From Sorrow to Growth: Investigating the Role of Crying in Therapy

by

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Abstract

Crying is a complex behavior that can serve several different purposes. While it is mostly used as a way to express emotions, the Biopsychosocial model of crying suggests that there is more to it than that. Gender, age, personality traits, cultural norms, past experiences with trauma and even biological factors such as hormone production can help explain why we cry the way we do. The purpose of this capstone project is to help therapists better understand the different contexts in which crying occurs, as well as how to evaluate a patient's crying and how to respond to it in a way that is helpful. For that purpose, the research on crying from years past has been comprehensively analyzed and summarized in this capstone project. This paper seeks to provide therapists with a nuanced understanding of the multifaceted nature of crying and its potential as a therapeutic tool.

Keywords: crying, tears, therapy, mental health

Table of Contents

Chapter One: Introduction

"Words, what are they? One tear will say more than all of them" - A.W. Schlegel

(as cited in Lutz, 2001, p.11)

In present-day northern Syria, an archeologist found clay tablets that date back to the 14th Century. Scholars agree that on these Canaanite tablets (named after the ancient city, Canaan) are the first written record of tears. The inscription is a poem about the Goddess Anant, who cried in such frenzy after her lover's death that the Gods decided to return him back to her (Carmichael, 1991). The translation of the poem in English reads that Anat "*continued sating herself with weeping; to drink tears like wine"* (Lutz, 2001, p. 33, para 2). This, the first written evidence of tears in human history, suggests that crying is the symbol of our suffering (Lutz, 2001; Carmichael, 1991). The people of Canaan believed that crying will magically bestow on them a resolution either in the form of intoxication or by sending out a message.

Scientists speculate that crying evolved before propositional language (Trimble, 2014). We were communicating via tears even before we learned to express ideas logically using rules of language and grammar (Trimble, 2014). The lachrymal (tear) apparatus first evolved when fish became terrestrial amphibians (Christle, 2019). All mammals are lachrymal, which means they have the ability to shed tears to keep their eyes healthy and hydrated (Trimble, 2014). There is a hypothesis that crying in humans may have originated from separation calls that are seen in all mammalian species and birds (Gračanin et al., 2018). Even in the animal world, when infants are removed from their parents, they make loud noises to get their attention (Bylsma et al., 2019).

There are two noticeable differences in the separation calls between humans and other animals. First, only humans cry for emotional reasons (Bylsma et al., 2019; Gračanin et al., 2018). Researcher Marc Bekoff (2007) extensively studied the emotional lives of animals and shared anecdotes of them displaying emotional pain through gestures other than tears (as cited in Trimble, 2014). Jane Goodall spent 45 years of her life studying chimpanzee behaviour, including intimate mother-infant bonding and never wrote of chimpanzees crying emotional tears under duress (Trimble, 2014). The second difference is that humans continue to cry in their adult life, a behaviour not observed in any other species. In the wild, once the infant grows into an adult, they no longer sound distress signals out of separation anxiety (Bylsma et al., 2019).

Human emotional crying changes from infancy to adulthood. Parents of newborns and researchers (Vingerhoets et al., 2012; Zeifman & Brown, 2011) have observed that an infant's cry is primarily vocal and does not always accompany tears. In contrast, adults are known to display more tears and have less vocalization when crying (Zeifman & Brown, 2011). The reasons that make us cry keep changing as we age. Infants appear to cry in response to pain or distress caused by hunger and fear of being left alone (Vingerhoets et al., 2012). Adults cry as a response to various emotions ranging from grief and suffering to joy and pleasure (Vingerhoets, 2013). One study on the frequency of emotional crying in adult humans noted how frequently we cry in relatively mundane situations (Bylsma et al., 2018). This includes common daily occurrences such as conflicts and minor frustrations and reactions to movies and music (Bylsma et al., 2018).

Crying in Psychotherapy

Psychotherapists from all traditions and backgrounds strongly consider a client’s tears during therapy as constructive (Vingerhoets, 2013; Bylsma et al., 2021). In one survey, more

than 70% of psychologists stated that they had actively encouraged crying in patients (Trezza et al., 1988). Clients who have cried during psychotherapy sessions while addressing emotionally difficult topics often report feeling better and/or lighter (Bylsma et al., 2021). From my own experience, I've observed that after a cathartic cry, clients often express how relieving it was for them to release those emotions.

There is a plethora of clinical theories that view crying as a necessary and important component of a successful therapeutic process (Capps et al., 2021). Freud and Breuer, in 'Studies of Hysteria' (1968) referred to tears as "*involuntary reflexes*" that are meant to aid in the release of overwhelming emotions in order to prevent an excessive emotional buildup. *"Sich austoben*" is a German word that means to *"cry oneself out*" and is used in traditional psychoanalytic theories to explain how strong emotions need to be vented in order to prevent psychic damage (Breuer & Freud, 1968, pp. 3-17).

Contemporary psychoanalytic theories have changed their position on emotions and now view them as communicative, interactive, and dynamic (Nelson, 2012). However, the perspective has stuck and even today in clinical literature, crying is generally treated as a necessary component of a successful therapeutic outcome (Bylsma et al., 2021). My supervisor was teaching me how to write post-session notes when I observed that she had written, "*the patient cried*" in one of her notes. When I asked her about it, she explained that crying is a positive marker, and it usually signals that therapy is moving forward. My supervisor, along with many psychotherapists, views crying as an index of client involvement in the psychotherapeutic process (Bylsma et al., 2021).

Catharsis Hypothesis

Researcher Rudolph Cornelius (1986) combed through 140 years of published articles about crying and found two repeating themes. First, as many as 94% of these articles had unanimously declared that crying is invariably beneficial and second, many of these articles had warned readers that suppressing tears is bad for one's health and well-being (Vingerhoets et al., 2007). Thirty-six years later, these two ideas are still assumed as factual truths by lay people and medical professionals, including counsellors (Vingerhoets, 2013). This is a problematic claim for health professionals to make because it does not consider the diverse circumstances in which crying occurs and might make crying problematic for the crier.

Decades of research on crying has not helped us come to a definitive conclusion on many relevant issues (Vingerhoets, 2013). One reason for that is the illusive and subjective nature of adult emotional crying. For instance, researchers who have tried to prove whether crying can lead to positive mood improvement are met with unique methodological challenges. Ad Vingerhoets and his colleague led the International Study on Adult Crying (ISAC) that collected data from student samples from 37 countries across the world. Data was obtained from 2497 men and 3218 women in the form of a survey (Betch & Vingerhoets, 2002). Over 70% of participants in this study reported feeling better after crying (Bylsma et al., 2008). This finding has been replicated in many studies where surveys were used as the research design (Labott and Martin 1988; Rottenberg et al., 2008; Vingerhoets, 2013; Gračanin et al., 2015). However, in retrospective studies when the question was slightly changed, and the participants were asked to specifically recall their most recent crying episode and how they felt after crying (Gračanin et al., 2015). Only 50% of the respondents reportedly had experienced a positive mood change after crying in their recent episode (Gračanin et al., 2015).

Vingerhoets was puzzled by this contradiction and concluded that surveys offer an incomplete picture because there is an implicit memory bias in the research design (Vingerhoets, 2013). The participants are generally free to choose their experiences. It has been suggested that such a research design leaves the possibility that participants preferred to report crying experiences that fit the popular notion that one feels better after having cried (Cornelius, 1997). An added problem in these studies is that the time interval after the crying episode and reported positive benefits is not precisely defined (Gračanin et al., 2015).

Biopsychosocial Model of Crying

Authors Kottler and Montgomery (2001) wrote extensively about the meaning of tears. They propounded the idea that one singular theory of crying simply cannot possibly account for its inherent complexity. I believe that human behaviour cannot be explained in isolation without understanding the overall context it was displayed in. The context ranges from minute-to-minute biochemical changes within the body to stubborn personality characteristics and must also include culture, social environment, gender, situational components, cognitive interpretations, and other unconscious influences.

Vingerhoets (2013) defined crying as an emotional expression that marks the truly important events in one's life. However, crying is more than just a symptom of intense emotions. It is a complex behaviour influenced by a combination of biological (e.g. hormones), psychosocial (e.g. personality characteristics), and situational factors (e.g. cultural norms and surrounding environment). The biopsychosocial model of crying suggests that we evaluate a situation based on these factors and then we decide to either "let it out" or "keep it in". From this

perspective, crying could be a sign of distress, a coping behaviour, or a symptom of compromised health (Vingerhoets et al., 2007) and more.

Research Question

Psychotherapy is a particularly intriguing context to examine crying since it is laden with intense emotional expression. According to Van Kleef (2016) emotional expressions convey more than just an individual's state of mind. They can also reveal the expresser's appraisal of the current situation, and give clues about their personality, social motives, or behavioural intentions (Van Kleef, 2016). Every human being regardless of age, gender, or race is eventually moved to tears to express overwhelming feelings (Vingerhoets, 2013). The Catharsis hypothesis has a history of informing views on crying among therapists (Bylsma et al., 2021). However, the perceived psychological benefits of crying are more contextually dependent than previously assumed (Gračanin et al., 2018).

Researchers Bylsma et al (2008) conducted a large-scale international study asking "when" not "if" crying is cathartic. Their research concluded that the mere presence of tears does not predict feelings of emotional catharsis, and that the context in which the crying episode takes place is equally important. The cry feels cathartic if the individual receives social support and/or experiences a resolution to the event that caused the crying episode (Gračanin et al., 2018; Bylsma et al., 2021). In contrast, if one is shamed or ridiculed for crying then it will make them feel worse (Gračanin et al., 2015). Little boys, for instance, are often taught not to show emotions through tears, which might affect their crying behaviour in adulthood (Carmichael, 1991).

The main focus of this capstone project is to explore how a client's crying affects the therapeutic process. The biopsychosocial model of crying suggests that there may be different origins and reasons for crying. The research question is to determine the role that crying plays in the journey of healing in therapy. This capstone project is an investigation to help therapists gain a better understanding of the various facets of crying, and how it might prove useful as a valuable therapeutic tool. To explore the role of crying in therapy I offer research that examines its adaptive functions, developmental aspects, and effects on emotional health.

Contribution to the field

Understanding crying, particularly its adaptive functions and developmental aspects, can offer psychotherapists a nuanced insight into the development of empathy, morality, and human nature (Vingerhoets et al., 2016). The reasons why we cry or do not cry disclose so much about who we are and what is important to us (Vingerhoets et al., 2016). My purpose is to inspire the reader to think about the functions of crying more critically. I shall be satisfied if this capstone project helps individuals deal with their own crying and the crying of others more effectively.

As social creatures, we are constantly trying to interpret the emotional responses of others based on their facial expressions and body language. Lawyers, for example, may encourage witnesses to cry in court to evoke pity in order to influence jury members. Our ideas of why we cry and how it impacts us have been passed down from ancient civilizations. Through this capstone project, I hope to help readers develop a more critical perspective when considering unproven, exotic, and vague theories on crying.

As Antoine de Saint-Exupéry (1943, p. 19) said in his famous work, The Little Prince, "*Take a journey with me to the mysterious land of tears*." This capstone project will present

readers with new facts, debunk popular misconceptions, and propose new and challenging hypotheses. My goal is to help the reader distinguish between the facts and conjecture on the nature of crying. Lastly, there is research that can help clinicians use tears as a clue to assess for depression and other mood disorders.

Crying in the psychotherapeutic context needs to be talked about because therapists are tasked with helping clients make changes in behaviour, personality, or perspective. Having a narrow perspective on crying can put blinders on a therapist's approach to healing. It is therefore, imperative for therapists to conceptualize tears based on both scientific evidence and cultural memes.

Reflectivity and Positionality Statement

When I started discussing my capstone project with friends and family, I discovered that everyone has a unique relationship to crying. Some of my friends find it difficult to cry despite experiencing catastrophic life events. A few friends confided that they had forgotten how to cry in childhood and only recently rediscovered their ability to do so. For me, crying is a sacred act of cleansing and purging the pain that afflicts my spirit.

The Buddhists believe that suffering is universal and so is the drive to overcome suffering and seek happiness. I believe that we cry because we must dignify our suffering with rituals. As a therapist, I am no stranger to dealing with the tears of others. Crying is an integral part and parcel of therapy. I believe that every time a client cries in session they are communicating complex emotions, the contents of which are sometimes a mystery even to them.

I have been careful not to let my own biases percolate into the interpretation of research results. I had initially planned to focus solely on scientific evidence and research, but I quickly

realized that studying crying objectively is a challenge due to its many methodological limitations. I do not advocate for any particular theory. Rather, my aim is to present the facts as objectively as possible and leave some room for interpretation. Maintaining an open mind is essential to gaining a deeper understanding of this intriguing phenomenon.

Definition of terms

Affect refers to the fuzzy mental feeling we experience after our brain has received a summary of its bodily functions (Barret, 2017)

Basal tears form an aqueous layer that keeps the eyes hydrated and protects the cornea from drying up (Trimble, 2014). They act as a constant shield between the eye and the world, keeping dirt and debris out (Mukamal, 2023).

Catharsis refers to the experience of relief after expressing strong emotions (APA, 2018). In psychodynamic theory, catharsis occurs when repressed emotions are released after traumatic events are brought into consciousness and re-experienced (Breuer and Freud, 1968).

Crying involves vocalizations, body movements, and changes in the muscles of faces including a strained facial expression and tears (Katz et al., 2022).

Emotions are heuristics (mental shortcuts) that our brains create in order to guide our actions and explain how we are feeling in a specific situation (Barrett, 2017). For example, fear is an emotion that the brain constructs in response to unsafe environments.

Emotional tears are produced in reaction to emotional stimuli ranging from sadness to joy or crying due to physical pain and discomfort (Trimble, 2014). Unlike basal and reflex tears, emotional tears can be held back voluntarily by the individual (Bylsma et al., 2021).

Empathic tears are shed in response to the suffering of others (Vingerhoets, 2013)

Inability to cry is defined as being unable to shed tears, vocalize sadness and make facial expressions of sadness such as grimace or scowl (Rottenberg et al., 2002)

Social tears are shed during social and cultural rituals (Vingerhoets, 2013)

Sentimental tears refer to those tears that swell up when one is witnessing a "positive" event such as crying at weddings (Vingerhoets, 2013).

Reflex tears are formed when your eyes are bothered by harmful irritants, such as smoke, foreign bodies, or onion fumes (Mukamal, 2023).

Outline of the Capstone

Psychology must bear the unique burden of explaining subjective human behaviour using objective scientific tools. The takeaway from the introduction is that even though crying has a firm biological basis it is also shaped by culture. It has little inherent meaning or explanation outside its direct social context. Objectively studying crying as a universal human phenomenon without considering the subjective context in which it occurs would therefore lead to an incomplete or flawed interpretation of it. To explore the role crying plays in therapy I will borrow research from multiple disciplines such as neurobiology, developmental psychology, anthropology and evolutionary psychology.

Chapter II will provide a backdrop for understanding a client's crying experience in therapy. The literature review will be divided into two parts. Part I will investigate the causes and effects of crying. Theories will be presented on how attitudes to crying develop and the effects of crying on the observer. In Part II, we will discuss research on the relationship between crying and health. In this section, the neuroanatomy of crying will be explored in detail.

Chapter III is structured to offer practical information to therapists on how they can support clients during emotionally intense moments. The goal is to furnish the counsellor toolbox with ideas on assessment and treatment planning. For assessments, I will refer to peer-reviewed studies that have unearthed intriguing insights about crying and its relationship to psychiatric disorders.

Chapter Two : Literature Review

"It is some relief to weep; grief is satisfied and carried off by tears." - *Ovid*

(as cited in Vingerhoets, 2013 p. 102, box. 6.2)

The goal of this capstone project is to understand the role of crying in aiding the healing process during therapy. To begin this inquiry, I will share research on the causes and effects of crying. I will distill the results from one of the most extensive studies on adult emotional crying undertaken by Ad Vingerhoets' team (1998-2001). Then, I will discuss the utility of two psychological theories that clinicians can use as frameworks to conceptualize why a client may or may not cry during a session. Part II of the literature review will explore the relationship between crying and health.

PART I – Cause and Effect

Why do We Cry?

The urge to cry is elicited by both environmental stimuli and internal reactions within the individual (e.g., thoughts, emotions, and memories) (Bylsma et al., 2021). The question "*Why do we cry*?" has puzzled researchers for decades because the reasons that make us cry can be attributed to an underlying emotion, specific situations, or both. According to a well-established theory proposed by Vingerhoets et al. (2016), emotional crying serves two primary functions. The first is the catharsis effect, which emphasizes the benefits of crying for the individual. The second relates to its ability to communicate with others (Bylsma et al., 2021). We all begin life innocently crying out to the world for help, comfort, and relief from the terror of being alone and abandoned. Crying allows one to express their helplessness and need for support, resulting in

comfort and relief (Hasson, 2009; Vingerhoets et al., 2016). Zoologist Desmond Morris remarks that teardrops shine iridescently on the skin, making them a powerful visual cue of our distress (Carmichael, 1991). These two functions are not mutually exclusive because receiving emotional support also contributes to feeling good after crying (Gračanin et al., 2015).

While conducting research for this capstone project, I had numerous discussions with friends, family members, and strangers. I asked about the things that typically make them cry, and the answers commonly reflected broad themes such as the death of a loved one, breakups, and physical pain. When I changed the question slightly and asked what recent event had made them cry, the answers changed perceptibly. They shared stories that ranged from minor conflicts, criticisms, and rejection to significant life events such as losing out a job opportunity. There is no universal tear-eliciting emotion or event. Besides, exposure to an emotional event alone is not necessarily enough to make one cry. Some individuals may need to be in a particular mental state or in a private setting (such as crying in the shower and not at work) for the tears to fall (Vingerhoets et al., 2012).

As a researcher, I am reluctant to create a universal list of crying-eliciting situations. However, there are good reasons to postulate that helplessness and hopelessness, particularly when associated with attachment-related issues such as death of a loved one, romantic breakups, or other separations have a strong universal power to make us tear up (Vingerhoets et al., 2016; Denckla et al., 2014). Based on systematic observations, Vingerhoets (2013) suggested four categories of events that trigger crying:

- Loss/separation (from attachment-related figures)
- Physical pain and discomfort
- Empathetic crying (i.e., where an emotional reaction of another is the trigger)

- Extraordinarily positive or moving situations

Developmental Theories of Crying

Behaviourism

Crying can be considered a learned behaviour that obeys the laws of operant conditioning (Ellis, 1962; Vingerhoets et al., 2016). Biopsychosocial theory has established how crying is influenced by biological, psychological, and social factors (Bylsma et al., 2021). Operant conditioning suggests that an individual learns a behaviour by associating it with consequences (Ellis, 1962; Hart et al., 1964). Some researchers speculate that our attitude towards tears is instilled in us early on by our parents, teachers, employers, and other authority figures we may encounter (Carmichael,1991).

Behaviour that follows the principles of operant conditioning becomes automated, like a reflex response to the conditioned stimulus (Gračanin et al., 2014). Even the most subtle forms of positive reinforcement, such as attention, will impact whether one begins to associate crying with the experience of gratification (Hart et al., 1964; Gračanin A. et al., 2014). On the other hand, when an individual is met with an aversive response to their crying, such as physical or emotional abuse, they may associate crying with impending punishment (Gračanin et al., 2014). This perspective also provides some insights into the development of gender differences in crying (Vingerhoets, 2013). For instance, men are likely to experience strong social pressure to suppress their tears, which might influence their crying behaviour (Carmichael, 1991).

According to Kay Carmichael (1991) we are all born with the ability to cry but it could be lost as we grow older due to two reasons. First, if our childhood environment were so hostile that the relief one would feel from crying was far outweighed by the punishment for crying.

Second, the emotions that trigger crying can be so overwhelming that the individual suppresses them as a protective measure. Carmichael (1991) explains that individuals may erect walls of denial to cope with the intensity of their emotions. Part II of the literature review will explore the effects of suppressing tears.

Attachment Theory

John Bowlby was the first psychologist to consider crying as an attachment behaviour (Nelson, 2012). According to attachment theory, our early relationships with caregivers determine our attachment style, influencing the way we seek emotional support as adults (Robinson et al., 2015). Ostwald (1972, p.350) described an infant's crying as the "*acoustical umbilical cord."* Bowlby theorized that crying is the primary means for an infant to restore safety and physical connection with their caregivers (Vingerhoets, 2013).

One peer-reviewed study explored how early emotional bonds affect emotional regulation in adulthood, with crying as the main source of emotional expression (Drenger et al., 2017). This study attempted to empirically examine the link between individual attachment orientation and differences in crying behaviour. The sample consisted of 121 participants with no mental health diagnosis. Two scales were utilized in the study. The first scale, Adult Crying Inventory (ACI), was used to measure the subjective crying experience of participants. The ACI scale was developed to assess various crying behaviours by Vingerhoets et al. (2001). The second scale, Experiences in Close Relationships (ECR), was used to explore their attachment orientations. ECR is a widely accepted and reliable self-report scale that assesses attachment anxiety and avoidance (Brennan et al., 1998). Variations along the dimensions of anxiety and avoidance reflect how people deal with attachment distress (Brennan et al., 1998; Mikulincer & Shaver

2007; Drenger et al., 2017). For instance, people scoring low on both dimensions (avoidance and anxiety) seem to have a secure attachment style. In contrast, attachment insecurity leads to either hyperactivating (anxiety) or deactivating (avoidant) behaviours (Mikulincer & Shaver, 2007).

Drenger et al. (2017) discovered that individuals with high attachment anxiety tend to cry more frequently and in response to a wider range of emotions. This finding was supported by other researchers such as Laan et al. (2012) and Denckla et al. (2014). Drenger et al. (2017) hypothesized that individuals with high attachment avoidance might cry less, which was found not to be true. However, they did find that individuals with high attachment avoidance were more likely to experience adverse effects of crying, such as discomfort and wanting to suppress tears. Individuals with high avoidant attachment might also report feeling guilty or dismayed that they cried (Drenger et al., 2017). It is important to note that recent theoretical and empirical work has shown that attachment styles are constantly changing (Xu & Shrout, 2013). The purpose of presenting this research is not to defame any attachment style but to offer an insightful framework that therapists can use during treatment planning.

Types of Attachment-related Crying

Attachment theorist Judith Nelson (2012) identified three types of crying: protest, sad, and inhibited:

'Protest crying' is characterized by loud and persistent vocalizations intended to signal intense anguish (Nelson, 2012). The objective is to communicate the crier's distress to the other person. Sometimes, this kind of crying is also an attempt to restore a loss of control or neutralize the current situation. By releasing pent-up emotions through tears, the crier may regain a sense of calm and attempt to create space for positive change (Robinson et al., 2015).

*'**Sad crying**,*' is a quieter and more subdued type of crying used to signal a state of helplessness or sadness (Nelson, 2012). This type of crying is particularly effective in eliciting emotional support, empathy, and sympathy from the observer (Drenger et al., 2017).

In ***'Inhibited' or 'Detached'*** type of crying there are no visible tears, but one can sense that the individual feels extreme hopelessness and dejection (Vingerhoets, 2013). This type of crying occurs among people with avoidant attachment or individuals who tend to withdraw and isolate themselves from others (Nelson, 2012). It is marked by the individual's lack of desire to cry even when they are going through a difficult time or experiencing a significant loss (Vingerhoets et al., 2016). According to Robinson et al. (2015), crying during therapy may be a way for patients to express their attachment needs to their therapist. A skilled therapist might be able to make calculated inferences by reading between the tears.

How Crying Influences Others

Humans are ultra-social animals. Some researchers speculate that our ability to cry has been instrumental in developing our empathy and our capacity to bond with strangers and kin (Walter, 2006). Nevertheless, this is only sometimes true. Hillary Clinton's emotional moment at a New Hampshire diner in 2008, when she was asked about the stress of running a nation, was viewed by critics as a calculated and manipulative move (Vingerhoets, 2013). Tears certainly signal that something is at stake, but there is a lack of clarity about the precise nature of their message. This ambiguity allows the observer's biases to color the meaning-making process. In this section, I will briefly summarize several studies that examine how crying impacts the observer.

Signals Warmth and Competence

According to the Stereotype Content Model (SCM) theory, our first impressions of others are based on two main factors: how friendly and approachable they appear and how competent and capable they seem (Fiske et al., 2007; Fiske, 2018). The two variables are not neatly separated but often overlap (Fiske, 2018). Numerous research studies concluded that most observers tend to view a crying individual as a warm-natured person (Ven et al., 2017; Zickfeld & Schubert, 2018). This hypothesis was recently replicated in a study across multiple countries by Zickfeld et al. in 2021 and found to be true regardless of the methodology used (i.e., study design and the number and type of stimuli).

Tears can be seen as a sign of helplessness, which may lead to a perception of incompetence (Miceli & Castelfranchi, 2003). A study was conducted by Wróbel et al. (2022) to investigate the relationship between tears and perceived competence. The study had a large sample size of 7,000 participants from 41 countries, and it found that the association is highly contextual. The tearful individual is perceived as incompetent if the crying is considered inappropriate for the specific situation. For example, crying at work may suggest a lack of ability to handle a situation or a lack of skill to regulate emotions (Wróbel et al., 2022).

Although the definition of an inappropriate situation is debatable, researchers found that shedding tears for positive events or situations where intense emotional expression is expected does not affect perceived competence. The context is also dependent on the type of person who is crying. Individuals with high status, such as politicians or business leaders, are often perceived more negatively for crying than others (Vingerhoets & Bylsma 2007). Ven et al. (2017) argued that people tend to generalize a singular act of crying in one situation as a consistent personality trait of the individual.

Communicate Sadness and Need for Support

Balsters et al. (2013) explored how tears can communicate sadness and the need for social support. They conducted two experiments where participants were asked to identify the emotions conveyed in photographs and videos of people with neutral or sad facial expressions. The images were displayed for a brief duration of less than 50 milliseconds. In the first experiment, tears were digitally added to sad faces, and the participants were able to identify sadness quicker in faces with tears compared to those without tears.

In the second experiment, tears were added to neutral faces, and the participants were asked to determine how much support the individuals in the photos needed. The results indicated that faces with tears, whether sad or neutral, were perceived to require more social support than those without tears. Several studies have shown that observers are more willing to provide emotional support to a crying person than to a non-crying individual (Balster et al., 2013; Hendriks et al., 2008; Vingerhoets et al., 2016; Stadel et al., 2019). Calm and quiet crying, as opposed to loud crying, tends to elicit more social support (Vingerhoets, 2013). Bobowik et al. (2023) demonstrated that individuals are more willing to help and donate to underprivileged groups if the advertisement displays pictures of crying faces. Perceived warmth and the experience of compassion toward the crier are two significant impacts on the observer's behaviour.

Tears and Crime

Researchers Picó Alfonso et al. (2020) designed a study to investigate how crying affects people's judgments of those who have committed minor transgressions and serious crimes. Research participants looked at photographs of people crying and the same pictures without

tears, alongside details of various crimes committed by them. As expected, the study found that tearful individuals were seen as more emotional, reliable, kind, and remorseful regardless of the nature of their wrongdoings. This positive perception resulted in more lenient punishments for misdeeds that might be construed as crimes of neglect, such as drunk driving. However, this did not hold true for what might be considered crimes of intent, such as theft or assault. The researchers explained that the perceived intention behind the crime and the severity of the offense played a significant role in the decision-making.

Evoking Discomfort

Grainger, Vanman, and Henry (2022) conducted a study to investigate the effects of tears on eye contact during social interactions. The researchers used eye-tracking technology to measure the duration of eye contact with the crier's eyes and mouth. Eye contact is a crucial factor in social communication, indicating attentiveness and interest (Kleinke, 1986). The researchers hypothesized that tears might alter the observer's engagement with the crying person, and the study explored this possibility. The sample consisted of 131 participants. The results revealed that participants gazed less at the eyes of a crying person when tears were present, indicating that tears might be perceived as emotionally aversive or uncomfortable. This finding aligns with previous studies that suggest that averting eye gaze can reduce emotional arousal in observers (Field, 1981; Van Rijn et al., 2019). Grainger et al. (2022) noted that individuals may look away from a crying face for various reasons, including providing privacy, reducing feelings of embarrassment, and signaling a lack of aggression to promote safety.

Do therapists cry in session?

During social interactions, humans have the remarkable ability to process information automatically and respond to it in real-time (Aviezer et al., 2011). Research suggests that mirror neurons allow us to imitate the neurons of others, making us more attuned to the emotions of those around us (Trimble, 2014). Furthermore, individuals with high levels of empathy often mirror the facial expressions of those they interact with (Vingerhoets, 2013). This makes me wonder whether therapists sometimes cry during emotionally intense sessions.

In 1987, the American Psychological Association (APA) asked 1000 psychologists (500 male and 500 female) if they had ever cried in front of a client. 56.5% answered affirmatively. When asked to rate if they believed that was ethical, 27% selected *"unquestionably yes*", 6% answered "*unquestionably no",* while most were not sure (Pope et al., 1987). The answer to this question might differ depending on the theoretical lens of counselling one adheres to. Psychoanalytic literature cautions against crying and advises therapists to be a blank slate (Vingerhoets, 2013). The reason is that crying could distract the client and turn the focus onto the therapist.

Research suggests that the therapeutic relationship is crucial to determining the effectiveness of the process (Pare, 2017). This means that it is imperative for counsellors not to rely solely on calculated theoretical techniques but to be 'real' with their clients. Corey (2001) says, "*It is through our own genuineness and our aliveness that we can significantly touch the lives of our clients*" (p. 15). However, a counsellor crying during the session is a complex issue with no straightforward answer.

Most professionals would agree that it is unethical for a counsellor severely struggling with their own mental and emotional health to work with clients. If a counsellor cries because of

their unresolved distress, then crying would be considered unethical (Curtis, 2003). On a related note, discussing the counsellor's intention for crying during a session is essential. To 'fake' tears in an effort to establish therapeutic rapport would not be helpful (Curtis, 2003). Research suggests that genuineness is invaluable in cultivating a meaningful relationship with clients (Bylsma et al., 2021).

In 2015, Amy Blume-Marcovici asked more than 400 psychologists and counselling students whether they had ever cried during sessions and how that had impacted their clients. She found that therapists often cried in response to their client's crying. The common themes that made therapists tear up were grief and loss, trauma, patient suicidality, terminating treatment, and gratitude towards the therapist (Blume-Marcovici et al., 2015). Interestingly, 81% of respondents expressed no remorse or regret at crying during the session. When questioned about therapeutic rapport, half the respondents answered that nothing had changed in their therapeutic relationship, while the others responded that they felt their relationship with their client had improved (Blume-Marcovici et al., 2015).

Russ Curtis (2003) coined the term "*tear anxiety*" after his practicum students repeatedly expressed feeling fearful about crying in front of their clients. His supervisees described feeling apprehensive that their tears would be looked down on as not being professional or appropriate (Curtis et al., 2003). My suggestion to therapists struggling with 'tear anxiety' is to cultivate awareness about your own countertransference. In therapy, countertransference occurs when the therapist projects their emotional responses, prejudices, or interpretations onto a patient (Heaning, 2023). These could be conscious or unconscious reactions and have long been considered an inevitable part of the counselling process (Vingerhoets, 2013). It is generally understood that counsellors can learn how to work constructively with countertransference by

seeking supervision (Curtis et al., 2003) or seeking therapy themselves to process their reactions toward their clients (De Lucia-Waack, 1999; Hansen, 1997).

PART II – Relationship between crying and health

'*I wept not, so of stone grew I within' - Dante Alighieri, Inferno, canto XXXIII, 1.49*

(as cited in Carmicheal, 1991, p. 156)

The opening scene of Edward Albee's play, "*Three Tall Women*," depicts an elderly woman crying inconsolably in a hospital room. When she finally stops, a nurse attempts to comfort her by fluffing her pillows and offering the platitude, "*There. Feel better? A good cry lets it all out.*" The woman retorts with a biting question, *"So what does a bad cry do?"* (Lutz, 2009, p. 43). This simple question inspired me to explore whether tears are actually helpful to us or not.

Over 2,000 years ago, Aristotle believed that crying while watching dramatic performances could *"cleanse the mind*" of suppressed emotions through catharsis (Vingerhoets, 2013, p.102). The idea that crying positively affects our mood and health has existed for centuries. In this section, I will critically analyze peer-reviewed research on the perceived positive effects of crying on physical and emotional health. The methodology of these studies will be carefully examined to assess the validity of their claims. To simplify this task, I have divided the perceived positive health claims of crying into four statements:

I. Tears help eliminate stress hormones and endorphins

II. Crying helps improve mood

III. Crying helps regulate the body (Homeostasis)

IV. Suppressing tears can negatively affect health

I. Tears help eliminate stress hormones and endorphins

In the 1980s, seminal research was conducted on the chemical composition of tears (Collier, 2022). William Frey (1981) collected the tears of volunteers working with an onion and compared it to tears shed while watching a sad movie (Bylsma et al., 2019; Vingerhoets, 2013). Reflex tears, triggered by irritants or smoke, are made up of proteins, ions, glucose, enzymes, and other chemicals (Trimble, 2014). Emotional tears, triggered by grief, contain proteins, endorphins, and hormones such as prolactin, potassium, and stress hormones (Trimble, 2014). In the same study Frey (1981) found that we shed a higher volume of emotional tears than reflex tears (Bylsma et al., 2019; Trimble, 2014).

Frey found that the two types of tears also differed in the protein content (Frey, 1985). Emotional tears had 25% more peptides than reflex tears, including a higher amount of ACTH, proteins, and enkephalin (Frey, 1985; Trimble, 2014). ACTH regulates cortisol production (Trimble, 2014). Enkephalin is a penta-peptide that regulates pain sensation (Bylsma et al., 2019). Frey hypothesized that since ACTH is a stress hormone, suppressing tears could increase stress and associated medical problems (Frey, 1985; Trimble, 2014).

Based on Frey's findings, Jakk Panksepp postulated that the release of endorphins (natural opioids) during crying can activate opioid receptors, inducing a pain-relieving or analgesic effect (Trimble, 2014; Panksepp et al.,1980). The discovery of opioid receptors in the amygdala and hypothalamus made Panksepp's theory seem more plausible (Lutz, 2001; Trimble, 2014).

Frey's research has some intriguing ideas. However, Vingerhoets et al. (2009) attempted to replicate William Frey's study twice without success (Vingerhoets 2013). Besides, stress hormones are also found in other bodily fluids such as saliva and urine. These fluids have never been associated with positive health benefits (Bylsma et al., 2019; Vingerhoets, 2013).

Can crying help cope with pain and stress?

Sharman et al. (2020) tested the hypothesis that emotional crying helps one cope with pain and stress. In a fascinating study, 197 female undergraduate students were randomly assigned to either watch either sad or neutral videos. The researchers hypothesized that those who cry while watching the sad videos would be able cope with pain and withstand the stressful task for longer.

To test this, the researchers used the Cold Pressor Stress Test (CPT), where the participants placed their left hand (up to the wrist) in icy water (temperature ranging from 0°C to 5°C). The duration of time participants could keep their hands in the water was recorded and used as a measure of coping ability across the three groups, the neutral control group (n = 65), sad criers (n = 71), and sad non-criers (n = 61). The results showed no significant difference between how long the three groups could hold their hand in the water. The researchers concluded that there was no difference in the ability to cope with pain between those who cry and those who do not.

In addition to the CPT, cortisol levels were also recorded at four different time intervals (before the study, just after watching the video, after the stress test, and at the end of the experiment). The cortisol levels changed for all three groups after the stress test, but there was no significant difference in cortisol levels between the three groups. They also measured changes in mood at separate time intervals by using self-reports and found no significant difference in mood improvement between the three groups (Sharman et al., 2020).

II. Crying helps improve mood

Research on the relationship between crying and mood has produced conflicting results. On one hand, participants in retrospective studies that rely on self-reports often report an improvement in mood after crying (Gračanin et al., 2015; Bylsma et al., 2008). On the other hand, laboratory studies that measure mood after exposing participants to emotional stimuli have concluded that mood actually worsens immediately after crying (Gračanin et al., 2015; Gross et al., 1994; Martin & Labott, 1991).

To address this discrepancy, Gračanin et al. (2015) conducted a study in which participants were shown emotional scenes from movies, and their mood was measured before the movie, right after, 20 minutes after, and 90 minutes after the movie. The sample size was 60 individuals, and self-reported data points were used to measure mood changes after crying. The results showed that participants who cried felt worse immediately after watching the sad movie, but their mood gradually improved when measured again at 20 minutes. At the 90-minute follow-up, the participants reported feeling even better than they did before the experiment started. In comparison, non-criers reported low mood immediately after the film but did not experience significant mood changes at the 90-minute follow-up.

Gračanin et al. (2015) explained that it is possible to feel worse after a cry, but then one's mood gradually improves and can even become more optimistic than before the triggering event. However, the researchers do express some uncertainty about whether the reduction in negative affect was a direct result of the crying, or was there something else at play as well.

Crying therapy as intervention

Crying or cathartic therapies actively encourage the expression of emotion through tears (Trimble, 2014). They are based on the hypothesis that crying in and of itself can bring relief from psychological suffering and symptoms (Bylsma et al., 2019). A peer-reviewed study in South Korea tried to use ‘crying therapy’ for breast cancer survivors to manage their pain and promote better mental health. Byun Hye-Sun et al. (2020) developed a crying therapy program and tested its effectiveness on 27 women. The results showed an overwhelming improvement in the mental health and mood of the participants. These improvements were measured with self-reports and through changes in their physiology (like blood pressure and low levels of Immunoglobulin G). It is hard to generalize the results of this because it was a single-group design, meaning that everyone went through the therapy and there was no control group. Furthermore, to prove the efficacy of crying therapy, we need research on how effective this is with male and trans populations.

Hidefumi Yoshida, a Japanese psychologist, is a strong advocate for crying therapy. In a short documentary titled "*Tears Teacher*," Yoshida travels across Japan hosting ‘crying workshops’ to promote the benefits of crying (Nakai, 2020). According to Yoshida, the Japanese are slowly learning to accept their inhibited emotions. As a result, there has been a noticeable emergence of ‘crying bars’ across the big cities where people unwind after work by watching sad films with others (Vingerhoets, 2013). This trend is known as the "*Crying boom*" in Japan, and it signifies a growing acceptance of the therapeutic value of tears.

III. Crying helps regulate the body (Homeostasis)

The constant communication between the brain and body through many separate and intricate structures makes crying possible. Crying involves five body systems: respiratory, cardiovascular, nervous, musculoskeletal, and endocrine (Bylsma et al., 2019). Our internal bodily systems like to maintain homeostasis, which is regulated by the mostly unconscious Autonomic Nervous System (ANS). ANS is divided into the sympathetic and parasympathetic nervous systems (Bylsma et al., 2019), both of which contain nerves that form the biological pathway to emotional tears.

The sympathetic nervous system mobilizes the body during stress for flight-flight responses. The parasympathetic nervous system controls various bodily functions during rest and relaxation. Homeostasis theory states that crying usually occurs at the peak of an emotional experience (Gračanin et al., 2014). Extreme environmental stimuli can flip the limbic system to trigger the lacrimal gland (Trimble, 2014). The spasmodic pressure from the facial muscles around the surface of the eye activates tear glands leading to secretion of tears (Trimble, 2014). After the intense crying, the body returns to homeostasis in the recovery state (Efran & Spangler, 1979; Gross et al., 1994).

A paper on the neurobiology of crying (Bylsma et al., 2019) reviewed research from years past and concluded that both structures of the autonomic nervous system play a role in crying. The paper suggests that the onset of a crying episode is associated with increased sympathetic activity, and the resolution of crying may be associated with increased parasympathetic activity. The fact that there is some evidence that crying stimulates parasympathetic activity makes one wonder if crying should be regarded as a self-regulating

mechanism (Bylsma et al., 2019). The paper was unable to clarify whether crying is a means or merely a sign of reduced tension.

An intriguing contradiction to this theory was discovered when Rottenberg et al. (2003) tried to study the homeostatic regulation between healthy individuals and those with a diagnosis of depression. Rottenberg et al. (2003) measured the cardiovascular responses as the participants in the two groups watched a sad movie. The researchers found that among healthy individuals, those who cried while watching the film showed noticeable signs of cardiovascular arousal and subsequent relaxation when compared to those who did not cry (Rottenberg et al., 2003). However, depressed patients who cried showed little physiological arousal. This finding implies that the physiological self-regulatory mechanisms associated with crying may be compromised in individuals experiencing depression. The link between changes in crying behaviour and depression will be explored further in chapter III.

It is difficult to disentangle the role of various brain structures in experiencing emotion, its expression, and regulation. The overall pattern suggested by neuroanatomy is that the production of tears is both an arousing distress signal and a means to restore physiological (and psychological) balance, depending on how and when this complex behaviour is displayed (Bylsma et al., 2019).

IV. Suppressing tears can negatively affect health

'I am frightened if I let out the pain it will destroy me.'

- Interview transcript from a woman living in a poverty-stricken housing project.

(as cited in Carmicheal, 1991, p. 159)

Many anecdotal experiences describe how suppressing tears or emotions harms physical health. A cancer patient by the pseudonym Fritz Zorn (as cited in Dantzer, 1993) felt that all the tears that he had never wept during his life had accumulated in his neck and created his tumor because their proper function (i.e., to be shed) had not been attained (Vingerhoets, 2013). Our day-to-day functioning and overall health rely on many intricate bodily processes working harmoniously. It is assumed that bottling up emotions, especially tears, may develop a range of psychosomatic or physiological maladies such as acne, hives, muscle tension, headaches, and ulcers (Vingerhoets, 2013). Robert Sapolsky (2007) wrote an insightful paper exploring how external misery mobilizes the stress response within our bodies. The repeated activation of the fight-flight response can cause wear and tear of organs, leading to stress-related disorders.

Can chronic suppression of tears somehow alter our immune system? Unfortunately, the few studies that have looked at this question suffer from severe methodical limitations, preventing researchers from drawing definitive conclusions (Vingerhoets et al., 2007). Why an individual chooses not to cry or control their emotional reaction has many answers. Take, for instance, the parent of a young child who must maintain composure to get through multiple moments of chaos every day. One might argue that it is appropriate to model healthy emotional processing to young children, but it is also vital to teach emotional compartmentalization. From this perspective, suppressing tears is not necessarily an unequivocally bad thing.

There is currently no convincing scientific evidence supporting the idea that the inhibition of crying may promote the development of health problems (Vingerhoets, 2013; Bylsma et al., 2021). A meta-analysis of 22 studies investigated whether repressing emotions increases the risk of cancer, cardiovascular diseases, and asthma (Mund & Mitte, 2012). It found that there is not enough evidence to suggest that repressive coping causes these diseases. Interestingly, the meta-analysis also looked at the risk of developing cancer and found that repressing emotions usually happens after the diagnosis and might be an emotional strategy to self-protect (Mund & Mitte, 2012).

Randolf Cornelius (1986) wrote, "*Crying is not necessarily beneficial to one's health as the cathartic model of crying would predict*." (as cited in Trimble, 2012, p.26, para 1). Ad Vingerhoets has been studying adult emotional crying for decades and has published nearly 40 peer-reviewed papers exploring its many facets. In his book, "*Why Only Humans Shed Tears*" (2013), he declared that there is no substantial proof that crying is good for one's physical health.

Research suggests that interpersonal emotion regulation can take different forms (Stroebe & Schut, 1999). Perhaps there are situations in which compartmentalization is warranted, and others in which crying is necessary. Some strategies involve different ways of engaging with emotional situations, while others hinge on ways to disengage from them (Totterdell & Parkinson, 1999). Stroebe and Schut (1999) have proposed a dual-process model of healthy grieving that includes the flexible oscillation between confronting and avoiding stressors associated with bereavement (Lisanne et al., 2019). Thus, the balance of suppression and expression of tears is healthy.

Crying is really strange

'He that conceals his grief finds no remedy for it'- Turkish proverb

(as cited in Carmichael, 2009, p.119)

The role of crying in therapy has been a subject of interest for many researchers. While crying can positively impact mood and homeostasis, it is not a magical cure-all. There is considerable doubt about whether the perceived mythical benefits can translate into clinical relevance. Undoubtedly, there is a correlation between crying and mood, but a clear causal link remains elusive. Additionally, the self-reported emotional benefits of crying are dependent on individual differences and specific contextual factors, such as whether the crier receives support. Research has shown that the reason and the event that makes someone cry also affect the emotional outcome. For example, people who cry in response to uncontrollable situations, such as the death of a loved one, may feel worse (Bylsma et al., 2008; Sharman et al., 2019). Similarly, respondents who cried while watching a sad movie reported feeling more distressed than those who did not cry (Bylsma et al., 2008; Sharman et al., 2019).

Tears are indicative of more than just sadness. In a study by Provine (2019), participants found it challenging to guess the emotional expression when tears were digitally removed from crying faces. They labeled the faces as confused, disgusted, or in awe. Interestingly, crying is often perceived as a display of pure intention. Wrobel et al. (2022) concluded that tearful individuals were considered honest-natured. Author Tom Lutz writes, *"Tears are the marrow of pure feeling, a sign of unsullied genuineness, the liquid gist of sincerity itself."* (2009, p.43 para, 1). However, crying can also be an underhanded way of getting what one wants. Shakespeare in

Othello coined the word "*crocodile tears*" to describe crying as an emotional blackmail tactic (Vingerhoets, 2013).

Despite the complexity of crying behaviour, therapists can use information from this literature review to make calculated guesses about the causes and effects of crying for clients. The next chapter will explore how this knowledge can be practically applied to make the most out of therapy. Chapter III will discuss peer-reviewed research that can help clinicians assess and plan treatment based on their clients' crying behaviour. Although there are still many questions surrounding the role of crying in therapy, evidence suggests that it can offer insights into a client's emotional state and be used as a tool in the therapeutic process (Bylsma et al., 2021).

Chapter Three : Application and Discussion

A skilled therapist can infer the patient's state of mind by observing their body language, choice of words, and even their silence. Tears, or the lack thereof, are crucial clues that therapists can use to diagnose mental health conditions and formulate effective treatment plans. While making clinical diagnoses does not fall within the purview of therapists in Canada, being knowledgeable about assessments can assist therapists in being more proactive in their treatment approach. The goal of Chapter III is to offer clinical insights into the role of crying in a therapeutic setting and its significance in treating mental health disorders.

Crying and Assessments of Mood Disorders

In 1803, US President Andrew Jackson signed the Indian Removal Act, ordering the Native American tribes of Choctaw, Creek, and Cherokee to relinquish their ancestral lands (Carmichael, 1991). This forced displacement resulted in countless deaths due to starvation, exposure, and disease. The migration route that the Indigenous peoples traveled became infamously known as the "*Trail of Tears*". This story is a poignant reminder that crying is often synonymous with suffering. However, the psychiatric instruments used to diagnose depression and other mood disorders do not count them as such. The Diagnostic and Statistical Manual (DSM)- III listed ‘crying proneness’ and ‘fits of crying’ as one of the 13 symptom criteria for diagnosing dysthymia but edited it out for the newer version (Rottenberg et al., 2008; Vingerhoets et al., 2007; Vingerhoets, 2013).

In 2008, Rottenberg and colleagues conducted a study exploring changes in crying behaviour among patients with mood disorders. Rottenberg et al. (2008) compared the frequency, causes, and outcomes of crying in patients with mood disorders to a healthy control

group. Forty-four participants with either dysthymia, adjustment disorder with depressed mood, or major depressive disorder were recruited. The results revealed that individuals who suffer from mood disorders are more prone to crying over negative antecedents. Patients with mood disorders also reported less mood improvement after crying compared to the control group. Researchers suggest that anhedonia, the inability to feel pleasure commonly associated with depression, may explain the results. Rottenberg et al. (2008) also noted that patients with a recent onset of depression cried more often than those who had already been dealing with it for an extended period.

Inability to Cry and Depression

The literature concerning the relationship between crying and depression is surprisingly complex and unsettled (Bylsma et al., 2021). Two contractionary theories exist. One theory suggests that there is a simple linear relationship between the severity of depressive symptoms and crying frequency (Vingerhoets & Bylsma 2007; Bylsma et al., 2021). In simple words, a depressed person will cry more frequently than someone who is not depressed. Many diagnostic inventories assume this direct positive correlation between the severity of depression and crying frequency (Bylsma et al., 2021). The Center of Epidemiological Studies Depression Scale [CES-D] (Radloff, 1977), the Zung Self-rating Depression Scale (Zung, 1965), and the Edinburgh Postnatal Depression Scale [EPDS] (Cox et al., 1987) score crying items linearly (Rottenberg et al., 2008; Vingerhoets et al., 2007).

The other theory suggests that the relationship between crying and depressive symptoms is non-linear (Vingerhoets et al., 2007). This suggests that individuals with milder forms of depression tend to cry more, while those experiencing severe depression often suppress tears or

report reduced crying (Vingerhoets, 2013; Bylsma et al., 2021). Both the Beck Depression Inventory (BDI-II) and the Hamilton Depression Scales (1967) score crying items in a non-linear fashion (Bylsma et al., 2021). The guidelines for scoring on the Hamilton scale (1967) instruct that an inability to cry may indicate that the depression has worsened, and the patient has gone "*beyond weeping*" into a non-crying state (Vingerhoets et al., 2007). Rottenberg et al. (2002) described the inability to cry as being unable to tear up and make sad facial expressions like a scowl or grimace.

Steer (2011) conducted a study to examine the relationship between the inability to cry and the diagnosis of severe depression. The study involved 1050 patients who were diagnosed with major depressive disorder and were divided into two groups based on their ability to cry. The study utilized the multiple logistic regression method to control for the influence of other symptoms of depression. The findings suggest that depressed patients tend to either cry more frequently or show reduced crying frequency. Interestingly, among other symptoms of the Beck Depressive Inventory-II, "*Loss of Interest*" was found to have a high association with the inability to cry. Therefore, the inability to cry when accompanied by a lack of interest indicates the possibility of severe depression.

Keller and Nesse (2006) consider the symptoms of depression as behaviours that help individuals cope with their situation. They hypothesized that in milder forms of depression, individuals cry more frequently, which may become less effective over time in soliciting support from others. The absence of social support may eventually lead the individuals to not crying at all (Rottenberg, 2003). The other explanation for the observed differences in crying behaviour among depressed patients and healthy control groups might be the use of antidepressants

(Bylsma et al., 2021). Selective Serotonin Reuptake Inhibitors (SSRIs) have been shown to reduce crying by research (Holguín-Lew & Bell, 2013; Hackett et al., 2010).

Crying and Eating disorders

German psychologist Cord Benecke (2009) conducted intimate psychiatric interviews with 120 women struggling with a range of conditions, including depression, anxiety, and eating disorders. His clinical observations suggest that women with eating disorders show a reduction in crying frequency (Benecke, 2009). Another study on eating disorders found that these patients tend to feel worse or reduced mood after a crying episode (Mangweth et al., 1999). The literature on eating disorders suggests that these patients have a strong desire for control (Reid et al., 2008; Mangweth et al., 1999) and use their symptoms to regulate emotional imbalances. In severe cases, binge-purge and excessive dieting behaviours act as a substitute for suppressed emotional expression (Mangweth et al., 1999). Bylsma et al. (2021) hypothesizes that patients with eating disorders show reduced crying because it might feel like they are losing control over their emotions, further aggravating their distress.

Crying and Personality disorders

According to a meta-analysis, patients with Borderline Personality Disorder (BPD) have a high tendency of using maladaptive strategies for emotional regulation (Southward & Cheavens, 2020). Due to a high level of emotional dysregulation, it is assumed that patients with BPD are more prone to crying (Bylsma et al., 2021). King et al. (2019) tested this assumption and found it to be true. However, the study concluded that it was uncertain whether the high frequency of crying is a symptom or a consequence of the disorder.

Peter et al., (2019) conducted a similar study comparing the crying behaviour of BPD patients with that of individuals with Cluster C personality disorders (Cluster C-PD) and non-patients. The study included 62 BPD patients, 25 Cluster C-PD patients, and 54 non-patients. The findings revealed that, in comparison to non-patients, BPD patients did indeed show higher crying frequency despite having similar tendencies to cry and comparable ways of dealing with tears. Interestingly, BPD patients reported less awareness of how their crying influenced others. The study also noted that Cluster C-PD patients exhibited a very similar pattern of findings to BPD patients. This led the researchers to conclude that the increased crying in both BPD and Cluster C-PD patients is likely influenced by environmental factors or a misperception of situations rather than stable traits (Peter et al., 2019).

Patients crying in Psychotherapy

Jungyoon Lee et al. (2017) conducted a study to investigate the experiences of clients who cried during therapy. Despite having only nine participants, the interview transcripts were candid and moving. The data from the semi-structured interviews was analyzed using Colaizzi's method of phenomenological study, a commonly used technique to explore and interpret subjective experiences rigorously and systematically (Wirihana et al., 2018).

The researchers created four clusters of themes: *'making contact with feelings*,' *'staying with the emotions*,' *'being wrapped up in the emotion*,' and *'the world has changed*.' (Jungyoon Lee et al., 2017, p. 562, table 2). Most participants reported crying in therapy after making contact with their problems or emotions. This led to two reactions. Some participants experienced an intense and complex feeling that they described as an *'emotional whirlpool*.' (Lee et al., 2017, p. 564). One participant explained that she felt *'knotted up*' during the tearful session

because she did not know how to deal with her intense emotions (p.564). On the other hand, some participants felt calm as they started *'getting comfortable staying with the emotions*.' (Jungyoon Lee et al., 2017, p. 562, table 2).

The researchers noted that an individual's predisposing belief in emotional experiences was a key indicator of how they would respond to their crying. They also acknowledged the role that one's sociocultural background plays in the meaning-making process. The crying experience also depended on how committed and involved the individual was in therapy. The realization of their difficulty made them feel that "*the world had changed for them*" or that they were experiencing a world unlike before (Jungyoon Lee et al., 2017, p. 562, table 2).

Excessive Crying during Intake

Capps et al. (2021) led a study aimed to gain insights into the overall functioning of clients who cried excessively during the early stages of psychotherapy. The research sample included 53 patients who were diagnosed with either mood disorder or personality disorder. To analyze their crying behaviour, researchers used Zonj's method, which was developed in 1997. This method consists of a list of micro-facial expressions and non-verbal behaviours like hiding the face, forcing the eyes shut, gazing upward, and jerky movements that frequently accompany crying (Zonj, 1997).

Of the 53 participants, 14 cried during the intake session. Clinicians assigned these patients Global Assessment of Functioning scores. The 14 participants were required to complete inventories assessing the possibility of childhood sexual abuse, personality characteristics, and experience of the therapeutic alliance. The researchers concluded that excessive crying during early therapy sessions is an indicator of lower global functioning, a high degree of emotional

dysregulation, borderline traits, and severe childhood sexual abuse (Capps et al., 2021; Capps et al., 2015). Their research has provided a better understanding of excessive crying behaviour in therapy sessions and the underlying factors that contribute to it. Capps et al. (2021) advised therapists to explore crying behaviours during intake to conceptualize a plausible explanation for the patient's symptoms. On a related note, excessive crying did not affect the quality of the working alliance, as rated by both the patient and the therapist.

Effective Interventions for the Tearful Client

Kottler (1996) wrote a moving essay on the symbolic function of tears as tools of communication. He argues that tears surpass the limitations of language and possess their own unique syntax, grammar, and vocabulary. As therapists, we must scrutinize our clients' tears and discern their underlying emotions, whether it be grief, confusion, relief, or despair. Many clients may feel uncomfortable crying in front of a stranger; thus, their tears could signify the beginning of a trusting therapeutic relationship. It is crucial for therapists to handle the underlying pain and emotion with utmost respect and care. I recently learned this lesson, after receiving feedback from a client who felt I had not provided a holding space for her pain. This poignant moment, though unfortunate, served as a catalyst for strengthening my alliance with the client.

Researchers Capps et al. (2015) recorded and analyzed interventions used by therapists during highly charged emotional sessions. They listed three categories of techniques psychodynamic therapists have used in those moments:

1. Encourage expression of affect

Therapists often employ methods to encourage clients to express their emotions in a safe and non-judgmental environment. They use statements inviting clients to explore, experience, and

express uncomfortable feelings; statements such as, "*Tell me about that feeling*" or "*And as you were saying that a moment ago, what did it feel like?"* (Capps et al., 2015, p.217, table 5). These prompts help clients delve deeper into their emotions, identify their triggers, and work towards resolving them.

2. Addressing shifts in mood or avoidance

In this technique, therapists used statements such as, "*Something happened a moment ago that made your thoughts get a little confused*" or "*I wonder what it might feel like to let some of that anger out in here*?" (Capps et al., 2015, p.217, table 5). These prompts help clients create awareness about what is happening within and how they might be avoiding unresolved emotions. Understandably, crying during a session can be intense and difficult for the client. However, despite these challenging moments, the alliance between the patient and therapist appears unaffected (Safran et al., 2011). On the contrary, clients who feel supported by therapists during these moments develop a deeper connection with them (Capps et al., 2015).

3. Providing an alternative perspective

The purpose of this technique is to validate the client's perspective and help them integrate new insights into old schemas (Gibbons et al., 2009). This technique can involve exploring fantasy or using imaginal exposure to help clients connect with more compassionate parts of themselves and others (McCullough et al., 2003). For instance, the therapists might say, *"If you could imagine the conversation you want to have with your friends about this issue, how would it play out*?" (Capps et al., 2015, p.217, table 5). By doing so, the therapist aims to help the client

live out the experience of torment and gain a deeper understanding of their emotions and feelings (Schanche et al., 2011).

Context that makes crying cathartic

A message that is woven throughout this capstone project is that crying can be cathartic in the right context. Using data from the International Adult Study on Crying (ISAC; Becht & Vingerhoets, 2002), researchers Bylsma et al. (2008) concluded the diverse contextual factors and individual differences that contribute to feeling good after a cry. These insights are categorized into three themes depending on the social environment, characteristic of the event and traits of the individual.

1. Social Environment

The social context surrounding a crying episode and the reactions of others play a significant role in determining the emotional aftermath. For instance, if a person is met with social support and comfort, they feel a lot better after crying. Understandably, if a person is ridiculed or shamed for crying, they tend to feel worse afterward (Bylsma et al., 2008; Sharman et al., 2019). Additionally, the number of people present and the location of the crying episode are relevant factors influencing the post-cry emotional state. For instance, some people might feel worse about crying at work and would prefer to cry in the privacy of their home (Bylsma et al., 2008). Temporary changes in physical health and sleep may also impact how one feels after shedding tears (Vingerhoets, 2013).

2. Characteristics of the Event

The event that triggered the crying episode is another factor to consider. For instance, if the event is a controllable situation, such as conflict, one can feel relief after crying (Vingerhoets, 2013), especially if the crying leads to a resolution and creates a new understanding within the individual (Bylsma et al., 2008). However, if the event that triggered the crying is uncontrollable, for example, the loss of a significant someone, then the crying reinforces sadness and helplessness (Bylsma et al., 2008).

3. Characteristics of the Individual

Crying proneness and crying threshold are important concepts that influence the cathartic benefits of tears. Research suggests that those who cry more frequently are more likely to report feeling better after crying than those who cry less often (Becht & Vingerhoets, 2002). It is important to consider the intensity and duration of crying; for instance, repeatedly crying for long hours does not help one feel better afterward (Bylsma et al., 2008).

Assessing crying behaviour based on the above-mentioned parameters can be useful in a comprehensive clinical evaluation of a person's well-being. Factors like how often someone cries, the reasons behind it, the situation, and associated mood changes can provide insights into their socio-emotional functioning. Creating a therapeutic environment where the crying patient feels supported could provide them with a corrective emotional experience. This can offer clients a template for healthier emotional expression and increased comfort with their emotions.

Advice to future researchers

Crying and Gender

Research suggests that there is little difference in how often males and females cry as infants (Vingerhoets, 2013). Interestingly, little boys cry more often than girls (Vingerhoets & Scheirs, 2000). Studies on crying differences in adult men and women claim that women cry significantly more than men (Bylsma et al., 2021; Robinson et al., 2015; Vingerhoets, 2013). These studies have relied on surveys and self-reports to support their conclusion. Some of these studies have used the neurobiology of crying, such as the role of hormones and the endocrine system, to support this conclusion. It is true that testosterone and prolactin affect the lachrymal system and could explain why women cry more than men (Vingerhoets, 2013). However, upon examining the methodology of these studies, I noticed a flaw in how researchers defined crying.

The International Study on Adult Crying (ISAC, Betch & Vingerhoets, 2002) defines crying as "*referring to tears in one's eyes due to emotional reasons*" (p.23). This definition implies that the research focuses more on how often men and women shed visible tears. This narrow definition only considers the production of tears, not the emotional experience leading up to it. I blame this limited definition for the perceived difference between gender and crying. I believe researchers may get a different answer if they focus less on the production of visible tears and more on the heightened emotional experience that makes one feel that they are being moved to tears. A better question to ask men would be, "*How often do you suppress the feeling of crying?*" instead of "*How often do you cry*?"

I argue that the focus on tear secretion misses crucial aspects of crying that are far more relevant to the discourse. Tears are the enigmatic and ethereal proof of our emotional lives. They represent our pain, pleasure, embarrassment, and more. I do not wish to imply that there is

absolutely no difference between how the various genders relate to crying. Vingerhoets (2013) reported that males and females appraise situations differently and thus cry for different reasons. My contention is that tear production is a physiological process, but weeping is a social and psychological process governed by social norms and etiquette.

Mystery of Tears

My ambition for this capstone project was to investigate the role of crying in therapy. Crying is a dynamic behaviour that continues to develop from birth to old age and is considered a valuable aspect of the therapeutic process (Knox et al., 2017). It is seen as a means for patients to express important information about their experiences and relationships, providing therapists with insights into what is going on for them (Bylsma et al., 2021). The act of crying in front of a therapist may be an indication of the client's trust in the therapeutic relationship. It suggests a willingness to be vulnerable and open about one's feelings (Bylsma et al., 2021). Patient crying is often viewed as a healthy emotional release, indicating engagement with the therapeutic process or the initiation of a healing process (Robinson et al., 2015). However, there are situations in therapy where tears might hinder the treatment process. This interference could occur because crying delays therapeutic progress or induces feelings of embarrassment in the client (Beck et al., 1979).

Different therapeutic orientations, such as psychodynamic, cognitive-behavioural, and humanistic, approach crying in distinct ways. Psychodynamic therapies really value the idea of people expressing their raw emotions during therapy. They see it as a good and healthy way for individuals to release built-up emotions or tension, leading to catharsis (Breuer and Freud, 1986). Humanistic therapy, specifically client-centred therapy, emphasizes exploring the client's current

emotions rather than dwelling on the past or future. Humanistic therapists consider crying as an invitation to explore the patient's present emotional state (Bylsma et al., 2021). In contrast, cognitive–behavioural therapists consider crying to be the result of an appraisal of the situation rather than a spontaneous emotional response (Bylsma et al., 2021). Cognitive therapists are likely to focus on emotions and thoughts experienced just before, during, or immediately following the crying episode.

Adult crying can be triggered by a wide range of events, from feeling powerless or losing a meaningful relationship to joyful and positive life events. There are significant differences in crying between individuals depending on age, gender, personality characteristics, culture, and past exposure to traumatic situations. Culture and social norms have a significant impact on crying behaviour, which explains why some clients may have learned to exercise emotional restraint. Therapists could explore this with clients and help them understand their unique coping mechanisms, and potentially find more adaptive ways to express and process emotions (Bylsma et al., 2021). On a related note, emotional processing can occur in diverse ways, and not all clients process emotions by crying. Some clients may benefit from intellectual exploration, behavioural exercises, or creative activities as part of their therapeutic process (Bylsma et al., 2017).

The potential benefits of crying in therapy include the client learning to express affect in a safe environment, gaining insight into their emotional experience, and developing adaptive emotional expressions in interpersonal relationships (Bylsma et al., 2021). Research shows that crying behaviour can change in patients diagnosed with depression or mood disorders. Risk assessment is warranted if patients show an inability to cry along with a loss of pleasure, as both these symptoms are indicative of severe depression. If clients report excessive crying or

difficulty crying, it might be useful to explore possible causes using the biopsychosocial model of crying. Clinicians are also advised to look into the possibility of childhood sexual abuse in clients who cry excessively during intake. To determine if changes in crying frequency indicate underlying issues, it is essential to rule out neurological conditions and consider the effect of medications like SSRIs. It is worth noting that excessive crying and the inability to cry aren't necessarily pathological. Professional help is warranted only if these behaviours significantly impair daily functioning or cause substantial distress (Bylsma et al., 2021).

Cornelius and Labott (2001) explain that when words fail, we try to communicate our emotions through crying. This explains why patients cry in 15% - 30% of all therapy sessions (Trezza et al., 1988; Blume-Marcovici, 2017). Tears express complex and often contradictory feelings, and we cry in the hope of feeling better. Like Alice in Wonderland, who cried and floated away on her tears towards her adventure (Caroll, 1893; Lutz, 2001), our tears can serve as vehicles of emotional release, even as they give voice to our distress.

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