



AN ABSTRACT OF THE DISSERTATION OF

Erin E. Mitchell for the degree of Doctor of Philosophy in Exercise and Sport Science presented on June 8, 2015.

Title: Posttraumatic Growth, the Physically Active Body, and Self-Compassion

Abstract approved: \_\_\_\_\_  
Vicki Ebbeck

Individuals who have been traumatized have the opportunity to experience posttraumatic growth, conceptualized as positive changes that result from navigating highly challenging life circumstances (Tedeschi & Calhoun, 2004). The current model of posttraumatic growth (Calhoun, Cann, & Tedeschi, 2010) is based solely on cognitive-emotional processing yet by examining the role of the physically active body in supporting this process, we can further understand how to nurture opportunities for experiences of posttraumatic growth. Moreover, the explicit inclusion of self-compassion is arguably warranted in the model given self-compassion also plays a role in posttraumatic growth and complements experiences with the physically active body.

The first manuscript in this dissertation is an autoethnography examining my personal experience with posttraumatic growth, my physically active body, and self-compassion. By sharing and examining my own experience, I provide an alternative to the standing paradigm of how physical activity is conceptualized in our culture. In this, I encourage the field of kinesiology to bring attention to how movement and self-compassion can support an individual's process of healing from hardship.

The second manuscript in this dissertation is an empirical investigation that utilized semi-structured interviews to gain an understanding of the contribution of the physically active body and self-compassion in facilitating the process of posttraumatic growth from the perspective of movement specialists ( $N=10$ ). This research provided insight into how practitioners conceptualized the process of healing and offered practical suggestions as to how to nurture posttraumatic growth in clients. Themes that emerged reflected practitioners' conceptualization of the personal process of healing as involving connection with, disruption of, and revision to dysfunctional patterns. Environmental supports that contributed to experiential opportunities for healing included: prompting a safe space and nurturing relationships.

In combination, results of this dissertation suggest the cognitive-emotional processing required of posttraumatic growth happens through, and is supported by, the physically active body. Such experiences are related to one's ability to practice self-compassion. Practitioners can nurture healing via the integration of physical and contemplative experiences of self-compassion within movement sessions.

©Copyright by Erin E. Mitchell  
June 8, 2015  
All Rights Reserved

Posttraumatic Growth, the Physically Active Body, and Self-Compassion

By  
Erin E. Mitchell

A DISSERTATION

submitted to

Oregon State University

in partial fulfillment of  
the requirements for the  
degree of

Doctor of Philosophy

Presented June 8, 2015  
Commencement June, 2016

Doctor of Philosophy dissertation of Erin E. Mitchell presented on June 8, 2015.

APPROVED:

---

Major Professor, representing Exercise and Sport Science

---

Co-director of the School of Biological and Population Health Sciences

---

Dean of the Graduate School

I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

---

Erin E. Mitchell, Author

## ACKNOWLEDGEMENTS

To Dr. Vicki Ebbeck, I offer my extended gratitude. You took me on as a student. You helped me discover my academic heart. You gave me the space to truly be me. Thank you for your compassionate and nurturing guidance.

To my committee members, Dr. Brad Cardinal, Dr. Elizabeth Root, Dr. Sarina Saturn, and Dr. Kristen Macuga, each of you provided me with invaluable support through your teaching, your questions, and your stories. Thank you.

To Mike Boucher, you reminded me to keep my eyes open. Thank you for helping me uncover the gift of my own sweet vulnerability. May we each continue the practice of being who we want to be.

To my family and friends, who have embraced me over the years as I have continued to find my way home. I bow to you in infinite gratitude.

Lastly, to those of you who have moved your bodies with me, who have been present with me when I have not been present with myself, who have met my grit and continued to stand close and love me, my heart expands out to each of you.

## CONTRIBUTION OF AUTHORS

Erin Mitchell, MPH was responsible for formulating the research questions, writing the autoethnography, collecting data for the empirical investigation, analyzing and interpreting the empirical data, and writing the empirical manuscript.

Vicki Ebbeck, Ph.D., assisted with the development of the studies, interpreting the empirical data, and editing the manuscripts.

## TABLE OF CONTENTS

	<u>Page</u>
Chapter 1: General Introduction.....	1
Chapter 2: Manuscript 1.....	8
From Hiding to Healing: An Autoethnography of Posttraumatic Growth, the Physical Active Body and Self-Compassion.....	9
Chapter 3: Manuscript 2.....	29
Posttraumatic Growth, the Physical Active Body and Self-Compassion: Giving Voice to Practitioners .....	30
Chapter 4: General Conclusion.....	64
Bibliography.....	68
Appendices.....	72
Appendix A: Posttraumatic Growth Model.....	73
Appendix B: Interview Guide.....	74

## LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
Figure 3.1 Participant Professional Profile.....	39
Figure 3.2 Personal process: Invoking physical and attitudinal practices for healing.....	43
Figure 3.3 Environmental Support: Creating experiential opportunities for healing.....	48

This is dedicated to those of you whose body holds a story.

Chapter 1: General Introduction

Posttraumatic Growth, the Physically Active Body, and Self-Compassion

Erin Mitchell

Oregon State University

It has been said that the work of researchers can become enriched, deeper, and more complex through interaction and consideration from different fields (Cummings & Kiesler, 2006). As Cardinal (2014) suggests, when various disciplines work together to study common problems, distinctive research can result. He highlights an example of such collaboration between Harrison, Gao, Rotich, Li, and Young in 2006, who employed a cross-disciplinary research paradigm and the latest technology in biomechanics to examine a sociocultural phenomenon. Examples such as this remind us that interactions across fields offer potential for new perspectives and more meaningful research. With such possibilities in mind, this dissertation connects the fields of kinesiology, psychology, and trauma.

Historically, kinesiology has focused on the body's physical fitness and activity in relation to varying elements of health (Corbin, 2012) and less so on physical activity as a means of healing. Some attention has been paid to the therapeutic qualities of physical activity, in areas such as dance therapy (Mills & Daniluk, 2002), equine therapy (Yorke, Adams, & Coady, 2008) and trauma sensitive yoga (Emmerson & Hopper, 2011). Such programs focus on creating feelings of safety (Emmerson & Hopper, 2011; Yorke, Adams & Coady, 2008) and connection to others (Yorke, Adams & Coady, 2008) and/or self (Emmerson & Hopper, 2011; Mills & Daniluk, 2002) in efforts to overcome emotional or psychological problems.

A term that has been used to express the idea of overcoming problems and creating positive change in response to difficult life circumstances is posttraumatic growth (Tedeschi & Calhoun, 2004). Though this concept has been broadly studied across disciplines, the current model of posttraumatic growth is limited in its conceptualizing of healing as being entirely cognitively-emotionally based. Given the field of trauma generally accepts that body needs to be

involved in the process of growth and recovery (van der Kolk, 2014), this model warrants attention to body, and related issues such as physical activity.

Research in kinesiology has considered the role of the physically active body and its contribution to posttraumatic growth. However, the research is limited. The focus has primarily been on the impact of social connections made through physical activity participation on posttraumatic growth outcomes (Burke & Sebastian, 2012; Hefferon, Greal, & Mutrie, 2008; McDonough, Sabiston, Ullrich-French, 2011). These studies, which have focused primarily on women's experience with breast cancer, have not given specific attention to how the physically active body contributes to posttraumatic growth.

Further, none of the previously mentioned work regarding the use of movement for healing has considered the role of self-compassion in this process, and this is despite the fact that the practice of self-compassion has recently received increasing attention in managing hardship and suffering. Self-compassion is the act of being kind towards one's self during times of hardship (Neff, 2003), such as those that result in posttraumatic growth. Self-compassion has been related to numerous positive psychological outcomes (Terry & Leary, 2011), which are similar to those expected of posttraumatic growth (Neff, 2003; Reyes, 2012). Despite the potential associations, no known previous research has explored the relationships among self-compassion, the physically active body, and posttraumatic growth.

For this dissertation, the relationship between the physically active body and self-compassion in supporting posttraumatic growth was explored. The first manuscript in this dissertation is an autoethnography examining the author's experience with posttraumatic growth, self-compassion, and her physically active body. By sharing and examining her personal experience, she provides an alternative to the standing paradigm of how physical activity is

conceptualized in our culture. The second manuscript in this dissertation is an empirical investigation that utilized semi-structured interviews to gain an understanding from the perspective of movement practitioners of the contribution of the physically active body and self-compassion in promoting posttraumatic growth. The goal is to better understand how, as a culture, we can support posttraumatic growth through experiences of movement and self-compassion. In summary, this dissertation contributes to the field of kinesiology by examining: 1) the role of the physically active body in supporting posttraumatic growth; 2) the function self-compassion serves in supporting posttraumatic growth; and, 3) practical suggestions for promoting compassionate posttraumatic growth through physical activity.

## References

- Burke, S. & Sabastian, C. (2012). Fostering growth in survivorship experiences: investigating breast cancer survivors' lived experience scaling Mt. Kilimanjaro from a posttraumatic growth perspective. *The Qualitative Report*, 17(32), 1-19. Retrieved from <http://www.nova.edu/ssss/QR/QR17/burke.pdf>
- Cardinal, B. (2014). Physical activity psychology research: Where have we been? Where are we going?. *Kinesiology Review*, 3, 44-52.
- Corbin, C. B. (2012). C. H. McCloy Lecture: Fifty years of advancements in fitness and activity research. *Research Quarterly for Exercise & Sport*, 83(1), 1-11.
- Cummings, J. N., & Kiesler, S. (2005). Collaborative research across disciplinary and organizational boundaries. *Social Studies Of Science (Sage Publications, Ltd.)*, 35(5), 703-722. doi:10.1177/0306312705055535
- Emerson, D., & Hopper, E. (2011). *Overcoming trauma through yoga: Reclaiming your body*. North Atlantic Books.
- Hefferon, K., Grealy, M., & Mutrie, N. (2008). The perceived influence of an exercise class intervention on the process and outcomes of posttraumatic growth. *Journal of Mental Health and Physical Activity*, 1, 47-88.
- McDonough, M., Sabastian, C. M., & Ullrich-French, S. (2011). The development of social relationship, social support and posttraumatic growth in a dragon boating team for breast cancer survivors. *Journal of Sport & Exercise Psychology*, 33, 627-648.
- Mills, L. J., & Daniluk, J. C. (2002). Her body speaks: The experience of dance therapy for women survivors of child sexual abuse. *Journal of Counseling & Development*, 80(1), 77-85.
- Neff, K. D. (2003). Development and validation of a scale to measure self-compassion. *Self and Identity*, 2, 223-250.
- Reyes, M. D. (2012). Self-compassion: A concept analysis. *Journal of Holistic Nursing*, 30(2), 1-10.
- Tedeschi, R.G., & Calhoun, L.G. (2004). The foundations of posttraumatic growth: New considerations. *Psychological Inquiry*, 15, 1-18.
- Terry, M. L. & Leary, M. R. (2011). Self-compassion, self-regulation, and health. *Self and Identity*, 10, 352-362.
- van der Kolk, B.A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York, NY: Viking.

Yorke, J., Adams, C., & Coady, N. (2008). Therapeutic value of equine–human bonding in recovery from trauma. *Anthrozoos: A Multidisciplinary Journal of the Interactions of People & Animals*, 21(1), 17-30.

Chapter 2: Manuscript 1

From Hiding to Healing: An Autoethnography of Posttraumatic Growth, the Physically Active  
Body, and Self-Compassion

Erin Mitchell

Oregon State University

“I come to give you something, and the gift is my own beaten self; no feast for the eye; yet in me is a more lasting grace than beauty.” (Sophocles, Oedipus at Colonus, 406 BC)

What follows is a story. My story. A story of trauma and growth. Trauma occurs when an individual is unable to fully move through the adverse emotional and physical responses evoked due to highly challenging circumstances (Mate, 2010). It has less to do with the actual situation and more to do with an individual’s response to the situation. In essence, trauma is not what happens to us; it is the residue that we hold inside of us from this happening (Mate, 2010). The impact of such circumstances can consciously or unconsciously be held within the body. As, Antonio Damasio states (as cited by Van der Kolk’s, 2002): “We use our minds not to discover facts but to hide them” (p.7), and, in my case, to hide them within my body. I carry a trauma imprint, it is stored within my breath, within my muscles, within my nervous system, and for decades my mind hid this from me.

Several years ago, my body rebelled; no longer willing to hold my unattended self in silence. The result was a host of out-of-context behaviors, not limited to panic attacks and dissociative events, disrupted my life. As these responses became more frequent and intense, my world deconstructed, eventually shattering my well-protected self-narrative. So began my journey of re-construction and posttraumatic growth, seen as the positive psychological changes that occur as a result of highly challenging life circumstances (Tedeschi & Calhoun, 2004). Posttraumatic growth is modeled as a cognitive-emotional process with no attention given to the body (Tedeschi & Calhoun, 2004). My physically active body was my advocate; it was also a medium for healing.

The following story is told from the perspective of my current sense of self, a 36-year-old, single, white, and well-educated woman. Following the advice of Sparkes (2002), emotional recall, systematic social introspection, and the inclusion of my vulnerable self are the foundation

of this autoethnography. The story is structured by placing my original and my revised self-narratives side by side. The model of posttraumatic growth indicates an individual's sense of self is shattered during highly challenging life circumstances. Through the process of self-analysis and self-disclosure this narrative is reconstructed to reflect growth. By placing my narratives side by side, the intention is to offer a medium to witness my internal world during this process.

It is not that the revised narrative is brighter and more positive; instead, it is that it is richer and wiser in perspective, reflecting self-compassion. Self-compassion is the art of being “touched by and open to one's own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one's suffering and to heal oneself with kindness” (Neff, 2003, p. 87). Cultivating such a mindset was pivotal in my experience of healing. In conjunction with my physically active body, practicing self-compassion transitioned me from a space of disembodiment and self-punishment to wholeness and self-care. By sharing and examining my personal experience, I am offering an alternative to how we commonly view physical activity and its impact on our lives.

### **My early active self where everything is perfect**

I am 10. I start running, at night, alone. I do not remember the first time I went, the why or the underlying feelings of motivation. I carry a Walkman that plays a mixed tape. My progress and speed are casually measured by blocks and songs. Mid-point of the run, I stop and swing in the park. I feel safe within the streets and within myself during these times. Most nights I leave and enter my parents' house unnoticed. My family do not support or inhibit my running. They do not question me about running at 11pm. After running, I climb into bed and fight to sleep. Sleep never comes easy.

I am 14. I start running cross-country and track. Solace is found in the structured practices, in creating an excuse to run more—morning runs, followed by practice, followed by an evening run. I stop listening to music in exchange for the growling of my stomach. Restrictive in my eating, I am hungry. Some nights, I exhibit less control. I eat then purge. Eating never comes easy.

I am 17. I start attending university on Vancouver Island. The first year, I live in my grandparents' basement. I study and run, run and study. I run up to 80 miles a week. I run my first marathon (and my 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>). I move in with my closest friend. She terms me a “social deviant,” in my rigorous behavior as she sips cocktails, watches TV, and talks on the phone. I think her ridiculous. Running is my form of play. When I run I feel good. My world is perfect, my parents, my three little brothers, and myself as long as I am running.

**Revised Narrative: My early active self where my body is protecting me from hardship**

Most psychotherapists claim that the more idealized an individual's history seems, the more likely it contains deeply hidden damage. Perfect parents often turn out to be abusive or seriously neglectful (Luepnitz, 2002). Children, and adults, wanting desperately to believe someone has loved and protected them produce a gilded picture and frame it for the world (Luepnitz, 2002). The same concept can be extended to idealized siblings, views of self, and lifestyles. I am an example of this. My childhood world was not perfect. It felt unpredictable and unsafe.

Running was an addictive form of self-punishment, which acted as a twisted form of self-soothing. As Mate explains (2010a), what seems non-adaptive and self-harming in the present was, at some point in our lives, an adaptation to help us endure what we had to go through then. If people are addicted to self-soothing, albeit sometimes destructive behaviors, it is only because

in their formative years they did not receive the soothing they needed (Mate, 2010a). Running was my emotional anesthetic against the pain of my young life. It gave me a sense of freedom, safety, and permission to be.

When I ran, I not only *felt* good, I believed I *was* good. Otherwise, my physical form felt uncontrollable, tarnished, and unsafe. Such negative self-perceptions are typical for individuals with histories of childhood trauma (van der Kolk, 2006). Running counteracted this state, dampening my emotions and allowing me to avoid the discomfort of my internal and external worlds. Disordered eating acted in a similar fashion. Similar relationships with eating psychopathology and childhood trauma have been documented (Moulton, Newman, Power, Swanson, & Day, 2015). I carried a sense that the smaller I was, the less space that I took up, the better. This reflected my feelings of unworthiness, dis-ease, and lack of safety.

My body acted as a container and bore the burden of holding my own and others' unmanaged emotions. Carrying others emotions aligns with the notion of protective identification, or the splitting off of painful emotions and storing them in another person (Luepnitz, 2002). As a child, I unconsciously opted to carry and be responsible for the feelings of individuals close to me who were unable to address their own distress and suffering. Over-exercising and destructive eating patterns helped me simultaneously deny and relieve some of the emotional weight I carried.

I was a girl whose personal and family demons were protected in an illusionary world of perfection. As long as I did "right," positive outcomes would result. Within this paradigm, there was no room for a sense of a traumatized self. Tenderness and self-compassion were unwarranted. I ran to endure, distancing myself from the chaos of my external environment and

my compromised internal sense of self. Running brought me into a world and body that felt safe and controllable. I had no sense that any other option for living existed.

This persisted into my 30's. It took addiction nearly taking a family member's life for anyone to acknowledge that indeed, problems existed. It was an intense moment where my intellectual and emotional worlds were allowed to meet in congruence. Part of me, though smarter, still resists writing this, feeling that I am betraying loved ones by going against the culture of silence and avoidance.

### **My later active self where there is something wrong with me**

I am 26. I start practicing yoga as a complement to running. I complete a 200-hour, month-long, residential Yoga Teacher Training program. My intention is to strengthen my yoga practice and to mold my physical form into a more idealized version of myself. Despite my surface-level intentions, I realize that I have a body and that my body is not relaxed. It is the first time I recall feeling my physical form, being aware of the tensions it stores. I am surprised.

I am more surprised when I experience an uncharacteristic emotional release towards the end of training. During a longer posture hold, waves of laughter, screaming, and crying ebb and flow from me. My sense of control and time is lost. My partner, who is supporting me with the cues, "relax, feel, allow, breath, let go," later told me I looked like I was "possessed by a poltergeist." Uncomfortable and foreign, I chalk this experience up to some yogic mystery I did not intend to revisit. I am not a person who cries, screams, and unleashes.

I am 30. Before dusk on an uncommon snowy morning, I exit sleep to meet my first panic attack. I am suffocating. Terrified, I run outside and collapse into a ball atop of the new snow. Similar attacks continue for the next two weeks during which I live on a cocktail of walking, sleeping, unintentional fasting, topped off with a consistent dose of Xanax. My mom, a

nurse by profession and mother at heart, tries to soothe me into the washroom for a well warranted bath. I stand at the door unable to enter, breath shallow, body not cooperating. There are no windows in the washroom. I will not survive in that windowless space. I am not a person who is scared and anxious.

I am 32. I am in an extended 4-hour yoga class, in a prolonged state of fasting. My defenses are softened. My body starts to feel overwhelmed, severely agitated. Barefoot, I flee the room. Crouching in the corner outside of the studio, I seek to control my erratic breath. Eyes focused on the floor. My sense of self disappears. It is dark. When my conscious self surfaces, I am in a different location being held by my teacher and a friend. I am told I was screaming “as though everyone I loved had died at once.” This is my first dissociative episode that I am aware of, although it will not be my last. How electrical lines sound, is how I feel. The story I tell myself is I have messed up my brain fasting. Otherwise, nothing has happened that merits such shameful behavior. Fighting to remain disconnected from my body, I stop doing yoga. I stop running. I try to be very still, to disengage from my dark, pained self.

**Revised narrative: My later active self where I discover my body is advocating for me**

Pain manifests itself on the level of the physical in two ways: discomfort that comes in as an unknown, new, releasing sensation and the pain that comes from struggling and pushing beyond a physical limitation (Kripalu, 2004). My early life had been spent avoiding the former by engaging in the latter. This was tied to my emotional body. As Mate (2010a) describes, the automatic repression of a painful emotion is a helpless child’s prime defense mechanism to endure trauma that may have otherwise been catastrophic. My ability to continue with the wholesale dulling of emotion was failing. Running had enabled this suppression. Yoga put a

stop to it. Through yoga, I first discovered that I had a body. I then connected to my body and the pain it held.

Disconnecting from bodily experience and having a compromised sense of an inner self is a common outcome for traumatized individuals (van der Kolk, 2006). History has taught us that it feels safer to separate from the body. As this becomes a more common practice, we can lose our ability to identify feelings and sensations, limiting self-awareness (van der Kolk, 2014). Being invited to then re-connect to the body, as yoga encourages, can feel overwhelming and intolerable (Emmerson & Hopper, 2011). With trauma, the rational brain's ability to squelch sensations and control emotional arousal can be limited (van der Kolk, 2006). This makes it difficult for an individual to put their experiences in context and can activate trauma responses that are incongruent to the present circumstances (van der Kolk, 2006). Though emotions do not occur by conscious choice, how we respond to emotions is more of a conscious choice. Often individuals who have been exposed to extreme threat, particularly early in life, combined with a lack of adequate caregiving responses, have difficulty modulating their emotional responses (Mate, 2010a).

My choices and ability to navigate the world felt strained and limited. The unexplainable shameful betrayal of my body during yoga was my closest identification of a sense of a traumatized self. Yet, I saw this state as uncalled for, something I created, a self-indulgent fault indicative of an afflicted sense of self. By no means was it something to treat with warmth or self-compassion.

### **My current active self where my body and I connect**

I am 32. I am no longer able to ignore the imprint from which my body has so graciously protected me. My life is interrupted by growing dysfunction, where episodes of dissociation

continue with increasing frequency. During a weekend therapy workshop I am told by the facilitator: “You are a high wire act. On a scale of 1-10, you display a trauma imprint of a 12.” An accurate appraisal given I had spent the weekend blacking out. In this unconscious state, I flee; running barefoot and coatless into the night, slamming my body into the living room window trying to escape.

Previously, the best my brain could do was shut down conscious awareness when the pain became too vast and unbearable that it threatened to compromise my ability to function. Now, the best it can do is render me vulnerable. Vulnerability, from the Latin word *vulnerare*, or “to wound,” is our susceptibility to being wounded (Mate, 2010a). This fragility is part of our nature. I meet my body, I meet my wounds. My mind is eclipsed by dreams and “memories.” I am no longer able to disconnect, I feel uncontained.

I am 32. Seeking to sooth myself, I start rock climbing. Seeking to “fix” myself, I start talk therapy. Though seemingly unrelated, these activities share commonalities. To be effective, both require a person to trust, to be exposed, to pay attention to, and to manage, their internal sensations. My first outdoor climbing trip, I experience a greater sense of safety and support than I previously remember in my life. It’s deeply unsettling to realize how insecure I feel in the world under general circumstances.

I am 33. I am 34. I am still in therapy. I am still climbing. I start reading about trauma and the body. I learn that it is an increasingly accepted perspective in the field of trauma treatment that clients must address the internal residues of the past and learn to regulate their physiological arousal in order to heal and re-program habitual physical responses (van der Kolk, 2006). This makes sense to me as I have had such experiences in climbing and therapy. I put myself in a position of manageable vulnerability that provides an opportunity to witness myself

in environments of risk while dependent on another. As my skill level increases with climbing, I am able to make a choice to put myself in a position of a heightened physiological state of danger and feel I have some control while trusting another. My interoceptive awareness and self-regulation improve, allowing me to safely get in contact with and confront the terror my body held.

In this, I experience tenderness towards myself. I can hear my therapist saying, “you don’t have to identify with a story;” a simple statement that has a huge impact. It is my first lived experience with self-compassion. A confluence of circumstances allow for this. My distress is great enough that the previous discomfort I associated with self-compassion feels like a relief in comparison. In addition, it is clear to me that the trauma imprint I carry is not something I created. I have attended therapy workshops and I see the stories other people’s bodies hold. I know it is not something that they manifested. I am not dissimilar.

As I continue to practice holding an attitude of kindness towards myself, I am able to soften the over-identification with my story, with how my trauma responses look and feel. And it takes practice, consistent attention towards the story I attach to my experience. Though I have seen like others, a part of me still self-disparages that I am different, I am damaged. Attention towards such thoughts, acknowledgement and allowance towards my internal world, nurtures an opportunity to be less embedded in my dysfunctional patterns. As a consequence, in moments when my breathing becomes shallow, when I get overwhelmed, when I am unexplainably scared, I calm myself by acknowledging that such experiences are part of me and that they are OK. The negative impact of my mind’s story lessons. This alters how I receive and interpret my physical experience; what was previously unbearable morphs into something easier. Self-compassion

begins to shift from an abstract concept to a more consistent tangible lived experience as I practice leaning into my discomfort instead of escaping from it.

This offers me the chance to more fully engage in healing opportunities. During therapy sessions, as my feelings and bodily sensations surface, instead of disconnecting, I am able honor what my body needs. I push, scream, and move to release. Practicing self-compassion first allows me to stay present during this process, to keep my eyes open. It then supports me consciously allowing my body to move as it desires and to heal. What would have previously deemed ugly and unnecessary is now experienced as a chance to create something new for myself. I am able to run, to practice yoga, to climb, and to safely connect with my body with gentleness. I am no longer fleeing. I am able to bear the reality of being me in my entirety and am mindful what my body can withstand. A sense of safety, equanimity, and hope is found in this.

**Revised narrative: My current active self where my body unlocks healing**

It would be presumptive of me to say that panic attacks and dissociative episodes have been extinguished from my life. Though they have been absent for a period of time, my body offers me no guarantees. I am OK with this. My body and I are in a relationship now, taking care of each other. Simple as it sounds, this connection has had a profound impact on my life. Disconnection from emotional and bodily states prevents a person from truly knowing oneself, and consequently limits the possibility of fully sharing oneself with another (Luxenberg, Spinazzola & van der Kolk, 2001). By connecting to the unattended space inside of me, I am now able to genuinely engage in a healthy relationship with myself and others.

Self-compassion supports this connection. It is a concept rooted in the idea that psychological strength comes from acknowledging and embracing our unsavory thoughts and

emotions (Neff, 2003). As Mate writes, “being cut off from our own natural self-compassion is one of the greatest impairments we can suffer because along with our ability to feel our own pain go our best hopes for healing, dignity, and love” (Mate, 2010a, p.354). I would add to this, that it also prevents us from engaging with others in a wholehearted way. If we are not comfortable with our own pain, others pain will overwhelm us. Kindness towards ourselves, allows kindness towards other, fostering connection.

There are moments I still struggle with the corrosive feelings of shame, of being broken and tarnished. My trauma responses rifted and unmoored my sense of self; they terrified and confused me. However, I am no longer waging a war with the perceived unsavory aspects of myself, compassionate self-inquiry has unbound me from suffering. Echoing Oedipus at Cornelos, I can say: “I come to give you something, and the gift is my own beaten self; no feast for the eye; yet in me is a more lasting grace than beauty” (406 BC/1954, p.105). It is a not a story of “perfection,” masking disconnect. It is a true and heartfelt story of the gift of my own “beaten” self.

## **Conclusion**

According to Frank (1995), personal stories act as important resources in offering flexibility in how we may conceive to live differently. Access to varied stories offers potential for expanding the sense of who we are and could be, as well as the possibility of taking care of ourselves and others in an enhanced manner. As a culture, our stories around physical activity tend towards a limited disembodied view of health and wellness. Self-compassion generally does not hold a place in our thinking around our physical activity and how we care for ourselves. Initiatives such as the current First Lady’s project, *Let’s Move! America’s Move to Raise a Healthier Generation of Kids*, is an example of our national approach to movement and self-care.

This program indicates physical activity “can help prevent a range of chronic diseases, including heart disease, cancer, and stroke, which are the three leading causes of death. Physical activity helps control weight, builds lean muscles, reduces fat, promotes strong bone, muscle and joint development, and decreases the risk of obesity” (letsmove). In line with kinesiology’s historical approach to physical activity (Corbin, 2012), such messages are limited. They ignore the healing and transformational possibilities of compassionate movement, restricting our experiences and behavior surrounding having a physically active or inactive body.

One may argue that the aim of the First Lady’s agenda is to prevent childhood obesity and thus, healing has no place in this dialogue. However, research indicates that exposure to traumatic events during childhood is associated with an increased risk of adult obesity (Gunstad et al., 2006). Logically, this could extend to childhood obesity yet we do not talk about obesity in relation to childhood hardship. Instead, we focus on the built environment, on nutrition, on the body’s physical fitness and activity in relation to varying elements of health, such as anthropometric measures, motivation, chronic disease, and mortality (Corbin, 2012). Such thinking encourages disconnect with the body and ignores the fact that we live in a society where a ubiquity of trauma exposures exist (Bonanno, 2005). Research suggests the prevalence of at least one experience of potential trauma exposure for most people (Bonanno, 2005), including adolescents and children (McLaughlin, 2013).

Despite the impact on our lives, our experiences of trauma and its outcomes can go unrecognized, as traumatized individuals are rarely in touch with the origins of their suffering (van der Kolk, 2014). With access to infinite numbing strategies, we are readily able to disconnect from our pain (Mate, 2010a). And in the end, we confuse decreased distress and increased wellness with posttraumatic growth, yet they are not the same (Calhoun, Cann, &

Tedeschi, 2010; Tedeschi & Calhoun, 2004). The concept of posttraumatic growth extends beyond wellness to positive changes in self-perceptions, interpersonal relationships, and into one's general life philosophy (Tedeschi & Calhoun, 2004); outcomes not that dissimilar to those related with self-compassion (Reyes, 2012).

Individuals can be fully in charge of their lives only if they can acknowledge the reality of the body in all its visceral dimensions (van der Kolk, 2014). Movement can assist people in gaining a sense of control over their bodies and be mindful of their thoughts and emotional reactions (Cordova, 2008). My naïve and avoidant tale of “perfection” was undone and subsequently rewritten through my physically active body. Years of running allowed me to deny my negative emotions and experiences. One cannot be self-compassionate towards something that they are not acknowledging (Gremer & Neff, 2013). Rarely do we see a young girl running and think of her as avoidant or hurting herself, particularly if she is not underweight. Culturally, I was the picture of health, yet I wasn't truly healthy. I was wounded. Encountering my body and its internal sensations through yoga corroded my false illusion of self.

Growth is dependent on such distress and a shattering of our world views to make room for the new (Tedeschi & Calhoun, 2004). However, it is only when sufficiently calm can people focus on context, interactions, and present moment experience (van der Kolk, 2006) that allows them to engage in the cognitive-emotional process required of posttraumatic growth (Tedeschi & Calhoun, 2004). For some individuals this requires that the body first learn it is safe (van der Kolk, 2014). Embodiment can support feelings of being safe, as well as experiences of self-compassion (Falconer, Slater, Rovira, King, & Gilbert, 2014). Such experiences are linked with less psychopathology (Barnard & Curry, 2011) and more self-care (Terry & Leary, 2011). The simple act of telling a new story does not necessarily alter the physiological responses of the

body that result in trauma responses. However, participating in intentionally emotionally and physically challenging activities can support experiences of embodiment and provide a vehicle for personal transformation (Dunn, Campbell, Penn, Dwyer, & Chambers, 2009).

In my case, climbing facilitated this process by encouraging mindfulness, an attribute of self-compassion (Neff, 2003; Reyes, 2012). I learned to meet the present with a balanced frame of mind (Reyes, 2012). I learned to acknowledge and hold space for my painful thoughts and emotions with equanimity. Mindfulness aligns the emotional and rational processes (Reyes, 2012), and relaxes the body, morphing suffering into an opportunity for psychological growth (Wada & Park, 2009). For me, mindfulness is the first step toward self-compassion.

Self-compassion is operationalized as having three interrelating components: self-kindness versus self-judgment, mindfulness versus over-identification, and common humanity versus isolation (Neff, 2003). My experience was that practicing mindfulness, noting my sensations and experience, then allowed me to practice kindness towards myself. One cannot be kind towards something that they are not acknowledging. As I became more mindful of my own habits, it allowed me to see how similar others were to me as well, supporting a sense of common humanity. When in a mode of avoidance, or over-identification with our experience, attuning to others experience is nearly impossible. I read a passage recently: “Once we were beautiful, now we are ourselves” (Barry, p 13, 2015). Self-compassion allowed me to know myself, be myself, and allow others the same opportunity.

The result can be a revised self-narrative infused with wisdom, reflecting acceptance of a changed self and recognition of the complexity of life (Calhoun, Cahn, Tedeschi, 2010; Weiss, 2010). Wisdom is another attribute of self-compassion (Reyes, 2012). Dimensions include the recognition and management of uncertainty; the integration of affect and cognition; and the

recognition and acceptance of human limitation (Linley, 2003). Development of wisdom requires internal adjustments, including reflection and a willingness to learn (Chen, 2011). Such adjustments are not isolated to the mind.

Schwartz, in weaving together embodied learning, wisdom, and neuroscience, stated, “life experiences showed me that my body possessed wisdom...that my body identified what technology failed to do so, I was awestruck by more manifestations of wisdom” (p. 1, 2011). She described a neurobiological model of wisdom (Meeks & Jeste, 2009) that emphasizes the nervous system flows throughout the body, and an embodied mind arises from its integrated functioning. Specific brain regions must connect and balance each other’s activities to create subjective awareness and emotional self-regulation. These are precursors to wisdom. One’s experience with wisdom is impeccably entwined with the functioning of the whole self and can lead to changed behaviors that modify the experience of suffering (Reyes, 2012).

Transforming suffering into growth is not to suggest that one does not feel the pain or grief during this process (Wada & Park, 2009). Frank’s (1991) ethical ideal for a body, referred to as *the communicative body*, is described as connected to both itself and others, its likelihood a possibility rather than a problem. Suffering is not compartmentalized to minimize the impact on self-identify; instead, “the essential quality of the communicative body is that it is a body in process of creating itself” (Frank, 1991, p 79) and healing in relation to others. Having a sense of common humanity and self-kindness, both recognized components of self-compassion (Neff, 2003; Reyes, 2012), can help develop this ideal.

Stories are one means of encouraging connection through shared experience. There is benefit to providing alternatives to the standing paradigm of how physical activity is conceptualized, looking beyond obesity prevention, increased physical fitness, and enhanced

wellness. Individual functioning and self-experience are influenced by the background body sensations that arise with cognitive-emotional processing (Ogden, 2006), the body holds meaning and influences our physical activity choices and behavior (Sparkes, 2002). This bodes for a paradigm shift from disembodied health and wellness towards one of healing and creation, where we have the possibility of transforming our stories into an embodied habit of wholeness (Sparkes, 2002).

In this story, I started with a simple bipedal form of physical activity done alone. I transitioned to practicing yoga, a more complex use of breath and body that involved being led by an instructor and sharing space with others. Eventually I started climbing, which is an even more complex use of my body that required me to trust others. Though I will not claim that this evolution is necessary for all, I do feel it played a role in my own experience. Today, I continue to run, do yoga, and to climb. The key difference is, there is intentionality and awareness behind how I approach physical activity. I know that the cognitive-emotional processing required of posttraumatic growth can happen through, and be supported by, the physically active body. With continued attention towards cultivating a practice of self-compassion, I trust that I will continue to engage in healing movement.

## References

- Barnard, L. K. & Curry, J., F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. *Review of General Psychology, 15*(4), 289–303.
- Bonanno, G. A. (2005). Resilience in the face of potential trauma. *Current Directions in Psychological Science 14*(3), 135-138. doi:10.1111/j.0963-7214.2005.00347
- Calhoun, L. G., Cann, A., & Tedeschi, R.,G. (2010). The posttraumatic growth model: Sociocultural considerations. In T. Weiss & R. Berger (Eds), *Posttraumatic growth and culturally competent practice: Lessons learned from around the globe* (pp 1-14). Hoboken, NJ: Wiley
- Chen, L. (2011). A qualitative inquiry of wisdom development: Educators' perspectives. *The International journal of aging and human development, 72*(3), 171-187.
- Cordova, M. (2008). Facilitating posttraumatic growth following cancer. In S. Joseph & A. Linley (Eds.), *Trauma, recovery and growth*. NJ: John Wiley & Sons.
- Corbin, C. B. (2012). C. H. McCloy Lecture: Fifty years of advancements in fitness and activity research. *Research Quarterly for Exercise & Sport, 83*(1), 1-11.
- Dunn, J., Campbell, M., Penn, D., Dwyer, M., & Chambers, S. K. (2009). Amazon heart: An exploration of the role of challenge events in personal growth after breast cancer. *Journal of Psychosocial Oncology, 27*, 119-135.
- Emmerson, D., & Hopper, E. (2011). *Overcoming trauma: Reclaiming your body*. Berkely, CA: North Atlantic Books.
- Falconer CJ, Slater M, Rovira A, King JA, Gilbert P, et al. (2014) Embodying Compassion: A Virtual Reality Paradigm for Overcoming Excessive Self-Criticism. *PLoS ONE 9*(11): e111933. doi:10.1371/journal.pone.0111933
- Frank, A. (1991). For a sociology of the body: An analytical review. In M. Featherstone, M. Hepworth, & B. Turner (Eds.), *Theory, Cultural & Society: The body: social process and cultural theory*, (p 36-103). London: Sage.
- Frank, A. (1995). *The wounded storyteller*. Chicago, IL: The University of Chicago Press.
- Germer, C. K., & Neff, K. D. (2013). Self-compassion in clinical practice. *Journal of Clinical Psychology, 69*(8), 856-867. doi:10.1002/jclp.22021
- Green, D., Lattimore, R. (Eds.). (406 BC/1954). *Sophocles, Oedipus at Colonus*, in *Complete Greek Tragedies* (Vol. 1, p. 105). (D.Green ,Trans.). Chicago: University of Chicago Press.

- Gunstad, J., Paul, R.H., Spitznagel, M.B., Cohen, R.A., Williams, L. M., Kohn, M., & Gordon E. (2006). Exposure to early life trauma is associated with adult obesity. *Psychiatry Research*, 142(1), 31-37.
- Kripalu Yoga Fellowship. (2004). *Kripalu yoga teacher development manual*. (p. 2.11). Lenox, MA: Kripalu Center.
- Let's Move. Get Active: Physical Activity. Retrieved April 3<sup>rd</sup>, 2015 From <http://www.letsmove.gov/get-active>
- Linely, P.A. (2003). Positive adaptation to trauma: Wisdom as both process and outcome. *Journal of Traumatic Stress*, 16(6), 601-610.
- Luepnitz, Deborah Anna (2002). *Schopenhauer's porcupines: Intimacy and its dilemmas*. (p 94, 232). New York, NY: Basic Books.
- Luxenberg, T., Spinazzola, J., & van der Kolk, B.A. (2001) Complex trauma and disorders of extreme stress (DESNOS) diagnosis, Part One: Assessment. *Directions in Psychiatry*, 21(25), 373-392.
- Mate, G. (2010). Forward. In Peter Levine's. *An unspoken voice: How the body releases trauma and restores goodness* (p xii). Berkeley, CA: North Atlantic Books.
- Mate, G. (2010a). *In the realm of hungry ghosts: Close encounters with addiction*. (p 40, 234, 54) Berkeley, CA: North Atlantic Books.
- McLaughlin, (2013). Trauma exposure and posttraumatic stress disorder in a national sample of adolescents. *Journal of the American Academy of Child and Adult Psychiatry*, 52(8), 815-830.
- Meeks, T. W., & Jeste, D. V. (2009). Neurobiology of wisdom: A literature overview. *Archives of General Psychiatry*, 66(4), 355–365.
- Moulton, S. J., Newman, E., Power, K., Swanson, V., & Day, K. (2015). Childhood trauma and eating psychopathology: A mediating role for dissociation and emotion dysregulation?. *Child Abuse & Neglect*, 39167-174. doi:10.1016/j.chiabu.2014.07.003
- Neff, K. D. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2, 85-102.
- Ogden, P. (2006) *Trauma and the body: A sensorimotor approach to psychotherapy*. Norton & Company Inc. New York, NY.
- Reyes, M. D. (2012). Self-compassion: A concept analysis. *Journal of Holistic Nursing*, 30(2),1-10.

- Sparkes, A. C. (2002). Autoethnography: Self-indulgence or something more. *Ethnographically speaking: Autoethnography, literature, and aesthetics*, 209-232. Google Books: Accessed June 1, 2014
- Swartz, A.L (2011). Wisdom, the body, and adult learning: Insights from neuroscience. *New Directions for Adult & Continuing Education*, 131, 1-24. doi: 10.1002/ac.417
- Tedeschi, R.G., & Calhoun, L.G. (2004). The foundations of posttraumatic growth: New considerations. *Psychological Inquiry*, 15, 1-18.
- Terry, M. L. & Leary, M. R. (2011). Self-compassion, self-regulation, and health. *Self and Identity*, 10, 352-362.
- Wada, K., & Park, J. (2009). Integrating Buddhist psychology into grief counselling. *Death Studies*, 33(7), 657. doi: 10.1080/0781180903012006
- Weiss, T., & Berger, R. (Eds.). (2010). *Posttraumatic growth and culturally competent practice: Lessons learned from around the globe*. Hoboken, NJ: John Wiley.
- van der kolk, B.A (2002). In Terror's Grip: Healing the Ravages of Trauma. *Cerebrum: The Dana Forum on Brain Science*, 4(1), 34-50.
- van der Kolk, B.A. (2006). Clinical implications of neuroscience research in PTSD. *Annals New York Academy of Sciences*, 1(2), 1-17.
- van der Kolk, B.A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York, NY: Viking.

### Chapter 3: Manuscript 2

Posttraumatic Growth, the Physically Active Body, and Self-Compassion:  
Giving Voice to Practitioners

Erin Mitchell

Oregon State University

Vicki Ebbeck

Oregon State University

“To live is to suffer, to survive is to find some meaning in the suffering.”  
- Friedrich Nietzsche

Posttraumatic growth may be the silver lining of suffering. Defined as the “positive psychological change experienced as a result of a struggle with highly challenging life circumstances” (Tedeschi & Calhoun, 2004, p. 1), posttraumatic growth implies that transformation can emerge from hardship. It’s an ancient concept, echoed in numerous world religions. Quoting his Holiness the 14<sup>th</sup> Dali Lama, “it is under the greatest adversity that there exists the greatest potential for doing good, both for oneself and for others” (His Holiness the Dali Lama, quote 7). A similar sentiment shared by Christians is that we “rejoice in our sufferings, knowing that suffering produces perseverance, and perseverance produces character, and character produces hope” (Romans 5:3-5 New International Version). In our society, where a ubiquity of trauma exposures exist (Bonanno, 2005), to live may be to suffer. However as Nietzsche suggests, meaning can be found within suffering and, as posttraumatic growth suggests, so can positive change.

During a lifetime, some estimates suggest a prevalence of at least one experience of potential trauma exposure for most people (Bonanno, 2005), including adolescents and children (McLaughlin, 2013). These may include, although are not limited to, events such as natural disasters, war, physical assault, emotional and physical abuse, disability, and disease. When an individual is unable to fully move through the adverse physical and emotional responses evoked due to such difficult circumstances, trauma occurs (Mate, 2010). In such cases, trauma is stored in the body and a fundamental reorganization of the way the mind and brain manage perceptions may occur, altering how one thinks (van der Kolk, 2014). Following such circumstances, individuals may be diagnosed with post-traumatic stress disorder (PTSD; Karam et al, 2014), complex PTSD (Courtois, 2008) or developmental trauma disorder (van der kolk, 2014).

Disorders such as these offer a view into these individuals' often difficult past and are highly related to the challenging day-to-day experience they may encounter (Najavits, 2013).

Living fully in the present is often difficult for traumatized individuals. Reminders of the past can automatically activate certain neurobiological responses that may be harmful and disruptive to the individual's current life (van de Kolk, 2006). With trauma, the rational brain, which overrides the emotional brain as long as our fears do not dominate, has a compromised ability to control emotional arousal (van der Kolk, 2014). In such cases, the moment someone feels trapped, enraged, or rejected, they are vulnerable to acting out old patterns (van der Kolk, 2014). They may blow up, freeze, or become helpless in the face of minor challenges (van de Kolk, 2006). Such dysfunction may be coupled with a host of negative health-related outcomes such as anxiety, depression, and insomnia (Bonanno, 2005), as well as an increased vulnerability for negative body image, self-harm, addiction, and dissociative behavior (van der Kolk, 2014). As Mate explains (2010a), what seems non-adaptive and self-harming in the present was, at some point in the traumatized individual's life, often an adaptation to help them endure what they had to go through. If people are addicted to self-soothing, albeit even destructive behaviors, it is to ease the pain they carry (Mate, 2010a).

Evidence exists, however, that in the aftermath of trauma numerous people are able to avoid dismal outcomes and experience personal growth (Weiss & Berger, 2010). Exploring trauma from this perspective is appealing and in line with the current positive psychology movement of studying the psychological characteristics and actions that promote wholeness and well-being (Seligman & Csikszentmihalyi, 2000). In many respects, the experience of posttraumatic growth, which is broadly characterized by positive changes in self-perceptions, interpersonal relationships, and in one's general life philosophy (Tedeschi & Calhoun, 2004), is

remarkable and suggests a considerable human capacity to progress through adverse circumstances. As researchers and professionals, understanding how to nurture and support such transformations is to our benefit.

Posttraumatic growth is modeled as a cognitive-emotional process that involves reassessment of beliefs and reconstruction of one's life narrative after a seismic event (Tedeschi & Calhoun, 2004). (See Appendix D for the model.) This echoes the Janoff-Bulmans' (1992) Shattered Assumptions Theory, which posits that our personal narrative consists of fundamental assumptions of a sense of safety and security and that when shattered, trauma occurs. According to the cognitive-emotional model, for posttraumatic growth to take place, individuals must experience psychological distress as their self-narrative breaks down (Tedeschi & Calhoun, 2004). The process is conceptualized as being subject to proximal and distal social-environmental influences (Calhoun, Cann, & Tedeschi, 2010). As Calhoun et al. (2010) explain, broad societal ideas, such as those reflected in the opening religious quotes, are considered distal influences and can either support or hinder an individual's growth. Proximal influences relate to interactions with people that have shared experiences who can, ideally, act as role models.

A necessary component of the process is individuals engaging in self-analysis and self-disclosure through mediums such as writing, praying, and talking (Tedeschi & Calhoun, 2004). A challenge that individuals who are traumatized may experience is a compromised ability to link words with their experiences, hence limiting this sort of cognitive-emotional processing. By nature, trauma brings individuals to the edge of comprehension, cutting them off from a language based on common experience or an imaginable past (van der Kolk, 2014). Broca's area, the speech center of the brain, often has markedly decreased activation during trauma and in circumstances of flashbacks, or the reliving of trauma (van der kolk, 2014). Such

circumstances may limit one's ability to engage in the process necessary for posttraumatic growth and narrative revision. This may include having a compromised ability to be receptive to environmental supports such as shared stories.

An increasingly common perspective within the field of trauma is that some individuals need to get in touch with, and address, the residue of trauma held within their bodies prior to being able to engage in talk therapy (van der Kolk, 2006), or the cognitive-emotional processing required of posttraumatic growth. Often individuals who are traumatized lack internal self-awareness, or interoception (van der Kolk, 2014). They are disconnected from language, from their body-based feelings, from themselves. Somatic therapies seek to address this by encouraging individuals to draw out and befriend sensory information that has been blocked by trauma; followed by completing the physical actions that were thwarted in the process of traumatization (Levine, 2011; Ogden, 2006). This increases people's ability to recognize the relationship between physical sensations and emotions and may allow individuals to put words to their feelings and experiences.

This can be conceptualized within Frank's Theory (1995), which posits that we can only know the world through our bodies, and therefore, our self-identity is a direct result of all worldly experiences via the body. By participating in intentional physically challenging activities, individuals can gain a sense of control over their bodies and be mindful of their thoughts and emotional reactions (Cordova, 2008) that potentially provides a vehicle for personal transformation and growth (Dunn et al., 2009). In a sense, trauma can create an environment in which, when nurtured, a reconnection to the body that supports enhanced bodily care and self-care can occur (Hefferon, Greal, & Mutrie, 2010).

Given this, it is surprising how little attention the physically active body's role in the growth from hardship has received within the field of kinesiology. Some attention has been paid to the therapeutic qualities of physical activity, in areas such as dance therapy (Mills & Daniluk, 2002), equine therapy (Yorke, Adams, & Coady, 2008), and trauma-sensitive yoga (Emerson & Hopper, 2011). Such programs focus on creating feelings of safety (Emerson & Hopper, 2011; Yorke, Adams & Coady, 2008) and connection to others (Yorke, Adams & Coady, 2008), and/or self (Emerson & Hopper, 2011; Mills & Daniluk, 2002) in efforts to overcome emotional or psychological problems.

Specific to the posttraumatic growth model, existing literature within the field of kinesiology is limited. Research has primarily focused on women with breast cancer in physical activities such as climbing Mt. Kilimanjaro (Burke & Sabiston, 2012), dragon boat programs (McDonough, Sabiston, & Ullrich-French, 2011), and group-based exercise classes (Hefferon, Greal, & Mutrie, 2008). These qualitative studies have found that women experienced posttraumatic growth-like outcomes related to their involvement in the given physical activity. Such outcomes included new-found health behaviors (Hefferon, Greal, & Mutrie 2008), increased interpersonal connection, nurturing a shift in one's life priorities (Burke & Sabiston; 2012; McDonough, Sabiston, & Ullrich-French, 2011), and a sense that increasing physical health contributes to mental well-being (Hefferon, Greal, & Mutrie 2008). It is noteworthy that these studies focused more on how the social experience of participating in an activity with others supported posttraumatic growth, and less on the actual role movement played in this process. Consequently, ample room remains to explore the role of the physically active body in supporting posttraumatic growth.

It is logical that in, or out of, relation to the physically active body, self-compassion could play a role in the difficult process of posttraumatic growth. Self-compassion is the act of being gentle with yourself during life's hardships and is rooted in the concept that positive emotions are generated by embracing the negative ones (Neff, 2003). It is defined through three interrelating components: self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification (Neff, 2003). Germer and Neff (2013) describe self-kindness as being warm and nurturing, instead of harsh, towards oneself during times of hardship. Common humanity involves recognizing that we are not alone in our suffering and that imperfection is part of the human experience (Gremer & Neff, 2013). Mindfulness involves accepting our painful thoughts and emotions with equanimity (Neff, 2003).

One of the most consistent research findings links greater self-compassion to less psychopathology (Barnard & Curry, 2011). Improved self-care (Terry & Leary, 2011), self-improvement motivation (Brienes & Chen, 2012), and proactive behavior towards one's own well-being are also associated with higher levels of self-compassion (Neff, Kirkpatrick, & Rude, 2007). The notion that nurturing negative emotions results in positive outcomes echoes the foundation of posttraumatic growth that self-enhancement can exist in tandem with adversity, and yet we are not aware of any published research that has considered this relationship in the context of physical activity.

The focus of the current investigation was to explore the potential contribution of self-compassion, in relation to the physically active body, in supporting posttraumatic growth. This was done through narrative inquiry from the perspective of practitioners who have direct experience using the physically active body to support posttraumatic growth. We can learn from such practitioners, who intentionally provide movement opportunities to promote growth from

trauma. They can provide insight and enhance our understanding of how best to nurture this process. This research had three aims: 1) to understand the contribution of the physically active body to posttraumatic growth; 2) to examine what, if any, function self-compassion serves in supporting posttraumatic growth through the active body; and 3) to elicit suggestions from movement specialists for promoting posttraumatic growth.

## **Methods**

### **Participants**

Purposive sampling was used for this study to recruit 10 practitioners who had relevant lived experience with the research questions. Marshall et al. (2013) advocated that when determining sample size researchers should act on precedent by citing sample sizes for similar research designs and questions. Based on similar previous studies that involved sample sizes of 3 (Burke & Sabiston, 2012), 10 (Hefferon et al, 2008), and 17 (McDonough et al, 2011), a sample size of 10 was determined for this study. It is prudent that we remember that the actual number of participants used in a study does not necessarily translate to quality of findings (Lal & Suto, 2012) and it is more about who we sample than how many (Creswell, 2007).

Study participants were white females, 30-62 years of age ( $M=49$ ;  $SD=9$ ), who self-identified as practitioners that used movement to support growth from hardship. They included somatic movement educators, yoga instructors, and movement therapists, where many participants identified being trained in more than one area of expertise. Experience in the role of practitioner ranged from 3-25 years (see Figure 1). Study participants were selected based on four inclusion criteria: (a) over the age of 21 years; (b) experience as a practitioner using the physically active body to support hardship; (c) the ability to communicate in English; and (d) access to the internet.

Figure 3.1: Participant Professional Profile

Participant	Profession (years in profession)
1	Somatic movement educator (12 years)
2	Yoga instructor (6 years)
3	Yoga instructor (10 years)
4	Dance/yoga/movement therapy instructor (10 years)
5	Yoga instructor (20 years)
6	Yoga instructor (3 years)
7	Somatic therapist/movement-based expressive arts therapist (25 years)
8	Yoga teacher (14 years)
9	Pilates/qigong/yoga instructor specializing in older adults (8 years)
10	Dance teacher (46 years); Pilates and personal fitness trainer (21 years); certified Laban movement analyst (10 years)

## Procedure

Recruitment ensued after receiving Institutional Review Board approval for this study. Recruitment methods included flyer distribution via email and newsletters to practitioners and studios involved with the work of interest. Social networking was also used including posting the announcement on target Facebook sites such as International Somatic Movement Educator and Trauma Sensitive Yoga. Interested participants were directed to contact the researchers via email. Ayling and Mewse (2009) found that participants demonstrated a general lack of concern regarding online security, even when disclosing sensitive information. Though the participants' real names were attached to their emails, no identifiers were attached to the results.

Study involvement included completing an on-line asynchronous typed interview. (See Appendix B.) Participants were emailed the interview guide to complete and return to the researcher. Initial responses to the interview questions ranged from 5 pages to 25 pages. All 10 participants were prompted for some form of follow-up information. Three participants did not respond to the follow-up questions citing time constraints or forgetting as a reason. No more than four exchanges (i.e., four prompts and responses) occurred for any one participant, and

participants were free to discontinue answering at any point. Two participants shared supporting materials, such as student testimonials and projects, to create a more personal and in-depth depiction of their story. Credibility was addressed through member checking (Creswell, 2007) to assure that stories had been accurately reflected. Once the interview was completed, the researchers' interpretation of the collective experiences was sent back to the participants to read and provide any suggested revisions, although no modifications were offered.

### **Design**

The research was guided by a relativist ontology perspective. This assumes that our lives are storied and influenced by the larger social-cultural matrix of our relationship to being in the world (Smith & Sparkes, 2008). Human reality is socially constructed, varied, and complex, and this is reflected by our stories (Smith & Sparkes, 2009). As such, narrative inquiry was the methodology used within this study.

Narratives generally contain “*point* and *characters* along with a *plot* connecting *events* that unfold *sequentially* over *time* and in *space* to provide an overarching *explanation* or *consequence*” (Smith & Sparkes, 2009). Neimeyer (2004) asserts that the narrative framework is a set of conceptual and practical tools with which to understand and nurture the life-enhancing process of posttraumatic growth. This is particularly true when considering the involvement of the physically active body in posttraumatic growth. “Narratives are bio-social in nature and involve telling a story to oneself and to others to give meaning to the ‘stuffness’ of life that includes bodily sensations and experiences as it is the body that carries the experiences that are the topic of the stories” (Sparkes & Smith, 2011).

Within this framework a subjective constructivist epistemology was adopted. This assumes that the research and participant are inseparable (Smith & Caddick, 2012); therefore, the

values and beliefs of the lead author who conducted the interviews and analyzed the data contribute to shaping the meaning found within the data. The lead author had personal experience using movement and self-compassion to facilitate her own posttraumatic growth. As a yoga instructor, she listened to students describe their accounts of similar growth. As a result, she put value on the role of the physically active body and self-compassion in contributing to the process of posttraumatic growth and believed that for some, it is a necessary precursor to being able to engage in talk therapy, or cognitive processing. She views the approach as a bottom up approach to healing versus the typical top down approach, and we acknowledge that these biases may be reflected within this study. In addition, prior to conducting this study, the lead researcher wrote an autoethnography on the personal interconnections for her among the active body, self-compassion, and posttraumatic growth. Engaging in such self-reflection on the topic of interest enhanced her ability to identify her relationship to her research participants' experiences. Ultimately, however, two researchers were involved in the analyses and interpretation of the data to help provide a balanced perspective.

### **Data Analyses**

The process of analysis conducted by the lead author involved identifying, describing, and interpreting the social structures, spaces, and processes that shape the meaning that individuals attach to their subjective experience (Patton, 2015). This included data immersion, identifying units of meaning, putting these units into larger themes, and continually going back and checking these themes (Creswell, 2007). As suggested by Patton (2015), both deductive and inductive analyses were used. The former determines the extent to which the data support existing ideas, while the latter generates new concepts. The co-author reviewed the themes,

subunits and supporting quotes and suggested revisions in a process of consensual agreement between the researchers that produced the final results.

Quality and credibility were addressed using the following criteria as cited in Smith and Caddick (2012). *Substantive contribution*: Richardson (as cited in Smith & Caddick) indicates that the researcher asks, does this piece contribute to our understanding of social life, while providing an embedded social scientific perspective? *Impact*: In addition, Richardson suggests that the researcher ask, does this research move me, inspire new questions? *Coherence*: Lieblich, Tuval-Mashich, and Zilber (as cited in Smith & Caddick) ask that the researcher provides numerous quotations, as well as suggestions of alternative explanations as to what the data may mean. *Transparency*: Tracy (as cited in Smith & Caddick) indicates that the research be scrutinized by another who will encourage reflection and exploration of the data.

## **Results**

Collectively, practitioners described the process of growing from hardship as a relationship between the physically active body and self-compassion. This journey was conceptualized as having both personal and environmental supports. Following is a description of the findings as expressed through the voices of the study participants.

### **Personal process: Invoking physical and attitudinal practices for healing**

The personal process for healing was based on clients invoking physical and attitudinal practices that allowed them to connect with, disrupt, and revise their dysfunctional patterns. The various levels of themes associated with this superordinate theme are depicted in Figure 3.1.

Figure 3.2: Personal process: Invoking physical and attitudinal practices for healing

Relationship to Dysfunctional Patterns

Connect to patterns	Disrupt patterns	Revise patterns
<ul style="list-style-type: none"> <li>• Body is a mirror to the interior world</li> <li>• Movement reveals one's inner world</li> <li>• Self-compassion supports connection with one's body</li> <li>• Self-compassion supports connection to one's pained self</li> </ul>	<ul style="list-style-type: none"> <li>• Movement supports shifting the inner world</li> <li>• Movement interrupts negative internal dialogue</li> <li>• Self-compassion interrupts negative internal dialogue</li> <li>• Self-compassion allows personal needs to be honored</li> </ul>	<ul style="list-style-type: none"> <li>• Movement is integral to transformation</li> <li>• Self-compassion is integral to transformation</li> <li>• Self-compassion facilitates movement during hardship</li> <li>• Movement nurtures self-compassion</li> </ul>

### Connecting to dysfunctional patterns

Practitioners first indicated that the body is a mirror to the interior world. As one practitioner expressed, “so much is formed from patterning...trauma...settles in the wholeness of the self: physical, emotional, spiritual, and intellectual. Each of these parts of the self takes a hit. Each part holds energy that creates a stuckness you may not feel, think, intuit, or be aware of.” As a result, trauma-related outcomes, including unconscious dysfunctional patterns, may be held within the body. To revise these patterns, an individual must first connect with these habits.

Participants voiced that movement is a medium individuals can utilize to connect to their inner world and unhelpful habits. They expressed that opportunities for healing and growth exist when a person is able to get in touch with their internal sensations through movement. Overall, practitioners shared the sense that “movement is the quickest, cleanest way to getting to the truth hidden in many of us.” They viewed physical activity as a way to “move stuck energy” and to work with the outcomes of trauma. The sense that “memory resides in the body and can be healed by going directly to the body” was shared by practitioners. Movement was seen as a way

to “access the body’s stories” and the “most honest response to what is happening inside a human being.” As one study participant described,

I had an experience of using movement- myself- that brought about a profound insight into an area of my psyche that was, at the time, unacknowledged and causing great disturbance in my life... I was struggling...I felt my mind was in a fog... I didn’t have a clear compass to navigate the difficult emotions and circumstance. At this teacher training we did an exercise...the facilitator instructed us to dance in a way that we thought was “ugly.” Upon following her instructions, the movement I performed moved something in me emotionally... I broke down in uncontrollable tears. For the first time I realized and acknowledged that a ‘dark’ part of my psyche believed that I was “dirty” ...It was as if I didn’t even know where that belief/thought had come from or where it had been buried. Low and behold, through movement- there it was and it was clear as day.

Practitioners also expressed that a client’s ability to invoke an attitude of self-compassion can facilitate their ability to connect to themselves during difficult times. As one practitioner expressed, it is important to “create deeper experiences from slower, embodied movement where there is time and space for mindfulness and compassion” towards self. The intention is to create an opportunity for a client to comfortably come into their body and to “speak about their body...so they can learn about themselves in non-judgmental space.” This process can be uneasy. Individuals who have experiences with trauma are often disconnected from their body and emotions. Self-compassion was identified as a helpful tool to handle the distress that may arise as clients connect to the memories of trauma and related dysfunctional patterns that are stored in their bodies.

In addition, self-compassion was viewed as a means to encourage “an open-minded relationship with one’s pain.” To nurture such a relationship, a study participant indicated that she delivered the following message to her clients: “We each hold dark places inside. Secrets we never speak and try to deny to ourselves. Characteristics that we think make us 'unlovable,' 'bad,' 'flawed,' 'shameful.’ Gently befriend your wounded self.” Echoing a similar idea, another study participant indicated that healing and growth “require we practice the Buddhist concept of

Maitri, translated as Unconditional Friendliness to Oneself.” According to practitioners, practicing self-compassion allows individuals to get in touch with, and embrace, their whole selves, including the unsavory and painful parts.

### **Disrupting dysfunctional patterns**

Once in touch with one’s dysfunctional patterns, the opportunity to disrupt these patterns exists. Practitioners described the importance of using awareness and meditative movement practices to facilitate this. Through such practices individuals can explore how to shift “patterns and mental constructs.” One practitioner described how she was able to “remove an emotional block, to see a psychological blind spot, and to recognize its fallacy” through her own yoga practice. Another said, “somatic re-patterning happens during lucid dreaming while the body is engaged in a shape or yoga posture.” Such intentional movement supports the shifting of an individual’s inner worlds towards a fuller way of being.

Practitioners also described movement as being a technique to disrupt “the internal dialogue of shame,” and “the un-helpful trains of thoughts” to foster more useful thoughts. It was identified that “some people are very attached to their story-mental processes. Sometimes flat out interrupting the negative monologue to bring them back to their physical sensations” can be useful. Loops of negative thought and shame were both identified as negative outcomes of trauma. Suggestions for interrupting these undesirable thoughts and emotions included bringing attention to the breath, feeling the feet, and suggesting a particular movement to focus the client’s attention.

Invoking an attitude of self-compassion in clients was viewed as an alternative and helpful way to “shift the internal dialogue of shame” and “replace it with a dialogue of self-love.” One practitioner indicated that her students reported learning about self-compassion

resulted in their recognizing how patterns of negative self-talk are quite pervasive, and consequentially resulted in a desire to shift them. She explained, “it is not until we sample self-compassion practices over time, that we begin to soften resistance to them [negative self-statements].” When we do, we have the opportunity to move towards creating a new paradigm for ourselves. As one practitioner described,

many of us also have been raised in environments where shame was used as motivation. Or we were abused or traumatized in ways that caused us to believe that we were not good enough. We looked outside ourselves for affirmations of our own worthiness... We came to believe that we were not good as we are, that we are flawed or damaged goods. By shifting the internal dialogue and discovering our own self-worth, by loving ourselves first, we shift our experience of being in the world.

Furthermore, practitioners agreed that self-compassion allows individuals to honor their personal needs. They shared the sense that “self-compassion-at its essence-is the offering to one's self that which is most deeply needed and therefore most nourishing on a moment-by-moment basis.” It is the “practice of being completely honest with oneself,” and the “intimate honoring of oneself in any given moment.” As one practitioner said, “when I have compassion for myself, I allow myself to be where I am, or feel what I feel.” Such attitudes and personal practices support the disruption of dysfunctional patterns by allowing individuals to notice and honor their needs instead of hiding or avoiding them.

### **Revising dysfunctional patterns**

All practitioners agreed that movement is a key component to healing from hardship. In general, study participants identified with the idea that “movement is a very helpful tool for supporting personal growth” and “on some level it is personal growth made real.” One practitioner shared that “time and time again I've seen clients respond to movement. Their breath softens and deepens; their bodies melt. Then ideas can take root” and transformation can occur. Another practitioner expressed,

we reach the limits of our rational thoughts and knowledge. Those can only take us so far. The body is wise and real. We separate body, mind, and spirit into separate boxes, trying to treat or heal one without the other...they are intertwined and all must be taken into account and involved in healing from hardship.

Practitioners generally shared the perspective that self-compassion is also an integral component of the healing process. Such an attitude was thought of as “a revolutionary act” that leads individuals “to greater life satisfaction, capacity for joy, and overall mental wellness.” It was seen as a lens that was “brighter, more encouraging” and that offered an opportunity for changed perspective and growth. One practitioner explained,

change never comes from plans based on feelings of shame...We tend to worry that if we are compassionate with ourselves we will be too soft and continue undesired behavior. My experience is the opposite. It wasn't until I really gave myself space and compassion that transformation occurred.

Similar to how connecting with the body during times of hardship can be challenging, so can being physically active. Uncomfortable and overwhelming sensations may arise.

Practitioners shared the sense that practicing self-compassion supports clients in feeling safe during these times. Self-compassion allows clients to listen to their bodies and to move their bodies however they need and want. It was seen as the “lubrication for movement to flow in the midst of hardship.” A practitioner shared the following words from one of her clients:

You invited me in, and you invited my body to come in too. To come in just as it was. Worthy to enter. To enter into the world of movement and being and stretching and awareness. To move into reality. My body had never felt so free and able to breathe and expand and reach out.

Practitioners agreed that physical experiences can be used to support the development of self-compassion. Some expressed that practicing self-compassion can be challenging and feel foreign for many clients and that “movement provides a way in through present moment, [via] non-judgmental sensory awareness.” It was felt that directing self-compassion towards movement and body sensations, could make invoking this attitude more accessible. The majority

of practitioners identified with the idea that “movement brings about physiological changes that can relax the body.” This, in turn, can make clients “more willing to consider/hold a self-compassionate perspective.” One practitioner took it a step further and described how through physical postures she mimicked the concept of self-compassion. To paraphrase, through specific posture sequencing she recreated the experience of slowing down, surrendering, having patience, and self-acceptance.” From this space individuals can take actions that lead to personal growth.

### **Environmental supports: Creating experiential opportunities to heal**

Practitioners in this study suggested that the personal process of invoking physical and attitudinal shifts for healing can be facilitated through environmental supports. They identified that nurturing relationships and promoting a safe space were keys to creating experiential opportunities to support client healing. Figure 2 provides an illustration of the various emergent ideas associated with this superordinate theme.

Figure 3.3: Environmental Support: Creating experiential opportunities for healing

<p>Nurturing relationships</p> <ul style="list-style-type: none"> <li>▪ Encourage connection to self: Embodiment</li> <li>▪ Encourage connection to others: Common humanity</li> <li>▪ Encourage connection to practitioner: Facilitate by doing</li> </ul>
<p>Promoting a safe space</p> <ul style="list-style-type: none"> <li>▪ Give permission to be</li> <li>▪ Tailor to clients’ needs</li> <li>▪ Invite exploration</li> </ul>

#### **Nurturing relationships**

Practitioners spoke of the importance of keeping clients connected to themselves in the present during a session. It was identified that individuals who have experiences with trauma often, and easily, disconnect from the present and try to escape uncomfortable sensations.

Practitioners indicated that connection and embodiment were cultivated through mediums such

as grounding meditations, teaching body-based awareness, as well as asking clients to keep their eyes open. Asking clients to make contact statements about tangible aspects of their experience, such as, “my feet are touching the floor,” was another suggested technique. As one practitioner shared regarding her personal experience with yoga, “I learned tools to stay present in my body during sensations, both pleasurable and painful. I no longer had to flee the intensity of my sensation.” It was deemed important to encourage clients to become embodied, to focus on how a pose or movement feels versus how it looks. Such experiences “emphasize the intelligence we have in how we are.”

In addition to supporting connection to the self in the present, practitioners identified that encouraging connection to the others was an important environmental support to healing. As one study participant expressed, the “nature of my work is helping people turn inward as embodied individuals who are connected to, and supported by community—so we know how to be with self and to be with others...we know how to reach out for support and how to reach in.” Another shared, “connecting to the movement of the group...brings us into a place of universal energy, the common heart-beat.” Practitioners desired to encourage a sense of wholeness in their clients, for clients to feel a part of all that is, to realize that they are not alone. Experiences of connection can be encouraged via themes introduced during a movement session and the following is an example provided by a participant:

The breath as connection to all that is, feeling breath moving within you, considering how breath connects each person in the room, how breath (air) flows from ocean to us, from us to plants, to the deserts in the east, and beyond, weaving us all together.

It was further recommended that practitioners have personal experience using movement to support their own growth and to integrate this experiential knowledge into their teaching. One practitioner wrote, facilitators need “to have the experience themselves to know how to translate it to their students. They need to have practice listening to their bodies,

connecting...identifying their body story.” Practitioners agreed it was important to spend time in such self-study and reflection regarding their own experiences and body. One wrote, “seek your own truth so you can support others to find theirs.” Some practitioners felt it useful to take this a step further and actually share elements of their personal experience, even if non-specific, to encourage a sense of shared experience between themselves and their clients.

Moreover, practitioners shared the sense that modeling self-compassion was a useful technique, where “we teach it by being it.” As one study participant expressed, it is critical to “know yourself, have self-compassion for yourself [and to] translate this knowledge into teaching.” This not only provides a living example to the students to model themselves after, it is also an attitude that supports effective teaching. One practitioner shared, “if I think I am not good enough, I start thinking about myself and lose my connection with my students.” Some practitioners indicated that to maintain compassion for themselves during a session, they internally ask themselves the same questions that they encourage in their clients. Practitioners felt teaching by example was infinitely more powerful than lecturing about a concept and that offering compassion to oneself and others during the process was always of use. One practitioner recommended, “whenever possible, consider all that you do not know about this person and give them the benefit of the doubt. Hold curiosity and compassion for these unknowns, and also be kind to yourself.”

### **Promoting a safe space**

Practitioners identified that it was important to “create an environment of support and permission to be oneself – a container of holding.” Giving individuals permission to be where they are, allows them to relax, to connect with themselves. It was felt that this contributed to preserving personal space in a safe and conducive way. The usefulness of such an experience is

demonstrated in the following testimonial from a client's student: "Your open heart and unified spirit in the studio created, made a safe place for my body to come out of hiding and reach for what it desired."

Practitioners identified that meeting the clients where they are is a critical component to promoting growth. They felt it was useful to have an awareness of who the clients are and where they have been, and to subsequently offer instruction and support that is appropriate. It was suggested to offer techniques "specific to an individual's presentation, practice with them, and have them report back changes they see." The relationship between the client and practitioner was conceptualized as an interaction intended to create a space for new possibility or awareness to arise while respecting where individuals were in their unique processes of growth. The majority of practitioners agreed that they provided some structure to a movement session while offering space for the client or group needs to guide the work. The process was described as a "dynamic inquiry," where in time, the unique background of each client comes forward as individuals discover their own solutions. Furthermore, some practitioners cautioned that, "students, who are not yet ready, or not open-minded toward this type of work, are a challenge" and that space needs to be created for them. One practitioner expressed,

I don't consider that it is my role to force people to do personal work that they are not ready to do. I try to help them feel heard... I don't push. I try to keep the interactions kind, receptive, open-minded and imbued with a sense of lightness, curiosity, and exploration.

Study participants indicated that inviting clients to explore their own limits and possibilities was seen as foundational to creating a safe space to heal. Practitioners described their teachings as soft and as invitations inward. One practitioner expressed that her intention was to "gently invite or open the door to 'trying'." To paraphrase, she indicated that even if a client turns down the movement it does not mean it was a bad idea because perhaps a seed was

planted. Practitioners agreed that using a language of invitation and exploration created opportunities and choice. It was a way to encourage individuals to sense and trust their own feelings and to be in charge of their own experience. Valuing and trusting one's own perceptions and experiences “cultivates a strong sense of self, inner direction” and supports individuals to “assume responsibility for their own growth and progress.” This addresses the fact that a central part of trauma is commonly based on the fact that a person's choice and need for safety has been taken away.

### **Discussion**

This study highlights the unique perceived association of the physically active body and self-compassion with the process of posttraumatic growth, as well as eliciting practitioners’ practical suggestions to support such a process. Similar to the model of posttraumatic growth (Calhoun, Cann, & Tedeschi, 2010), current study participants conceptualized this as a personal process influenced by environmental supports. A difference found in this study was that practitioners saw the cognitive-emotional processing required of posttraumatic growth as both happening through, and supported by, the physically active body and in relation to one’s ability to practice self-compassion. In light of results from the current study, it is recommended that the model of posttraumatic growth be revised to specifically include the role of the physically active body and self-compassion.

Similar to the shattering and revision of one’s personal schema found in the model of posttraumatic growth, practitioners conceptualized the process of growth as requiring clients to connect to, disrupt, and revise dysfunctional patterns. This is in line with current thinking in neuroscience. As van der Kolk (2014) explains, trauma gets embedded in our brain circuitry and forms the templates in how we think of ourselves and the world. Though these inner maps are

remarkably stable, the possibility to reconstruct them exists. Doing so, however, requires that we know ourselves, and self-awareness requires that we are able to feel and interpret our physical sensations and internal world (van der kolk, 2014). As this study demonstrates, movement can be a therapeutic medium that supports individuals getting in touch with their internal world and offers the possibility to shift established patterns with the development of greater self-awareness.

These findings are in line with previous research that suggests movement encourages reconnection to one's body (Mills & Daniluk, 2002), greater body attunement (Emmerson, Sharma, Chaudhry, & Turner, 2009), and increased self-awareness (Emerson & Hopper, 2011). Furthermore, self-awareness contributes to increased self-regulation (van der Kolk, 2014), and the ability to self-regulate supports one in being better able to manage triggers that can result in trauma responses. With this, individuals will be less likely to demonstrate out of context behavior as they face their internal and external worlds. Knowing ourselves allows us to identify what is going on, what we need, and how to meet these needs. Moreover, self-awareness contributes to self-care. The physically active body thus plays a role in supporting increased self-care and regulation.

When it comes to encouraging posttraumatic growth, not all movement is of equal value. The activity's effect on the autonomic nervous system is of importance. The autonomic nervous system is composed of the parasympathetic and sympathetic nervous system. The parasympathetic nervous system is responsible for regulating the body's basic function and is activated with each exhale. The sympathetic nervous system is responsible for taking action in the body and brain and is stimulated by each inhale. One measure of the nervous system's well-being is Heart Rate Variability (HRV). HRV reflects the balance of the parasympathetic and sympathetic nervous systems, with greater fluctuations being associated with one's ability to stay calm,

making an individual less vulnerable to having trauma responses (van der Kolk, 2014). Physical activities that focus on breath and relaxation have been shown to cause a shift in the autonomic nervous system balance towards parasympathetic dominance, reflecting a more relaxed state (Patil, Mullur, Khodnapur, Dhanakshirur, Aithala, 2013). Such alterations reflect a change in HRV. Physical activities that encourage shifts towards greater HRV and a relaxed state of being could logically be associated with an increased potential to support growth. For this study, all participants were involved in somatically-oriented movement, such as yoga.

Unique to this study was the practitioners' view that self-compassion was integral to the process of healing through the physically active body. This makes sense in light of neurological research, which suggests that self-compassion is associated with positive physiological responses such as triggering the oxytocin-opiate system (Gilbert & Proctor, 2006), lowering levels of stress hormones (Rockcliff, Gilbert, McEwan, Lightman, & Glover, 2008), and increased positive emotions through the stimulation of pathways within the left prefrontal cortex (Lutz et al., 2004). The prefrontal cortex is a rational part of the brain that can be compromised in trauma, resulting in trauma responses (van der Kolk, 2014). It is feasible that over time practicing self-compassion can help balance the brain, which may result in decreased negative rumination.

Negative rumination is associated with shame and results in unhealthy perspectives (Reid, Temko, Moghaddam, & Fong, 2014) that are maintained through repetitive patterns of passively focusing on feelings of psychological distress (Nolen-Hoeksema, Wisco, Lyubomirsky 2008). For posttraumatic growth to occur, these dysfunctional patterns must be disrupted. Practitioners in this study believed that self-compassion facilitates shifting negative rumination towards something more positive. Such thinking is supported by recent research that indicates self-compassion partially mediates the relationship between shame and rumination (Reid et al.

2014). It may be that the positive physiological and psychological changes associated with self-compassion support soothing of the body. The authors are not aware of any research linking self-compassion and Heart Rate Variability, yet it is possible that a relationship exists and that this may also influence how an individual responds to negative feelings and thoughts.

It is worthwhile considering the fact that self-compassion is associated with psychological resilience (Neff & McGehee, 2010). When confronted with difficult circumstances, individuals with higher levels of self-compassion demonstrate less negative emotions, more accepting thoughts, and a greater tendency to put their problems into perspective (Leary, Tate, Adams, Allen, & Hancock, 2007). This suggests that self-compassion assists in managing distress and, therefore, would be associated with decreased experiences of trauma and increased opportunities for posttraumatic growth. It is possible that individuals who experience posttraumatic growth may have initially low levels of self-compassion and it is only after a trigger where individuals realize their lives have worth that these individuals shift towards a more compassionate attitude towards the self (Reyes, 2012) that supports their growth. The potentially parallel development of self-compassion in relation to posttraumatic growth should be explored further, as should the contribution of movement to this process.

Literature on the experience of posttraumatic growth does not indicate if this process is continuous or discrete. Though this study did not directly ask participants about this, responses suggest that posttraumatic growth could be viewed as a continual process. One practitioner shared:

Every year as the "anniversary" of my trauma rolls around something happens in my body. I basically begin to feel anxious. My heart races, I feel light headed, it is hard to ground, I feel rather teary. The first year I expected it. The second year I wasn't and as the date got closer I was getting more anxious. I was really frustrated. In spite of everything I had done to heal why was I still feeling this way? "Get over it!" But then my spiritual director reminded me: Your body remembers. Self-compassion came

flooding in. Of course! My body remembers. Self-compassion allowed me to honor my body and what it needed and wanted as the day approached. Each year it has gotten to be less and less.

Such accounts suggest that growth may not have a distinctive end point and be a sort of cycling back to connect, disrupt, and revise one's patterns of being. As van der Kolk writes, "Trauma is not stored as a narrative with an orderly beginning, middle, and end" (p 135, 2014). Likewise, the undoing of trauma is unlikely to be as orderly as the cognitive-emotional model of posttraumatic growth, or this study's findings, suggest. It may be more of a spiral process that could be visualized similar Creswell's (2007) conceptualization of qualitative understanding involving a continual process of immersion, identification, integration, and revising.

Practitioners identified that environmental supports can help bolster the personal process of healing by nurturing relationships and prompting a safe space. These results are in line with the cognitive-emotional model of posttraumatic growth that indicates healing must be nurtured within a supportive environment (Calhoun, Tedeschi, & Cahn, 2010). In the absence of a supportive environment, the cognitive process of posttraumatic growth may be a factor related to increased distress (Hobfoll et al, 2007). Traumatized humans recover in the context of relationships that provide physical and emotional safety (van der kolk, 2014) and self-enhancement. The importance of creating a shared lived experience by engaging in physical activity with similar others has been previously documented (Burke & Sabiston, 2012; McDonough et al., 2011; Sabiston et al., 2007). Individuals need to feel connected to others during times of hardship and realize that they are not alone, which reflects the aspect of common humanity found in self-compassion (Neff, 2003). Attunement and re-connecting to others supports recovery from trauma, yet can also be a challenge to individuals who have experienced trauma (van der Kolk, 2014).

Prompting a safe space can help address this challenge. Previous studies have documented the importance of promoting a safe space and what this constitutes. These studies support the current findings. Meeting the client's' needs, inviting exploration (Spinazzola, Rhodes, Emerson, Earle, & Monroe, 2011), and offering a tone of permission (Mill & Danulik, 2002) are elements conducive to a healing class climate. The fact that creating a sense of safety is a reoccurring theme when dealing with individuals that have experienced trauma is not surprising. Circumstances of trauma are often associated with individuals feeling unsafe and having had a lack of autonomy in threatening situations. People must feel secure in their environment to be able to relax and be present enough to engage in the difficult steps that healing requires. What the present investigation emphasizes is that the physical domain can provide a setting that is perceived as safe for healing.

Unique to this study was the importance placed on modeling self-compassion within a session to prompt a safe environment. Practitioners indicated their having a personal practice with self-compassion was the best way to encourage their clients to adopt similar attitudes. Such experiences of attunement are supported by mirror neurons. As described by Swartz (2011), mirror neurons help us echo each other. This is the basis of our learning by observing, to connect what we see with what we feel through touch. This also facilitates our ability to empathize (van der Kolk, 2014) and feel connected. Previous research has related mirror neurons to the development of wisdom through this process (Meeks & Jeste, 2009), where it is possible that something similar may occur with self-compassion given several aspects of wisdom have been attributed to self-compassion (Reyes, 2012).

Implications of this study call for ongoing research regarding the role of self-compassion and the physical active body in healing, both in combination and independent of each other.

Arguably this suggestion is biased given current study participants were practitioners who self-identified as facilitating the process of growth from hardship with movement, suggesting inherent support of this concept. Though this is true, such attitudes are in line with somatic therapists who believe trauma is held in the body and needs to be addressed through the body (Levine, 2011; Ogden, 2006). Hefferon, Greal, and Mutrie, (2010) suggest that considering the body in posttraumatic growth is especially important when the trauma is directly related to the body, as with cancer or illness. Others assert that the type of trauma is irrelevant and it is how the trauma affects an individual's body that matters (van der kolk, 2014). Regardless, the body is seen as an important element to healing and this can logically extend to the physically active body as demonstrated in the advocacy of the practitioners in this study who recounted the healing through movement they had both personally experienced and professionally witnessed with their clients.

Given the prevalence of trauma exposure and the potential that individuals may not be aware of the impact of trauma on their bodies, it is important for movement practitioners who may not be directly seeking to support growth from hardship, to still hold an awareness of such possibilities when working with clients. With this, as one study participant reminded us, "people can reinforce maladaptive mental/emotional behaviors through movement," where clients may interpret verbal cues in such a way that aligns with maladaptive behaviors and sets of beliefs. Such reminders speak to the importance of incorporating components of self-compassion into any movement sessions as a means to support self-care, regardless if an individual has been exposed to trauma.

Though the use of online interviews offered benefits, it also had its limitations. Individuals who originally indicated an interest in participating opted not to after they saw the

interview guide, feeling that the time commitment was too great. Of those who did participate, just over half of them continued to engage in dialogue around the subject beyond their initial response. For researchers interested in using a similar procedure in the future, it is suggested that the email exchange start with a few general questions that set a personal stage to work from versus sending the entire interview guide at once. Other limitations of this study include the inability to determine the independent effects of self-compassion and the physically active body on posttraumatic growth, the use of retrospective narrative interviews, and a lack of triangulation across multiple data sources.

In conclusion, practitioners indicated that the physically active body and self-compassion were integral to the process of healing and were seen as having a reciprocal relationship. Intentional movement can encourage embodiment (Emerson & Hopper, 2011; Emmerson, Sharma, Chaudhry, & Turner, 2009) that can support self-awareness and self-regulation (van der kolk, 2014) and is also linked to feelings of being safe, as well as experiences of self-compassion (Falconer et al., 2014). In turn, self-compassion supports clients being physically active and disrupting negative patterns. This supportive relationship may relate to the calming effects self-compassion and movement offer the nervous system. Relaxing the nervous system and mind is related to one's ability to get in touch with the residue of trauma held within one's body and recover. (van der Kolk, 2014). As interoception increases, it is possible that the system relaxes individuals so they are better able to link words with their experiences, enabling them to engage in the self-analysis and self-disclosure required of transformation (Tedesechi & Calhoun, 2004). The findings from the current investigation suggest that integrating physical activity and contemplative experiences of self-compassion can facilitate the process of posttraumatic growth for clients.

## References

- Ayling, R. & Mewse, A., J. (2009). Evaluating internet interview with gay men. *Qualitative Health Research, 19* (4). 566-576. doi: 10.1177/1049732309332121.
- Barnard, L. K. & Curry, J., F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. *Review of General Psychology, 15*(4), 289–303.
- Barry, Rebecca. (2015). *Recipes for a beautiful life*. New York, NY; Simon & Schuster.
- Bonanno, G. A. (2005). Resilience in the face of potential trauma. *Current Directions In Psychological Science, 14*(3), 135-138. doi:10.1111/j.0963-7214.2005.00347
- Breines, J. G. & Chen., S. (2012). Self-compassion increases self-improvement motivation. *Personality and Social Psychology Bulletin*. doi: 10.1177/0146167212445599
- Burke, S. & Sabiston., C. (2012). Fostering growth in survivorship experiences: investigating breast cancer survivors' lived experience climbing Mt. Kilimanjaro from a posttraumatic growth perspective. *The Qualitative Report*. Academic one file. Web. 8. Mar.2014
- Calhoun, L. G., Cann, A., & Tedeschi, R.G. (2010). The posttraumatic growth model: Sociocultural considerations. In T. Weiss & R. Berger (Eds), *Posttraumatic growth and culturally competent practice: Lessons learned from around the globe* (pp 1-14). Hoboken, NJ: Wiley.
- Cordova, M. (2008). Facilitating posttraumatic growth following cancer. In S. Joseph & A. Linley (Eds.), *Trauma, recovery and growth*. NJ: John Wiley & Sons.
- Courtois, C.A. (2008). Complex trauma, complex reactions: Assessment and treatment. *Psychotherapy: Theory, Research, Practice, Training, 41*(4), 412–425. doi:10.1037/1942-9681.s.1.86
- Creswell, J. (2007) *Qualitative inquiry & research design: choosing among five approaches*. Thousand Oaks, CA: Sage Publications.
- Dunn, J., Campbell, M., Penn, D., Dwyer, M., & Chambers, S. K. (2009). Amazon heart: An exploration of the role of challenge events in personal growth after breast cancer. *Journal of Psychosocial Oncology, 27*, 119-135.
- Emmerson, D., & Hopper, E. (2011). *Overcoming trauma: Reclaiming your body*. Berkely, CA: North Atlantic Books.
- Emerson, D., Sharma, R., Chaudhry, S., & Turner, J. (2009). Trauma-sensitive yoga: Principles, practice, and research. *International Journal of Yoga Therapy, 19*(1), 123-128

- Falconer CJ, Slater M, Rovira A, King JA, Gilbert P, et al. (2014) Embodying Compassion: A Virtual Reality Paradigm for Overcoming Excessive Self-Criticism. PLoS ONE 9(11): e111933. doi:10.1371/journal.pone.0111933
- Frank, A. (1995). *The wounded storyteller*. Chicago, IL: The University of Chicago Press.
- Germer, C. K., & Neff, K. D. (2013). Self-compassion in clinical practice. *Journal of Clinical Psychology, 69*(8), 856-867. doi:10.1002/jclp.22021
- Gilbert, P. & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy, 13*, 353-379.
- Hefferon, K., Grealy, M., & Mutrie, N. (2008). The perceived influence of an exercise class intervention on the process and outcomes of posttraumatic growth. *Journal of Mental Health and Physical Activity, 1*, 47-88.
- Hefferon, K., Grealy, M., Mutrie, N. (2010). Transforming from cocoon to butterfly: The potential role of the body in the process of posttraumatic growth. *Journal of Humanistic Psychology, 50*(2), 224-247.
- His Holiness The Dalai Lama, *The Little Book of Buddhism*, 14<sup>th</sup> Retrieved From <http://www.timmissartok.com/bushpilotlinks/MahayanaBuddhism.html>
- Hobfoll, S.E., Hall, B.J., Canetti-Nisim, D., Galea, S. Johnson, R.J., & Palmieri, P.A. (2007). Refining our understanding of traumatic growth in the face of terrorism: Moving from meaning cognitions to doing what is meaningful. *Applied Psychology: An International Review, 56*(3), 345–366. doi: 10.1111/j.1464-0597.2007.00292
- Janoff-Bulman, R. (1992). *Shattered assumptions*. New York: Free Press.
- Karem, E. (2014). Cumulative trauma risk thresholds: 12 Month ptsd in world mental health surveys. *Depression & Anxiety, 31*, 130-142.
- Lal, S., Suto, M., Ungar, M. (2012). Examining the potential of combining the methods of grounded theory and narrative inquiry: A comparative analysis. *The Qualitative Report, 17*(4), 1-22.
- Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology, 92*, 887-904.
- Levine, P. (2010). *An unspoken voice: How the body releases trauma and restores goodness*. North Atlantic Books. Berkeley, CA.

- Lutz, A., Greischar, L. L., Rawlings, N. B., & Davidson, R. J. (2004). Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. *Proceedings of the National Academy of Sciences*, 101, 16369–16373.
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research?: A review of qualitative interview in IS research. *Journal of Computer Information Systems*, 54(1), 11-22.
- Mate, G. (2010). Forward. In Peter Levine's. *An unspoken voice: How the body releases trauma and restores goodness* (p xii). North Atlantic Books.
- Mate, G. (2010a). *In the realm of hungry ghosts: Close Encounters with addiction*. (p 40, 234, 54) Berkeley, CA: North Atlantic Books.
- McDonough, M., Sabiston, C. M., Ullrich-French, S. (2011). The development of social relationship, social support and posttraumatic growth in a dragon boating team for breast cancer survivors. *Journal of Sport & Exercise Psychology*, (33), 627-648.
- McLaughlin, (2013). Trauma exposure and posttraumatic stress disorder in a national sample of adolescents. *Journal of the American Academy of Child and Adult Psychiatry*, 52(8), 815-830.
- Meeks, T. W., & Jeste, D. V. (2009). Neurobiology of wisdom: A literature overview. *Archives of General Psychiatry*, 66(4), 355–365.
- Mills, L. J., & Daniluk, J. C. (2002). Her body speaks: The experience of dance therapy for women survivors of child sexual abuse. *Journal of Counseling & Development*, 80(1), 77-85.
- Najavits, L. (2013). Helping vulnerable populations: A comprehensive review of the treatment outcome literature on substance use disorder and PTSD. *Journal of Clinical Psychology*, 69(5), 433-479.
- Neff, K. D. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2, 85-102.
- Neff, K. D., Kirkpatrick, K. & Rude, S. S. (2007). Self-compassion and its link to adaptive psychological functioning. *Journal of Research in Personality*, 41, 139-154.
- Neff, K. D. & McGeehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity*, 9, 225-240.
- Neimeyer, R. (2004). Fostering posttraumatic growth: A narrative elaboration. 53-59. *Psychological Inquiry*. 15(1), 53-59.
- Nolen-Hoeksema S, Wisco BE, Lyubomirsky S. (2008). Rethinking rumination. *Psychological*

*Science*, 3, 400–24

- Ogden, Pat. (2006) *Trauma and the Body: A Sensorimotor Approach to Psychotherapy*. Norton & Company Inc. New York, NY.
- Patil, S.G., Mullur, L.M, Khodnapur, J.P., Dhanakshirur , G.B. Aithala, M.R. (2013). Effect of yoga on short-term heart rate variability measure as a stress index in subjunior cyclists: a pilot study. *Indian Journal of Physiology And Pharmacology*. 57 (2), 153-8.
- Patton, M., Q.( 2015). *Qualitative Research & Evaluation Methods* (4<sup>th</sup> ed.). SAGE Publications. Thousand Oaks, CA.
- Reid, R. C., Temko, J., Moghaddam, J. F., & Fong, T. W. (2014). Shame, rumination, and self-compassion in men assessed for hypersexual disorder. *Journal Of Psychiatric Practice*, 20(4), 260-268. doi:10.1097/01.pra.0000452562.98286.c5
- Reyes, M. D. (2012). Self-compassion: A concept analysis. *Journal of Holistic Nursing*, 30(2), 1-10.
- Rockliff, H., Karl, A., McEwan, K., Gilbert, J., Matos, M., Gilbert, P. (2011). Effects of intranasal oxytocin on compassion focused imagery. *Emotion*, 11, 1388-1396.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology. *American Psychologist*, 55, 5-14.
- Smith, B., Sparkes, A. (2008). Narrative inquiry in psychology: Exploring the tensions within. *Qualitative Research in Psychology*, 3(3), 169-192.
- Smith, B., & Sparkes, A. C. (2009). Narrative inquiry in sport and exercise psychology: What can it mean, and why might we do it? *Psychology of Sport & Exercise*, 10(1), 1-11.
- Smith, B., Caddick, N. (2012). Qualitative methods in sport: a concise overview for guiding social scientific sport research. *Asia Pacific Journal of Sport and Social Science* 1(1), 60-73, doi: 10.1080/21640599.2012.701373
- Sparkes, A., Smith, B. (2011) Inhabiting different bodies over time: Narrative and pedagogical challenges. *Sport, Education, and Society*, 16(3), 357-370.
- Spinazzola, J., Rhodes, A. M., Emerson, D., Earle, E., & Monroe, K. (2011). Application of yoga in residential treatment of traumatized youth. *Journal of the American Psychiatric Nurses Association*, 1078390311418359
- Swartz, A.L (2011). Wisdom, the body, and adult learning: Insights from neuroscience. *New Directions for Adult & Continuing Education*, 131, 1-24. doi: 10.1002/ac.417
- Tedeschi, R.G., & Calhoun, L.G. (2004). The foundations of posttraumatic growth:

- New considerations. *Psychological Inquiry*, 15, 1-18.
- Terry, M. L. & Leary, M. R. (2011). Self-compassion, self-regulation, and health. *Self and Identity*, 10, 352-362.
- Weiss, T., & Berger, R. (Eds.). (2010). *Posttraumatic growth and culturally competent practice: Lessons learned from around the globe*. Hoboken, NJ: John Wiley.
- van der Kolk, B.A. (2006). Clinical implications of neuroscience research in PTSD. *Annals New York Academy of Sciences*, 1(2), 1-17.
- van der Kolk, B.A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York, NY: Viking.
- Yorke, J., Adams, C., & Coady, N. (2008). Therapeutic value of equine–human bonding in recovery from trauma. *Anthrozoos: A Multidisciplinary Journal of the Interactions of People & Animals*, 21(1), 17-30.

## Chapter 4: General Conclusion

Understanding what facilitates posttraumatic growth is of interest given the prevalence of trauma and the host of negative outcomes associated with trauma. Using qualitative methods, the role of the physically active body and self-compassion in nurturing posttraumatic growth were examined. Both were found to contribute to growth, independently and in combination with each other. This reflects the author's personal experience in the autoethnography where the physically active body and self-compassion supported her own growth. It also reflects the view of practitioners who facilitate movement sessions aimed at nurturing healing in their clients. Findings suggest that the current perspective on posttraumatic growth in the literature could be broadened to specifically encompass the physically active body and self-compassion.

This study provides a unique perspective for the field of kinesiology to approach movement. It shifts our focus away from the traditional associations of physical activity and fitness towards a more holistic view of the role the physically active body could play in the lives of individuals. In addition, it draws attention to the beneficial aspects of integrating attitudes of self-compassion into the physical domain. Lastly, it offers specific strategies for practitioners to support the process of healing in their clients. Strategies include nurturing relationships within a class and promoting a safe space in a session. By examining new ways to facilitate growth from hardship, we can continue to support individuals who are suffering from the impact of trauma.

## Bibliography

- Ayling, R. & Mewse, A., J. (2009). Evaluating internet interview with gay men. *Qualitative Health Research*, 19 (4). 566-576. doi: 10.1177/1049732309332121.
- Barnard, L. K. & Curry, J., F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. *Review of General Psychology*, 15(4), 289–303.
- Bonanno, G. A. (2005). Resilience in the face of potential trauma. *Current Directions in Psychological Science* 14(3), 135-138. doi:10.1111/j.0963-7214.2005.00347
- Breines, J. G. & Chen., S. (2012). Self-compassion increases self-improvement motivation. *Personality and Social Psychology Bulletin*. doi: 10.1177/0146167212445599
- Burke, S. & Sabastian, C. (2012). Fostering growth in survivorship experiences: investigating breast cancer survivors' lived experience scaling Mt. Kilimanjaro from a posttraumatic growth perspective. *The Qualitative Report*, 17(32), 1-19. Retrieved from <http://www.nova.edu/ssss/QR/QR17/burke.pdf>
- Cardinal, B. (2014). Physical activity psychology research: Where have we been? Where are we going?. *Kinesiology Review*, 3, 44-52.
- Calhoun, L. G., Cann, A., & Tedeschi, R.,G. (2010). The posttraumatic growth model: Sociocultural considerations. In T. Weiss & R. Berger (Eds), *Posttraumatic growth and culturally competent practice: Lessons learned from around the globe* (pp 1-14). Hoboken, NJ: Wiley
- Chen, L. (2011). A qualitative inquiry of wisdom development: Educators' perspectives. *The International journal of aging and human development*, 72(3), 171-187.
- Cordova, M. (2008). Facilitating posttraumatic growth following cancer. In S. Joseph & A. Linley (Eds.), *Trauma, recovery and growth*. NJ: John Wiley & Sons.
- Corbin, C. B. (2012). C. H. McCloy Lecture: Fifty years of advancements in fitness and activity research. *Research Quarterly for Exercise & Sport*, 83(1), 1-11.
- Courtois, C.A. (2008). Complex trauma, complex reactions: Assessment and treatment. *Psychotherapy: Theory, Research, Practice, Training*, 41(4), 412–425. doi:10.1037/1942-9681.s.1.86
- Cummings, J. N., & Kiesler, S. (2005). Collaborative research across disciplinary and organizational boundaries. *Social Studies Of Science (Sage Publications, Ltd.)*, 35(5), 703-722. doi:10.1177/0306312705055535
- Creswell, J. (2007) *Qualitative inquiry & research design: choosing among five approaches*. Thousand Oaks, CA: Sage Publications.

- Dunn, J., Campbell, M., Penn, D., Dwyer, M., & Chambers, S. K. (2009). Amazon heart: An exploration of the role of challenge events in personal growth after breast cancer. *Journal of Psychosocial Oncology*, 27, 119-135.
- Emmerson, D., & Hopper, E. (2011). *Overcoming trauma: Reclaiming your body*. Berkely, CA: North Atlantic Books.
- Emerson, D., Sharma, R., Chaudhry, S., & Turner, J. (2009). Trauma-sensitive yoga: Principles, practice, and research. *International Journal of Yoga Therapy*, 19(1), 123-128
- Falconer CJ, Slater M, Rovira A, King JA, Gilbert P, et al. (2014) Embodying Compassion: A Virtual Reality Paradigm for Overcoming Excessive Self-Criticism. *PLoS ONE* 9(11): e111933. doi:10.1371/journal.pone.0111933
- Frank, A. (1991). For a sociology of the body: An analytical review. In M. Featherstone, M. Hepworth, & B. Turner (Eds.), *Theory, Cultural & Society: The body: social process and cultural theory*, (p 36-103). London: Sage.
- Frank, A. (1995). *The wounded storyteller*. Chicago, IL: The University of Chicago Press.
- Let's Move. Get Active: Physical Activity. Retrieved April 3<sup>rd</sup>, 2015 From <http://www.letsmove.gov/get-active>
- Germer, C. K., & Neff, K. D. (2013). Self-compassion in clinical practice. *Journal of Clinical Psychology*, 69(8), 856-867. doi:10.1002/jclp.22021
- Green, D., Lattimore, R. (Eds.). (406 BC/1954). *Sophocles, Oedipus at Colonus*, in *Complete Greek Tragedies* (Vol. 1, p. 105). (D.Green, Trans.). Chicago: University of Chicago Press.
- Gilbert, P. & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy*, 13, 353-379.
- Gunstad, J., Paul, R.H., Spitznagel, M.B., Cohen, R.A., Williams, L. M., Kohn, M., & Gordon E. (2006). Exposure to early life trauma is associated with adult obesity. *Psychiatry Research*, 142(1), 31-37.
- Hefferon, K., Greal, M., & Mutrie, N. (2008). The perceived influence of an exercise class intervention on the process and outcomes of posttraumatic growth. *Journal of Mental Health and Physical Activity*, 1, 47-88.
- Hefferon, K., Greal, M., Mutrie, N. (2010). Transforming from cocoon to butterfly: The potential role of the body in the process of posttraumatic growth. *Journal of Humanistic Psychology*, 50(2), 224-247.

His Holiness The Dalai Lama 14<sup>th</sup> Retrieved May 14<sup>th</sup> From

<http://www.timmissartok.com/bushpilotlinks/MahayanaBuddhism.html>

- Hobfoll, S.E., Hall, B.J., Canetti-Nisim, D., Galea, S. Johnson, R.J., & Palmieri, P.A. (2007). Refining our understanding of traumatic growth in the face of terrorism: Moving from meaning cognitions to doing what is meaningful. *Applied Psychology: An International Review*, 56(3), 345–366. doi: 10.1111/j.1464-0597.2007.00292
- Janoff-Bulman, R. (1992). *Shattered assumptions*. New York: Free Press.
- Karem, E. (2014). Cumulative trauma risk thresholds: 12 Month ptsd in world mental health surveys. *Depression & Anxiety*, 31, 130-142.
- Kripalu Yoga Fellowship. (2004). *Kripalu yoga teacher development manual*. (p. 2.11). Lenox, MA: Kripalu Center.
- Lal, S., Suto, M., Ungar, M. (2012). Examining the potential of combining the methods of grounded theory and narrative inquiry: A comparative analysis. *The Qualitative Report*. 17(4), 1-22.
- Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology*, 92, 887-904.
- Levine, P. (2010). *An unspoken voice: How the body releases trauma and restores goodness*. North Atlantic Books. Berkeley, CA.
- Linely, P.A. (2003). Positive adaptation to trauma: Wisdom as both process and outcome. *Journal of Traumatic Stress*, 16(6), 601-610.
- Luepnitz, Deborah Anna (2002). *Schopenhauer's porcupines: Intimacy and its dilemmas*. (p 94, 232). New York, NY: Basic Books.
- Lutz, A., Greischar, L. L., Rawlings, N. B., & Davidson, R. J. (2004). Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. *Proceedings of the National Academy of Sciences*, 101, 16369–16373.
- Luxenberg, T., Spinazzola, J., & van der Kolk, B.A. (2001) Complex trauma and disorders of extreme stress (DESNOS) diagnosis, Part One: Assessment. *Directions in Psychiatry*, 21(25), 373-392.
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research?: A review of qualitative interview in IS research. *Journal of Computer Information Systems*, 54(1), 11-22.

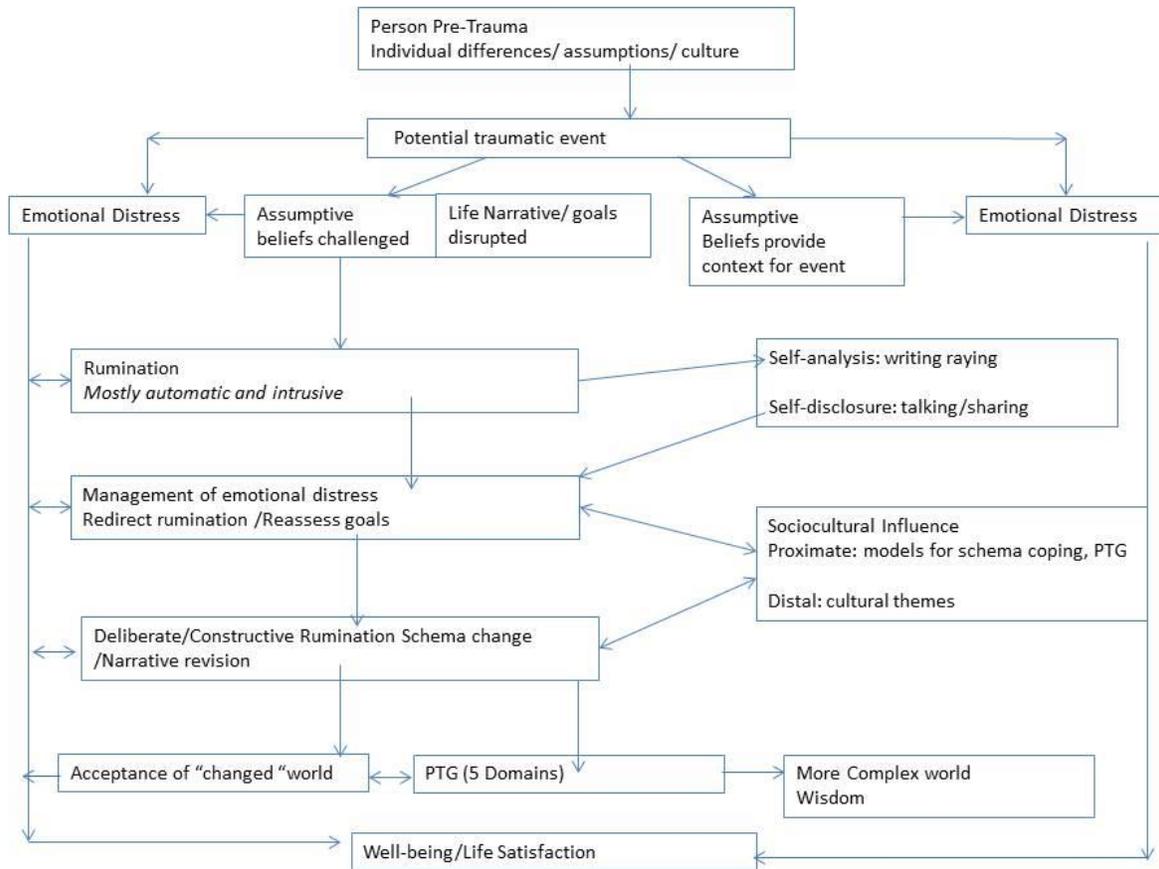
- Mate, G. (2010). Forward. In Peter Levine's. *An unspoken voice: How the body releases trauma and restores goodness* (p xii). Berkeley, CA: North Atlantic Books.
- Mate, G. (2010a). *In the realm of hungry ghosts: Close encounters with addiction.* (p 40, 234, 54) Berkeley, CA: North Atlantic Books.
- McDonough, M., Sabastian, C. M., & Ullrich-French, S. (2011). The development of social relationship, social support and posttraumatic growth in a dragon boating team for breast cancer survivors. *Journal of Sport & Exercise Psychology*, *33*, 627-648.
- McLaughlin, (2013). Trauma exposure and posttraumatic stress disorder in a national sample of adolescents. *Journal of the American Academy of Child and Adult Psychiatry*, *52*(8), 815-830.
- Meeks, T. W., & Jeste, D. V. (2009). Neurobiology of wisdom: A literature overview. *Archives of General Psychiatry*, *66*(4), 355–365.
- Mills, L. J., & Daniluk, J. C. (2002). Her body speaks: The experience of dance therapy for women survivors of child sexual abuse. *Journal of Counseling & Development*, *80*(1), 77-85.
- Moulton, S. J., Newman, E., Power, K., Swanson, V., & Day, K. (2015). Childhood trauma and eating psychopathology: A mediating role for dissociation and emotion dysregulation?. *Child Abuse & Neglect*, 39167-174. doi:10.1016/j.chiabu.2014.07.003
- Najavits, L. (2013). Helping vulnerable populations: A comprehensive review of the treatment outcome literature on substance use disorder and PTSD. *Journal of Clinical Psychology*, *69*(5), 433-479.
- Neff, K. D. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*, 85-102.
- Neff, K. D., Kirkpatrick, K. & Rude, S. S. (2007). Self-compassion and its link to adaptive psychological functioning. *Journal of Research in Personality*, *41*, 139-154.
- Neff, K. D. & McGeehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity*, *9*, 225-240.
- Neimeyer, R. (2004). Fostering posttraumatic growth: A narrative elaboration. 53-59. *Psychological Inquiry*. *15*(1), 53-59.
- Nolen-Hoeksema S, Wisco BE, Lyubomirsky S. (2008). Rethinking rumination. *Psychological Science*, *3*, 400–24

- Ogden, P. (2006) *Trauma and the body: A sensorimotor approach to psychotherapy*. Norton & Company Inc. New York, NY.
- Patil, S.G., Mullur, L.M, Khodnapur, J.P., Dhanakshirur , G.B. Aithala, M.R. (2013). Effect of yoga on short-term heart rate variability measure as a stress index in subjunior cyclists: a pilot study. *Indian Journal of Physiology And Pharmacology* 57 (2), 153-8;
- Patton, M., Q.( 2015). *Qualitative Research & Evaluation Methods* (4<sup>th</sup> ed.). SAGE Publications. Thousand Oaks, CA.
- Reid, R. C., Temko, J., Moghaddam, J. F., & Fong, T. W. (2014). Shame, rumination, and self-compassion in men assessed for hypersexual disorder. *Journal Of Psychiatric Practice*, 20(4), 260-268. doi:10.1097/01.pra.0000452562.98286.c5
- Reyes, M. D. (2012). Self-compassion: A concept analysis. *Journal of Holistic Nursing*, 30(2),1-10.
- Rockliff, H., Karl, A., McEwan, K., Gilbert, J., Matos, M., Gilbert, P. (2011). Effects of intranasal oxytocin on compassion focused imagery. *Emotion*, 11, 1388-1396.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology. *American Psychologist*, 55, 5-14.
- Smith, B., Sparkes, A. (2008). Narrative inquiry in psychology: Exploring the tensions within. *Qualitative Research in Psychology*, 3(3), 169-192.
- Smith, B., & Sparkes, A. C. (2009). Narrative inquiry in sport and exercise psychology: What can it mean, and why might we do it? *Psychology of Sport & Exercise*, 10(1), 1-11.
- Smith, B., Caddick, N. (2012). Qualitative methods in sport: a concise overview for guiding social scientific sport research. *Asia Pacific Journal of Sport and Social Science* 1(1), 60-73, doi: 10.1080/21640599.2012.701373
- Sparkes, A. C. (2002). Autoethnography: Self-indulgence or something more. *Ethnographically speaking: Autoethnography, literature, and aesthetics*, 209-232. Google Books: Accessed June 1, 2014

- Sparkes, A., Smith, B. (2011) Inhabiting different bodies over time: Narrative and pedagogical challenges. *Sport, Education, and Society*, 16(3), 357-370.
- Spinazzola, J., Rhodes, A. M., Emerson, D., Earle, E., & Monroe, K. (2011). Application of yoga in residential treatment of traumatized youth. *Journal of the American Psychiatric Nurses Association*, 1078390311418359
- Swartz, A.L (2011). Wisdom, the body, and adult learning: Insights from neuroscience. *New Directions for Adult & Continuing Education*, 131, 1-24. doi: 10.1002/ac.417
- Tedeschi, R.G., & Calhoun, L.G. (2004). The foundations of posttraumatic growth: New considerations. *Psychological Inquiry*, 15, 1-18.
- Terry, M. L. & Leary, M. R. (2011). Self-compassion, self-regulation, and health. *Self and Identity*, 10, 352-362.
- Wada, K., & Park, J. (2009). Integrating Buddhist psychology into grief counselling. *Death Studies*, 33(7), 657. doi: 10.1080/0781180903012006
- Weiss, T., & Berger, R. (Eds.). (2010). *Posttraumatic growth and culturally competent practice: Lessons learned from around the globe*. Hoboken, NJ: John Wiley.
- van der kolk, B.A (2002). In Terror's Grip: Healing the Ravages of Trauma. *Cerebrum: The Dana Forum on Brain Science*, 4(1), 34-50.
- van der Kolk, B.A. (2006). Clinical implications of neuroscience research in PTSD. *Annals New York Academy of Sciences*, 1(2), 1-17.
- van der Kolk, B.A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York, NY: Viking.
- Yorke, J., Adams, C., & Coady, N. (2008). Therapeutic value of equine-human bonding in recovery from trauma. *Anthrozoos: A Multidisciplinary Journal of the Interactions of People & Animals*, 21(1), 17-30.

## Appendices

## Appendix A: Posttraumatic Growth Model



## Appendix B: Interview Guide

How old are you?

What is your gender?

I identify myself as (check all that apply):

- Non-Hispanic
- Hispanic
  
- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Other

*The following questions are in reference to your work using movement to support personal growth during times of hardship.*

What type of practitioner are you?

ie: yoga instructor, mental health specialist, movement therapist

How long have you been a practitioner in the role you just identified?

Briefly describe your training and background in this area.

Where do you practice?

ie: private business, contract work, government facility

I am interested in your experience regarding the use of movement in facilitating your clients' personal growth from hardship. Hardship may include, yet it not limited to, disease, disability, unexpected loss, abuse, chronic neglect, assault, and exposure to war, or natural disasters. Personal growth may include, yet is not limited to, experiences such as positive changes in self-perception, in relationships, and in one's life priorities.

Answer the following questions as openly and honestly as possible. The more detailed and specific you are, the more helpful it will be. Share what you feel would be beneficial including, specific stories, memorabilia, or anything else that would contribute to your responses. Remember, there are no correct answers, or right or wrong response lengths. Please apply the following questions to your specific situation.

Note: Please protect the privacy of your clients by not using any information, including their names, that could identify them.

### **Professional Experience**

1. Share any stories you have about how movement has contributed to your clients' personal growth through difficult times. These stories can be what you have observed, experienced, or what an individual has expressed to you.
2. Describe your experience facilitating these sessions.
3. What role do you see movement playing in supporting personal growth?

Please consider commenting on *any* of the following:

- How do you address personal growth within a session?
- What sort of session environment do you feel nurtures personal growth?
- What sort of practitioner client relationship do you feel best supports personal growth?
- Please explain if you offer specialized sessions to targeted populations/hardships?
- Is there a specific sequencing to the session? If so, please describe.
- Do you provide private or group sessions? If group, how many clients do ideally have in a session?
- What sort of client attendance do you encourage?
- How do you recruit clients? How do they learn about your work?

## **Self-Compassion**

I would now ask you to consider self-compassion. By self-compassion I am referring to “being touched by and open to one’s own suffering, not avoiding or disconnected from it, generating the desire to alleviate one’s suffering and to heal oneself with kindness” (Neff, 2003, p. 87). I link self-compassion, personal growth from hardship, and movement. This may, or may not, be the case for you.

Please share your view about how self-compassion, personal growth from hardship, and movement are related.

1. Can you offer real-life examples to support your position?
2. Do you think self-compassion is essential to the process of personal growth from hardship through movement? Please explain.
3. What function do you think self-compassion could play in personal growth?

## **Practical Suggestions**

1. Share what supports and barriers you have encountered in trying to use movement experiences to facilitate growth from hardship.
2. How have you, or would you handle, a client having a trauma response while in session with you?
3. How do you manage the unique background and stage of healing/growth that each client brings to session? How do you do this within group sessions?
4. Describe, if any, the referral system you may have in place for clients that need additional support.
5. What advice do you have for other practitioners interested in using movement to facilitate personal growth from hardship?
6. Describe a pivotal learning moment you have had. What take-away message would you share with other practitioners from this experience?

Any final comments you would like to share on the topic?