with complex trauma: A systematic review and meta-analyses of longitudinal studies. *Trauma, Violence, & Abuse, 24*(4), 2743–2757. https://doi.org/10.1177/15248380221111484

Mayo Clinic. (2022, December 13). *Post-traumatic stress disorder (PTSD)*. https://www.mayoclinic.org/diseases-conditions/post-traumatic-stress-disorder/symptoms-causes/syc-20355967

Michałowska, S. N., & Chęć, M. (2024). Dialectical behavior therapy in the treatment of trauma. *Archives of Psychiatry and Psychotherapy*, *26*(1), 26–32. https://doi.org/10.12740/APP/172133

Molavi, P., Pourabdol, S., & Azarkolah, A. (2020). The effectiveness of acceptance and commitment therapy on posttraumatic cognitions and psychological inflexibility among students with trauma exposure. *Archives of Trauma Research, 9*(2), 69–74. https://doi.org/10.4103/atr.atr_100_19

Morin, A. (2017). Toward a glossary of self-related terms. *Frontiers in Psychology*, *8*, Article 280. https://doi.org/10.3389/fpsyg.2017.00280

Morrison, K., & Dwarika, V. (2022). Trauma survivors' experiences of Kundalini yoga in fostering posttraumatic growth. *Journal of Child & Adolescent Trauma, 15*(3), 821–831. https://doi.org/10.1007/s40653-022-00441-w

National Institute of Alcohol Abuse and Alcoholism (NIAAA). (2020). *Alcohol's effects on health: Research-based information on drinking and its impact*. https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/understanding-alcohol-use-disorder

Ng, F., Ibrahim, N., Franklin, D., Jordan, G., Lewandowski, F., Fang, F., Roe, D., Rennick-Egglestone, S., Newby, C., Hare-Duke, L., Llewellyn-Beardsley, J., Yeo, C., & Slade, M. (2021). Post-traumatic growth in psychosis: A systematic review and narrative synthesis. *BMC Psychiatry, 21*(1), Article 607. https://doi.org/10.1186/s12888-021-03614-3

O'Donovan, R., & Burke, J. (2022). Factors associated with post-traumatic growth in healthcare professionals: A systematic review of the literature. *Healthcare, 10*(12), Article 2524. https://doi.org/10.3390/healthcare10122524

Omkarappa, D. B., & Rentala, S. (2019). Anxiety, depression, self-esteem among children of alcoholic and nonalcoholic parents. *Journal of Family Medicine and Primary Care, 8*(2), 604–609. https://doi.org/10.4103/jfmpc.jfmpc_282_18

Omkarappa, D. B., Rentala, S., & Nattala, P. (2019). Social competence among children of alcoholic and nonalcoholic parents. *Journal of Education and Health Promotion, 8*, Article 69. https://doi.org/10.4103/jehp.jehp_320_18

Pachito, D. V., Pega, F., Bakusic, J., Boonen, E., Clays, E., Descatha, A., Delvaux, E., Bacquer, D. D., Koskenvuo, K., Kröger, H., Lambrechts, M.-C., Latorraca, C. O. C., Li, J., Martimbianco, A. L. C., Riera, R., Rugulies, R., Sembajwe, G., Siegrist, J., Sillanmäki, L., … Godderis, L. (2021). The effect of exposure to long working hours on alcohol

consumption, risky drinking and alcohol use disorder: A systematic review and meta-analysis from the WHO/ILO joint estimates of the work-related burden of disease and injury. *Environment International, 146,* Article 106205. https://doi.org/10.1016/j.envint.2020.106205

Petersen, A. C., Joseph, J., & Feit, M. N. (Eds.). (2014). *New directions in child abuse and neglect research*. National Academies Press. https://doi.org/10.17226/18331

Pittenger, S. L., Pogue, J. K., & Hansen, D. J. (2018). Predicting sexual revictimization in childhood and adolescence: A longitudinal examination using ecological systems theory. *Child Maltreatment, 23*(2), 137–146. https://doi.org/10.1177/1077559517733813

Porges, S. W. (2021). Polyvagal Theory: A biobehavioral journey to sociality. *Comprehensive Psychoneuroendocrinology, 7,* Article 100069. https://doi.org/10.1016/j.cpnec.2021.100069

Porges, S. W. (2022). Polyvagal Theory: A science of safety. *Frontiers in Integrative Neuroscience, 16,* Article 871227. https://doi.org/10.3389/fnint.2022.871227

Quickert, R. E., & MacDonald, T. K. (2020). Being in the moment so you can keep moving forward: Mindfulness and rumination mediate the relationship between attachment orientations and negative conflict styles. *International Journal of Environmental Research and Public Health*, *17*(18), Article 6472. https://doi.org/10.3390/ijerph17186472

Résibois, M., Rotgé, J.-Y., Delaveau, P., Kuppens, P., Van Mechelen, I., Fossati, P., & Verduyn, P. (2018). The impact of self-distancing on emotion explosiveness and accumulation: An fMRI study. *PloS One, 13*(11), Article e0206889. https://doi.org/10.1371/journal.pone.0206889

Rider Mundey, K., Nicholas, D., Kruczek, T., Tschopp, M., & Bolin, J. (2019). Posttraumatic growth following cancer: The influence of emotional intelligence, management of intrusive

rumination, and goal disengagement as mediated by deliberate rumination. *Journal of Psychosocial Oncology, 37*(4), 456–477. https://doi.org/10.1080/07347332.2018.1514449

Salonia, G., Mahajan, R., & Mahajan, N. S. (2021). Codependency and coping strategies in the spouses of substance abusers. *Scholars Journal of Applied Medical Sciences, 7,* 1130–1138. https://doi.org/10.36347/sjams.2021.v09i07.002

Schouten, K. A., van Hooren, S., Knipscheer, J. W., Kleber, R. J., & Hutschemaekers, G. J. M. (2018). Trauma-focused art therapy in the treatment of posttraumatic stress disorder: A pilot study. *Journal of Trauma & Dissociation, 20*(1), 114–130. https://doi.org/10.1080/15299732.2018.1502712

Schlumpf, Y. R., Nijenhuis, E. R. S., Klein, C., Jäncke, L., & Bachmann, S. (2019). Functional reorganization of neural networks involved in emotion regulation following trauma therapy for complex trauma disorders. *NeuroImage Clinical, 23,* Article 101807. https://doi.org/10.1016/j.nicl.2019.101807

Selby, E. A., Kranzler, A., Panza, E., & Fehling, K. B. (2016). Bidirectional-compounding effects of rumination and negative emotion in predicting impulsive behavior: Implications for emotional cascades. *Journal of Personality, 84*(2), 139–153. https://doi.org/10.1111/jopy.12147

Shakespeare-Finch, J., & Barrington, A. J. (2012). Behavioural changes add validity to the construct of posttraumatic growth. *Journal of Traumatic Stress, 25*(4), 433–439. https://doi.org/10.1002/jts.21730

Shakespeare-Finch, J., Martinek, E., Tedeschi, R. G., & Calhoun, L. G. (2013). A qualitative approach to assessing the validity of the posttraumatic growth inventory. *Journal of Loss and Trauma, 18*(6), 572–591. https://doi.org/10.1080/15325024.2012.734207

Shakoor, S., Theobald, D., & Farrington, D. P. (2022). Intergenerational continuity of intimate partner violence perpetration: An investigation of possible mechanisms. *Journal of Interpersonal Violence, 37*(7–8), NP5208–NP5227. https://doi.org/10.1177/0886260520959629

Shaw, S. B., Nicholson, A. A., Ros, T., Harricharan, S., Terpou, B., Densmore, M., Theberge, J., Frewen, P., & Lanius, R. A. (2023). Increased top-down control of emotions during symptom provocation working memory tasks following a RCT of alpha-down neurofeedback in PTSD. *NeuroImage Clinical, 37,* Article 103313. https://doi.org/10.1016/j.nicl.2023.103313

Singh, N. K., & Bhattacharjee, D. (2022). Impact of alcohol on family functioning. In V. K. Shanwal & B. S. Chhikara (Eds.), *Alcoholism: Causes, symptoms, effects and treatment* (pp. 15-34). CRC Press. https://doi.org/10.1201/9781003280361

Smith, A., Bryson, H., Gartland, D., Mensah, F., Wood, C. E., & Price, A. (2023). Mothers' experiences of emotional abuse from an intimate partner and its associations with children's developmental outcomes at 5 years. *Child Abuse & Neglect, 146,* Article 106458. https://doi.org/10.1016/j.chiabu.2023.106458

Sparrow, R., & Fornells-Ambrojo, M. (2024). Two people making sense of a story: Narrative exposure therapy as a trauma intervention in early intervention in psychosis. *European Journal of Psychotraumatology, 15*(1), Article 2355829. https://doi.org/10.1080/20008066.2024.2355829

Spidel, A., Lecomte, T., Kealy, D., & Daigneault, I. (2018). Acceptance and commitment therapy for psychosis and trauma: Improvement in psychiatric symptoms, emotion regulation, and treatment compliance following a brief group intervention. *Psychology and Psychotherapy, 91*(2), 248–261. https://doi.org/10.1111/papt.12159

Steil, R., Schneider, A., & Schwartzkopff, L. (2022). How to treat childhood sexual abuse related PTSD accompanied by risky sexual behavior: A case study on the use of dialectical behavior therapy for posttraumatic stress disorder (DBT-PTSD). *Journal of Child & Adolescent Trauma, 15*(2), 471–478. https://doi.org/10.1007/s40653-021-00421-6

Strathearn, L., Giannotti, M., Mills, R., Kisely, S., Najman, J., & Abajobir, A. (2020). Long-term cognitive, psychological, and health outcomes associated with child abuse and neglect. *Pediatrics, 146*(4), Article e20200438. https://doi.org/10.1542/peds.2020-0438

Substance Abuse and Mental Health Services Administration. (2014). *Trauma-informed care in behavioral health services* (Treatment Improvement Protocol series, No. 57). https://www.ncbi.nlm.nih.gov/books/NBK207192/

Sullivan, M. B., Erb, M., Schmalzl, L., Moonaz, S., Noggle Taylor, J., & Porges, S. W. (2018). Yoga therapy and polyvagal theory: The convergence of traditional wisdom and contemporary neuroscience for self-regulation and resilience. *Frontiers in Human Neuroscience, 12,* Article 67. https://doi.org/10.3389/fnhum.2018.00067

Taku, K., Tedeschi, R. G., Shakespeare-Finch, J., Krosch, D., David, G., Kehl, D., Grunwald, S., Romeo, A., Di Tella, M., Kamibeppu, K., Soejima, T., Hiraki, K., Volgin, R., Dhakal, S., Zięba, M., Ramos, C., Nunes, R., Leal, I., Gouveia, P. … Calhoun, L. G. (2021). Posttraumatic growth (PTG) and posttraumatic depreciation (PTD) across ten countries: Global validation of the PTG-PTD theoretical model. *Personality and Individual Differences, 169,* Article 110222. https://www.sciencedirect.com/science/article/abs/pii/S0191886920304116

Taylor, J., McLean, L., Korner, A., Stratton, E., & Glozier, N. (2020). Mindfulness and yoga for psychological trauma: Systematic review and meta-analysis. *Journal of Trauma & Dissociation, 21*(5), 536–573. https://doi.org/10.1080/15299732.2020.1760167

Tedeschi, R. G., Shakespeare-Finch, J., Taku, K., & Calhoun, L. G. (2018). *Posttraumatic growth: Theory, research, and applications*. Routledge. https://doi.org/10.4324/9781315527451

Timothy, A., Benegal, V., Shankarappa, B., Saxena, S., Jain, S., & Purushottam, M. (2019). Influence of early adversity on cortisol reactivity, SLC6A4 methylation and externalizing behavior in children of alcoholics. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, *94*, Article 109649. https://doi.org/10.1016/j.pnpbp.2019.109649

Tomaszewski, C., Belot, R.-A., Essadek, A., Onumba-Bessonnet, H., & Clesse, C. (2023). Impact of dance therapy on adults with psychological trauma: A systematic review. *European Journal of Psychotraumatology*, *14*(2), Article 2225152. https://doi.org/10.1080/20008066.2023.2225152

Unver, H., & Timur Tashan, S. (2021). Effect of yoga on posttraumatic growth and quality of life in first-time mothers: A randomized controlled trial. *Journal of Obstetrics and Gynaecology Research, 47*(12), 4180–4188. https://doi.org/10.1111/jog.15025

Van der Kolk, B. A., Hodgdon, H., Gapen, M., Musicaro, R., Suvak, M. K., Hamlin, E., & Spinazzola, J. (2016). A randomized controlled study of neurofeedback for chronic PTSD. *PloS One*, *11*(12), Article e0166752. https://doi.org/10.1371/journal.pone.0166752

Walker, J., & Pacik, D. (2017). Controlled rhythmic yogic breathing as complementary treatment for post-traumatic stress disorder in military veterans: A case series. *Medical Acupuncture, 29*(4), 232–238. https://doi.org/10.1089/acu.2017.1215

Walsh, D., McCartney, G., Smith, M., & Armour, G. (2019). Relationship between childhood socioeconomic position and adverse childhood experiences (ACEs): A systematic review. *Journal of Epidemiology and Community Health, 73*(12), 1087–1093. https://doi.org/10.1136/jech-2019-212738

Woollett, N., Bandeira, M., & Hatcher, A. (2020). Trauma-informed art and play therapy: Pilot study outcomes for children and mothers in domestic violence shelters in the United States and South Africa. *Child Abuse & Neglect, 107,* Article 104564. https://doi.org/10.1016/j.chiabu.2020.104564

World Health Organization. (2020, January 28). *Adverse Childhood Experiences international questionnaire (ACE-IQ).* https://www.who.int/publications/m/item/adverse-childhood-experiences-international-questionnaire-(ace-iq)

World Health Organization. (2021, March 9). *Violence against women*. https://www.who.int/news-room/fact-sheets/detail/violence-against-women

Wu, X., Kaminga, A. C., Dai, W., Deng, J., Wang, Z., Pan, X., & Liu, A. (2019). The prevalence of moderate-to-high posttraumatic growth: A systematic review and meta-analysis. *Journal of Affective Disorders, 243,* 408–415. https://doi.org/10.1016/j.jad.2018.09.023

Yunitri, N., Chu, H., Kang, X. L., Wiratama, B. S., Lee, T.-Y., Chang, L.-F., Liu, D., Yeni Kustanti, C., Chiang. K.-J., Chen, R., Tseng, P., & Chou, K.-R. (2023). Comparative effectiveness of psychotherapies in adults with posttraumatic stress disorder: A network meta-analysis of randomised controlled trials. *Psychological Medicine, 53*(13), 6376–6388. https://doi.org/10.1017/S0033291722003737

Zięba, M., Wiecheć, K., Biegańska-Banaś, J., & Mieleszczenko-Kowszewicz, W. (2019). Coexistence of post-traumatic growth and post-traumatic depreciation in the aftermath of trauma: Qualitative and quantitative narrative analysis. *Frontiers in Psychology, 10,* Article 687. https://doi.org/10.3389/fpsyg.2019.00687