

A Constructivist Grounded Theory Approach to Brainspotting

by

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Abstract

This study examined the phenomena of *the essential elements of a brainspotting (BSP) session*. A review of literature described basic brainspotting processes as outlined by Grand (2013). Associated research included discussion of psychotherapeutic bases of brainspotting, including eye movement desensitization and reprocessing, somatic experiencing, lifespan integration, sensorimotor psychotherapy, and psychoanalytic psychotherapy. Neuropsychological literature reviewed included dual attunement, orienting behaviors and gaze fixation, interoceptive loops, and salient brain structures located in the midbrain tectum. In this study, the qualitative method constructivist grounded theory was utilized to describe BSP as a psychotherapeutic intervention and support a framework for how future research should be implemented. This study included 16 participants made up of eight clinicians and eight patients, which yielded 96 pages and approximately 2,400 lines of transcribed data. Analysis returned six phases and three underlying conditions of BSP. These included the chief complaint, constriction, linking, expansion, de-escalation, and conclusion phases, with underlying maintenance of attention and psychodynamic conditions. The therapeutic recursion condition is identified as a pervasive element in all phases and conditions of BSP and is considered to have external therapeutic access to interoceptive loops. These phases and conditions have parallels to existing literature associated with BSP and support a curious, antireductionist approach to human suffering that draws on contemporary neuropsychanalytic theory and intervention.

Keywords: psychotherapy, brainspotting, eye movement desensitization and reprocessing, neuropsychanalytic, somatic experiencing, eye position

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Chapter I

Introduction

When a person comes to see me, I know nothing. I know nothing about them or why they are the way they are, or how they are going to heal. That allows me to be in a place so that: whoever they are and wherever they are will just come out. And come out and present itself to me and to us. From there the healing begins. – Grand (2014)

Meaning of the Research Question

Brainspotting (BSP) is a psychotherapeutic treatment approach that theorizes the human visual field can be used to locate eye positions that correspond with relevant internal emotional experience (Grand, 2013; Corrigan and Grand, 2013). A relevant eye position, or *brainspot*, is found by engaging in several different processes. In short, the therapist locates a brainspot by assisting the patient in connecting clinical material (e.g., cognitions, memories, transferences) with mindful awareness of body areas experiencing somatic distress. Next, the therapist guides the patient's eyes across the visual field and notes clinically-relevant behavioral cues. This may include facial tics, flushing of the face, blinking, pupil dilation, ocular saccades (quick, lateral eye movements), sharp intakes of breath, and so on. This is known as *outside window BSP*. Patient self-report of felt somatosensory information is also an important diagnostic and treatment feature and is a second way of locating a relevant eye position. This is known as *inside window BSP*. For example, a patient may focus on sensation in the abdomen and track its relative intensity based on horizontal, vertical, near, or far eye positioning.

Additionally, Grand (2013) presents *gazespotting* and *the expansion model*. Gazespotting may be the most easily observable type of BSP and, interestingly, was identified after the inside and outside window models. This particular brainspot is located by simply being aware of where the patient's eyes spontaneously go when discussing relevant material. The expansion model is used "to promote and enhance performance, creativity, and self-experience" (p. 154). This

expansion is also equated to growth and the supposed “infinite” (p. 154) potential for self-enhancement in humans.

In other words, different locations in the visual field are often reported to either enhance or deactivate the felt sensations associated with clinical material. Through eye fixation on these localized areas and a process of mindful awareness, patients are thought to be able to locate, process, and discharge deeply held emotional material in a profound and lasting manner by accessing innate nervous system functions (Grand, 2013).

History of Brainspotting

BSP was developed by David Grand, PhD, in 2003 (Grand, 2013) while treating a 16-year-old female, high-level ice skater in therapy for performance anxiety that included dissociative symptoms. Prior to performing, the patient reported either numbness in her lower extremities or that she had completely forgotten her program. As a result she was competing at a level far below her talent. During a year of treatment, Dr. Grand utilized several psychotherapeutic modalities, including relationally-based, insight-oriented psychotherapy as well as aspects of Eye Movement Desensitization and Reprocessing (EMDR) (Shapiro, 2001) and Somatic Experiencing (SE) (Levine, 1997) that he combined in an approach called “The Grand System” (Grand, 2001). Some factors underlying the patient’s difficulty included maternal attachment problems, difficulty adjusting to her parents’ divorce, and an abundance of sports related injuries, failures, and embarrassments. Treatment had been a success except for a lingering inability to complete the triple loop, a moderately challenging ice skating maneuver but not the most difficult in this athlete’s repertoire. During one session, the patient was directed to imagine the jump in slow motion and stop at an image that corresponded with the exact point at which the jump went wrong.

As she fixated on this image and accompanying somatic distress, Dr. Grand guided her eyes horizontally across her visual field with his hand, an aspect of EMDR. During a particular eye movement, Dr. Grand observed that “her eyes noticeably wobbled in a sustained *microsaccade* followed by locking into a frozen position” (p. 2, 2001). Microsaccades are defined by Dimigen, Valsecchi, Sommer, and Kliegl (2009) as “small, involuntary flicks in eye position that occur once or twice per second during attempted eye fixation...[M]icrosaccades are also accompanied by genuine and sizable cortical activity, manifested in” an electroencephalogram. (p. 321). Instinctively, Dr. Grand stopped at this point and held his fingers directly in front of the position in which the patient’s eyes were frozen. Grand (2009) describes the following events:

During the subsequent ten minutes a remarkable torrent of processing ensued. A series of new traumatic memories emerged and rapidly processed through to resolution. But even more surprising was that a remarkable amount of “resolved” traumas reopened and processed through to a deeper level. At the end of the ten minutes, the processing slowed and completed, and the eye lock released. (p. 3)

Interestingly, the ice skater reported the next day she completed several triple loops without a problem and did not report this symptom again during the course of treatment. Dr. Grand and his colleagues repeated this maneuver and found similar results with a variety of patients and clinical issues. Out of this the BSP treatment approach was born.

Social and Clinical Relevance

Freud (1961) recognized that psychology exists in a “middle position between medicine and philosophy” (Mancia, 2006, p. 39). In line with the evidence-based practices push in medicine and managed care organizations’ (MCOs) focus on cutting costs, psychotherapists are encouraged to use evidenced-based psychological practices (EBPPs) (Mozdzierz, Peluso, & Lisiecki, 2011). Within the EBPP paradigm are empirically-supported treatments (ESTs), which

typically use randomized-controlled trial (RCT) methodology and identify isolated therapeutic ingredients at a prescribed frequency and dosage. ESTs propose that psychotherapeutic interventions contain specific techniques that are purported to remediate identifiable deficits forming the diathesis of a given mental disorder (Barlow, 2004). This method of practice is adhered to despite broad and compelling evidence to the contrary (Miller, Duncan, & Hubble, 2004) and the identification of common factors thought to actually affect psychological growth, regardless of isolated ingredients (Messer & Wampold, 2006; Shedler, 2010). ESTs are not in and of themselves inherently harmful to patients; however, they can be detrimental if applied rigidly and they use predominately *linear*, as opposed to *non-linear*, thinking. The latter encompasses both scientific knowledge and intuitive clinical judgment derived from professional experience (Mozdzierz et al., 2011).

While certainly both ways of approaching psychotherapy can be beneficial, this author wonders if valuable forms of treatment, like BSP and others, may be discarded for lack of empirical evidence that meets the standards of the predominately linear thinking of ESTs. This gets to the heart of what constitutes “evidence” and how it applies to psychological research. Mental disorders and psychological discomfort are often invisible conditions and are inherently complex and epiphenomenal. Those clients presenting to health professionals for psychological treatment rarely exhibit unidimensional symptomology; rather, they experience distress in varying diagnostic categories and in differing areas of functioning. Furthermore, these symptoms can ebb and flow over the course of time based on a litany of shifting biological, social, and psychological factors. For example, a study of outpatient psychiatric patients with a diagnosis of Major Depressive Disorder found that over 73% also met criteria for at least one additional mental condition (Zimmerman, Chelminski, & McDermut, 2002). Much research purporting the

efficacy of EBPPs use patient populations with one, clear diagnostic problem that may not be exemplary of real-world patients seeking treatment (Shedler, 2010).

Talk therapy, traditionally central to psychological assessment and intervention, may be limited in its ability to heal some trauma-related syndromes (van der Kolk, 2014). Grand (2013) states:

What scientists learned in the 1990s led to a revolutionary shift in how we understood the brain and how it affected everything we think, feel, and do. Unfortunately this change has been slow to come in the practice of psychotherapy. Much of the mental health field still adheres to variants of talk therapy without paying attention to the neurobiological imperative driving the healing process. (p. 89)

Trauma can be considered to be part of the human condition (Grand, 2013; Scaer, 2005) and therefore a primary constituent of many mental disorders. BSP, derived from two trauma treatments, EMDR and SE, can be seen as a treatment for trauma-related procedural memories that utilizes the mechanisms directly involved in threat detection and response (Scaer, live presentation, January 21, 2012). Shedler's (2010) contention that change factors in psychotherapy are inherently psychodynamic coupled with evidence for an upper limit of talk therapy's effectiveness, particularly with trauma, makes it crucial that BSP be studied further.

Currently, evidence with regard to BSP can be seen as largely anecdotal with a few studies and scholarly papers supporting its use. The technique has been used for approximately 12 years, roughly 8,000 practitioners have been formally trained (Grand, 2013), and there seems to be a general consensus regarding how to apply the technique in psychotherapy and achieve therapeutic benefit, as determined by clinical experience. However, when compared to other established psychotherapies it has been starkly understudied. Only a few studies have been conducted and even fewer published in peer-reviewed journals.

Several issues may explain the reason for the lack of empirical evidence. First, BSP is provided by established practicing clinicians, many of whom are not likely to do research. Second, the somewhat flexible application of BSP may not lend itself to classic research methodologies as there are no strict protocols to be followed, making it difficult to isolate change factors in the treatment. Finally, BSP is still relatively new and has not yet had the opportunity to be studied by research entities, such as universities or clinics. The relative lack of empirical evidence further demonstrates the necessity of research studies such as this one.

In many ways BSP can be considered a treatment modality existing only on the fringes of the mental health profession, but should it be? To better understand BSP, research must be done to identify the components of the paradigm and elucidate a framework that can be used to better understand how BSP works.

Personal and Professional Relevance

My path to BSP began in the spring of 2003 (Grand & Goldberg, 2011), my freshman year of college. I was a talented but struggling collegiate baseball pitcher at Grand Valley State University in Grand Rapids, Michigan. Exiting high school, I had the physical make-up to not just be a good college player, but possibly play professionally as I was being scouted by several Major League Baseball teams. At 6'6", I threw hard and had excellent control of the baseball, a combination that can lead to success as a pitcher.

Although I played quite well during the fall baseball season and was likely to be the only true freshman on the team to make the regular season roster, things began to disintegrate for me that winter: mysteriously, I started to slowly but surely lose my ability to control the baseball. The first time this occurred, I was catching for a high school pitcher during a camp put on by the baseball team and coaches. After a few pitches from the high school student, who was receiving

instruction from my head coach, I threw the ball wildly over his head. This was something I did not initially think would be a persistent problem. My next throw back, however, landed about 10 feet in front of the pitcher at which time a wave of anxiety flowed over me. The thought “what if I can’t get the ball back at all” slammed into my consciousness and I was confused, panicked, and most of all, angry with myself for failing to perform such an ostensibly insignificant athletic endeavor. Pitches continued to come in, and I continued to throw wildly back, until a teammate came, mercifully, to relieve me.

As I walked back to my dorm room, my roommate and fellow pitcher said, “Jesus, man, that was embarrassing for everyone. What the hell is going on?” I was asking myself the same question and at that time had no idea how to answer. My arm, once able to do things only a small number of people in the world could do, felt foreign and detached from my body. I recall getting back to my dorm and simply staring at my arm demanding to know why it had betrayed me. I attempted everything I could to overcome my problem, even spending hours in a darkened gym, alone, throwing a tennis ball against the wall until I could no longer even lift my arm.

My play continued to deteriorate through the winter and I was given a redshirt year, meaning that I would maintain four years of college eligibility while still being part of the official roster. I was reduced to not being able to throw the ball 10 feet because my arm would “lock,” refusing to abide by the throwing motion I had performed literally millions of times. I was athletically incapacitated and in the midst of significant depression and anxiety marked by embarrassment, anger, and phobic fears that forced deep questioning of basic aspects of my self.

In the spring of my freshman year, my father learned of David Grand, PhD, a psychotherapist and international trauma expert from New York who worked successfully with many types of performers, including high-level athletes. I entered treatment with Dr. Grand

holding a deep distrust of psychotherapy, mostly connected to unhelpful experiences as a child and adolescent. The athlete in me wanted to work through this problem on my own, to overcome it with sheer will, and come out on the other side a better pitcher and better person for it.

Looking back, a part of me realized I needed more and thus reluctantly began having psychotherapy sessions with Dr. Grand.

Around this time, Dr. Grand had discovered BSP and was beginning to use it with his patients, which now included me. At 18 years old I sat in my dorm room locating areas of tension within my body and looking at different areas in my visual field. Over time and to my utter disbelief, I began to feel better and actually regain my athletic abilities. I transferred to a smaller college, made the team, and participated adequately. I never threw as hard as I once did, but my control of the baseball not just returned to my previous level, but remarkably improved.

Unfortunately, the story does not have an ideal ending. I ended up having three surgeries on my shoulder and one on my hand, the former resulting from dozens of subluxations and many dislocations due to damage to cartilage and ligaments. The accumulated toll of years of pitching, injuries, and surgeries made it impossible for me to continue and began to threaten my ability to use my shoulder for even everyday movements. I made the difficult choice to stop playing baseball.

From 2002 to 2007, I played with approximately 100 individual college baseball players and about 25 coaches, trainers, physical therapists, and physicians closely associated with the various programs. A conservative estimate is that one out of five of my teammates over that period exhibited some form of ostensibly mysterious performance problems: catchers anxiously throwing back to the pitcher but not to bases, pitchers “losing” control of previously mastered pitches, inexplicable panic symptoms associated with approaching the ballpark, losing feeling in

extremities for no particular reason, and many other problems. Players described these occurrences as being “mind-fucked,” while coaches accused them of being “lazy,” “fucking pussies,” “losers.” Without comment coaches would cut these players from the team, lower them in the batting order, or move them from the starting pitching rotation to the bullpen. The latter two designations can be considered as devastating to the psyche of an athlete as being cut.

Despite the obvious nature of stark drops in performance, not one coach, trainer, physical therapist, or physician ever considered these problems to be anything other than normal post-injury or surgical recovery issues. When physical etiology was supposedly ruled out, it was determined that these problems indicated a character flaw in the athlete. To this researcher’s knowledge, no mental health professional was ever involved in assessment or treatment of these athletes. Athletes were personally observed compensating with tobacco, alcohol, opiates, and performance-enhancing drugs including amphetamines and anabolic steroids to try and regain lost athletic abilities. And again, no coach or medical professional appeared to be aware of these behaviors.

My physical potential in high school never even remotely translated to college, much less professional baseball. However, I was left with mounting curiosity about my work with Dr. Grand and the nature of these problems. What happened in our sessions that made it possible for me to recover many of my abilities? How could I maintain these abilities even as the physical structure of my shoulder continued to deteriorate? More importantly, how was I able to overcome all the associated shame, anxiety, anger, and confusion and feel like my confident, happy self again?

As one means of answering these questions, I began to study psychology. I graduated with my bachelor’s degree, then continued on for a master’s and am now completing a doctorate

degree in clinical psychology. What I know now is that the primary therapeutic component of psychotherapy is the relationship between therapist and patient (Messer & Wampold, 2006; Rogers, 1961). The degree to which emotional wounds heal is linked to the degree and quality of this dyad. The therapist must be empathic and attuned to facilitate a sense of trust within the patient and allow him or her to delve into the deep recesses of the self. Within this empathic, attuned relationship, understanding and processing through events incurred during development that are impacting the person is also of utmost importance.

Dr. Grand did all of the above, and masterfully, but there was something about the technique with the eyes, brainspotting, that I intuitively felt added something immensely powerful to the indispensable factors of the clinical relationship. I needed to learn more, so I completed the multiples levels of BSP training over several years in Boulder, Colorado, with Dr. Grand and his associates. As my clinical skills advanced, I observed how profoundly BSP added to and deepened my ability to assist patients in healing emotional wounds. Working within the context of a relationship-based, psychodynamic therapy approach, the addition of BSP seemed to allow for positive and meaningful emotional shifts within the patient, frequently to a subjective degree and quality not experienced prior.

In addition to using existing literature to guide clinical work, psychologists are researchers themselves. Benefit to patients can be maximized and the potential for harm reduced by using research-informed practices. In fact, it is an ethical imperative that psychologists do so. Practitioners of psychotherapy must come from a place of knowledge and be able to logically defend their positions while maintaining awareness of each patient's unique needs. An innate curiosity and desire to, as thoroughly as possible, examine psychotherapy is at the heart of this dissertation.

Statement of the Research Question

The research question is as follows: *What are the essential elements of a Brainspotting session?*

Definition of Terms

To provide a clear explanation for the research question, each term will be defined independently.

Essential. Essential is an adjective defined as “pertaining to or constituting the essence of a thing” (essential, n.d.). Synonyms include “indispensable,” or “necessary.” For this study, *essential* indicates an element that is fundamental to the BSP process and explanatory of important phenomena. Although essential suggests some measure of absolute necessity, elements considered essential in this study are to be understood as flexible attributes.

In Brainspotting, it is both acknowledged and embraced that we are working in a field of uncertainty, where we know just a shred of what there is to know about the inner universe of the human brain. Brainspotting therapists know that the only solutions to the problems clients bring to the therapy office lie within the clients themselves. Brainspotting encompasses a full spectrum of possible interventions with clients, according to their needs. (Grand, 2013, p. 147)

This study will explore the above-mentioned, brainspotting interventions with an acceptance of the intrinsic uncertainty of psychotherapy. Essential is then considered to be a state open to reevaluation while still having common components.

Elements. Element is a noun defined as “a component or constituent of a whole.” The synonym *characteristic* can also be used. Characteristic is defined as “pertaining to, constituting, or indicating the character or peculiar quality of a...thing; typical; distinctive.” (characteristic, n.d.) In terms of this study, an *element* or characteristic could be nearly anything derived from grounded theory analysis, including behaviors on the part of the therapist or patient, verbalizations, awarenesses, or recurrent interactions.

Elements should not be considered equal to specific ingredients that *must* make up a BSP session. Butler and Strupp (1986) state: “[T]he goal of psychotherapy research shifts from the search for active ingredients toward efforts to identify fundamental principles of human interaction that underlie the interpersonal conditions essential for therapeutic change” (p. 30). In this study, fundamental principles of the BSP interaction are identified through data analysis. Furthermore, constructivist grounded theory researchers, in line with the flexible nature of BSP, “vary in their emphasis on one or another aspect but taken together, share commonalities” (Charmaz, 2006, p. 10). These commonalities will constitute the essential elements of a BSP session.

Brainspotting session. Psychotherapy itself is performed by a clinician licensed as a psychologist, psychiatrist, social worker, counselor, or advanced psychiatric nurse. Psychotherapists draw from a range of theoretical and technical orientations, including behavioral, cognitive, humanistic, or psychodynamic, among others, and in differing modalities including individual, family, or group. Topics addressed include those of a philosophical to technical nature based on the presenting needs of the patient (Zeig & Munion, 1990). Sessions lasting between 30 and 50 minutes have been found to be equally satisfactory to patients (Turner, Valtierra, Talken, Miller, & DeAnda, 1996); therefore, a session is deemed to be within this temporal range for the purposes of this study.

A BSP psychotherapy session will use one of the various forms of intervention as outlined by Grand (2013). Choice of intervention is up to the clinician participant, who will work within his or her scope of practice and in relation to chosen philosophical orientation. Options include Outside Window, Inside Window, Gazespotting, Resource Model, or Expansion Model

BSP. Session length is determined by the clinician based on the patient participant's current mental state and in accordance with parameters of the clinician's discipline.

Chapter I provided an introduction to and history of BSP; exploration of social, clinical, personal, and professional relevance; statement of the research question; and definitions of terms. Chapter II will review current and classic literature relevant to BSP and discuss themes and critiques relevant to the theoretical, philosophical, and applied underpinnings of BSP.

Chapter II

Literature Review

BSP is a technique that draws on several therapeutic traditions including Eye Movement Desensitization and Reprocessing (EMDR), Somatic Experiencing (SE), and psychoanalytic psychotherapy (Grand, 2013). The basic components of BSP will be presented, as well as associated psychotherapies and neuroscientific literature.

Basic Brainspotting Processes

The original type of BSP, Outside Window, is related to Grand's (2013) original discovery of reflexive behavioral cues to internal, clinically-relevant phenomena: eye blinking, sharp intakes of breath, flinching, and so on. This begins with the therapist inquiring of the presenting problem, activating the patient somatically around the issue, and determining the level of activation (often on a 0 to 10 scale) accompanying the identified body area. Using a simple pointer, the therapist very slowly moves horizontally across the patient's visual field, looking for outwardly observable reflexive responses as the patient holds the somatic activation in his or her mind. When reflex responses are seen, the therapist holds the pointer at the point of the salient response and guides the patient to "mindfully observe their inner process, wherever it goes. We encourage curiosity and openness and discourage expectations" (p. 25). For example, the therapist may state, "See what comes next – what comes next and then what follows. Don't try to direct the process, and don't try to focus it or hold it back. Trust your instincts" (p. 25). This process Grand refers to as *focused mindfulness*. Whereas typically mindfulness is understood as meditative awareness of the present moment in a non-judgmental manner (Kabat-Zinn, 2012), focused mindfulness is a specific form preempted by the process of *focused activation* as identified in BSP. Focused activation is defined as a set-up process arising from focus on a

singular issue or situation, assessing accompanying body sensations, rating their subjective level of distress, and locating a corresponding eye position (Grand, 2013, p. 155). This leads to the state known as focused mindfulness, which is unique to BSP.

Over the first 6 months of Grand's (2013) use of BSP, he discovered that some people were aware of areas in the visual field not necessarily correlated with outward behavioral cues. They were able to self-direct the therapist to points that corresponded just as accurately to their presenting problem. Out of this came the Inside Window paradigm of BSP and a systematic, patient-directed means of locating a Brainspot. This used the same set-up, including identification of a pertinent clinical issue, locating areas of somatic activation related to the issue, and determining its subjective level of intensity. The Inside Window Brainspot is located by tracking the pointer across the patient's visual field along the x-axis, then the y-axis, and sometimes, the z-axis. Inside Window relies on the conscious, self-reflective abilities of the patient, while Outside Window depends on the therapist's outward observation of the patient's reflexes. Grand states "both types of Brainspots worked extremely effectively, although differently at times" (p. 31).

A third type of BSP, Gazespotting, uses the spontaneous direction of the eyes as the patient discusses a pertinent clinical issue. "Gazespotting is a process that accesses the brain quite differently than Inside or Outside Window...it strikes me as a spontaneous way of scanning our inner neural environment by intuitively scanning our visual field" (Grand, 2013, p. 58). Corrigan and Grand (2013) cite Micic, Ehrlichman, and Chen's (2010) research on non-visual gaze patterns. These are defined as spontaneous fixations of the eye that elicit mental activity but do not result in visual perception of an outward object. The authors hypothesize that movement

of the eyes correlates with long-term memory storage and fixate when the salient memory is located.

Grand (2013) emphasizes that BSP is a flexible model, and that what type of BSP process used is dependent on the unique presenting issues of the patient and the clinician's moment to moment decision making. Grand within Camarda (2011) states that while there is "a structure, it is a much more open model...what we're doing with Brainspotting with all the different Brainspotting tools is that we're tracking the client, and we're choosing which Brainspotting tools to use at which time and with which combination."

Psychotherapeutic Bases

Eye Movement Desensitization and Reprocessing. EMDR was discovered in 1987 by psychologist Francine Shapiro (2001) who noticed that her own distressing memories tended to diminish with rapid, horizontal eye movements. Subsequently, she experimented with others and found similar results: that these eye movement tended to have a desensitizing effect on distressing recollections. Over time, basic protocols were established by Shapiro (2001) and are characterized by an eight-phase treatment approach, which includes the following: history taking; stress reduction techniques; identifying visual images, positive beliefs, negative beliefs, and emotions and bodily-held sensations related to the traumatic memory; closure and reinforcement of self-calming activities; and continuation of processing based on progress made thus far (pp. 69-75).

Other protocols have been developed beyond Shapiro's. For example, Quinn's (2009) Emergency Room Procedure (ERP) is designed to be used within hours of the traumatic event for those in a *silent terror* or highly agitated state. ERP entails normalizing physiological symptoms of acute traumatic stress (e.g., uncontrollable shaking or extreme dissociation),

psychoeducation regarding EMDR procedures, identification of negative and positive cognitions, desensitization (bilateral stimulation), and closure consisting of assessment of current state and appropriate referral information. Notably, Grand (2001) also redefined the initial protocols in Natural Flow EMDR and the Grand System. In contrast to orthodox EMDR, Grand's work can be described as a "creative, integrative, resourcing model" when paired with some tenets of Somatic Experiencing and psychoanalytic psychotherapy. "By contrast, Brainspotting is built on a model where the therapist simultaneously attunes to the client and the client's brain processes" (Grand, 2013, p. 3).

A survey of EMDR literature yielded mixed results in terms of laboratory efficacy and real-world effectiveness, with bodies of research both in support of, and in denial of, EMDR's clinical utility. In a study comparing EMDR, the selective serotonin reuptake inhibitor (SSRI) fluoxetine, and placebo, it was found that EMDR was more successful than pharmacotherapy in achieving reductions in depressive and PTSD symptoms and superior to placebo. Therapeutic gains were seen in a 6-month follow-up with adult-onset trauma symptoms. However, in the case of child-onset trauma symptoms, neither EMDR nor fluoxetine achieved significant symptom remission (van der Kolk, et al. 2007).

To study PTSD symptomology and the effects of EMDR therapy, Inoue (2009) used a battery of psychometric instruments, including the Impact of Event Scale-Revised (IES-R), the Rorschach Comprehensive System (CS), and the Thematic Apperception Test (TAT). The Rorschach CS and TAT yielded significant improvements on post-test measures of interpersonal relationships, and similarly to traditional therapy, promoted self-insight. Twenty-four randomized controlled trials support EMDR therapy in the treatment of trauma and other

negative life experiences. Seven of 10 studies reported EMDR therapy works faster and is more effective than trauma-focused cognitive behavioral therapy (Shapiro, 2014).

A meta-analysis including six RCTs and three quasi-experimental studies found evidence supporting the use of EMDR with combat-related PTSD to be “sparse and equivocal” (Albright & Thyer, 2010, p. 1). Another meta-analysis conducted by Davidson and Parker (2001) found EMDR to be equal to, but no better than, other exposure-based techniques; via dismantling studies, they concluded that eye movements were unnecessary. These authors do, however, suggest more research is needed to ascertain with what populations or diagnostic categories EMDR may be most helpful and suggest concentration on returning veterans with PTSD diagnoses.

Given the predominant nature of eye movements in EMDR therapy, dismantling studies attempted to assess each component part of EMDR therapy. This illuminated what influence each central component had on therapeutic changes. These studies, as well, are mixed in terms of how vital eye movements are to a reduction in presenting clinical symptoms. A meta-analytic study found compelling evidence for the necessity of eye movements, in addition to simple exposure techniques, and that proponents of EMDR have shown sufficient rationale for their use. When choosing between two established treatments for PTSD, EMDR and trauma-focused CBT, the authors encouraged client choice coupled with therapists’ clinical judgment (Jeffries & Davis, 2013).

With two treatment conditions, EMDR with eye movements and EMDR without eye movements (modified), the former condition was superior to the latter in terms of decrease in PTSD diagnoses (85% to 57%, respectively) (Renfrey & Spates, 1994). It should be noted that this study had a small N, seven and eight participants for each group, which reduces statistical

power significantly. Additional studies with similar formats suffered from like methodological concerns, including wide heterogeneity of diagnoses within groups, minimal treatment length (e.g., two sessions), truncation of EMDR protocol leading to poor construct validity, and so on (Boudeywans & Hyer, 1996; Carrigan & Levis, 1999; Pitman et al., 1991). This is further evidence of the equivocality in their conclusions and mirrors the conclusions about the uncertain nature of EMDR's global utility.

Lee and Cuijpers (2013) write that prior meta-analyses of dismantling studies that found sub-significant effect sizes for the eye movement component of EMDR may have suffered from type II error (false negative). They suggest this may be related to factors such as single versus multiple raters or a failure to adjust for sample size, among others potential problems. Their methodology included a review of the literature categorized into two groups consisting of a total of 849 participants. The first was made up of 15 clinical trials and contrasted the effects of EMDR therapy with eye movements to those of EMDR with no eye movements. The second included 11 laboratory trials that examined the effects of subjects' eye movements while consciously thinking of a disturbing memory compared to the same procedure without the eye movements in a sub-clinical situation.

The effect size for the first group was moderate and significant (.41) while it was large and significant for the second (.74). The strongest effect size difference was for measures of vividness in the second group. Additionally, treatment fidelity acted as a moderator variable on eye movements in the first group. It was concluded that eye movements are a necessary component of EMDR, and this aspect differentiates it from other exposure-related treatments such as exposure and response prevention or imaginal exposure (Lee and Cuijpers, 2013).

Logie (2014) provides a review of the debate in psychology over EMDR and its status as a “treatment of choice” on par with CBT and psychodynamic therapy. Logie notes EMDR’s designation by the National Institutes of Health (NIH) paints it as an established therapy for PTSD. However, Logie (2014) also points out that psychologists are less clear on whether it can be used with similar confidence in cases of other diagnoses such as depression or obsessive-compulsive disorder. Therapists have also begun to provide services with EMDR as a stand-alone treatment approach, much like CBT or psychodynamic therapies. Many consider it appropriate for various diagnostic categories, especially if it is flexibly redefined as in the work of Grand (2001).

With regard to the lack of consensus about what mechanisms underlie the changes seen in patients undergoing EMDR therapy, Logie (2014) identifies three separate hypotheses thought to explain these: rapid eye movement (REM), increased interhemispheric communication, and reduced working memory functioning. The REM hypothesis proposes that the eye movements prescribed in EMDR mimic those seen in REM sleep. This is thought to promote a similar brain state that is theorized to aid in the consolidation of memories, in this case those that contribute to post-traumatic symptoms. Interhemispheric communication increases have been associated with availability of episodic memories and the subsequent ability to effectively process them. However, it remains uncertain whether horizontal eye movements increase interhemispheric connectivity (p. 514). Lastly, it is hypothesized that working memory capacity is limited and drawing on both visuospatial and central executive functions “taxes” these systems. The resulting effect is that imagery may become impaired and thus would have a diminished emotional load. Some may argue that this is not a true reconsolidation of traumatic memory, but

rather a defensive maneuver akin to suppression or avoidance, which allows for simple coping, rather than emotional, processing.

Somatic Experiencing. Somatic Experiencing (SE) is a body-oriented technique developed by psychologist and medical biophysicist Peter Levine (1997) that focuses on bodily-held sensations associated with traumatic events. It is considered a psychobiological therapy derived from psychology, stress physiology, ethology, neuroscience, indigenous healing practices, and medical biophysics. It does not focus primarily on symptoms of trauma but aims to address the original, traumatizing event, or set of events.

SE has been used as a PTSD prevention tool with children and teens in the acute stress phase (less than 6 months) of post-trauma psychological reactions. In this case, clinicians work with both children and their parents to learn and implement SE-based skills to aid reduction of initial problems and prevent the development of PTSD. Targeted symptoms include social withdrawal, anxiety, phobias, aggression, and addictive behaviors. This is in contrast to common allopathic ways of treating trauma-related symptom clusters, namely symptom-reduction psychotherapies and psychotropic medications (Levine & Kline, 2011).

SE effectiveness has been assessed through self-psychology, Jungian archetypes, and psychophysiology with emergency service personnel, including a treatment group of firefighters, police officers, and paramedics. Self-psychology is a contemporary form of psychoanalysis based on the primacy of subjective experience. Jungian archetypes are theories based on the work of Carl Jung that reflect unconscious patterns arising from one's culture and personal context. Psychophysiology is the application of physiological functions on psychological processes. Themes in the realm of self-psychology included mirroring and idealization of traumatic childhoods, which were endorsed by most of the participants. Finally, the Jungian

theory of the hero allowed participants to complete their jobs with skills characteristic of this archetype, including sacrifice, skill, strength, and courage (Zettle, 1999).

Physiological symptoms observed in the participants from the above study were grouped into four main symptom-sets: hyperarousal, constriction, dissociation, and freeze responses. SE was shown (in 80% of participants) to reduce specific symptoms of mood swings, anxiety, amnesia, flashbacks, and intrusive imagery, and increase the ability to concentrate (Zettle, 1999). SE has also been used to reduce somatic and cognitive symptoms of depression in a group of homeless individuals (Changaris, 2014). Notably, the Resource Model of BSP is based on the *body resource* (Grand, 2013), a facet of SE. This uses the same set-up process of Inside Window BSP; however, instead of looking for somatic areas of activation around a problem, patients locate areas of resource or strength, as well as their correlating brainspot.

Another treatment approach is the trauma resiliency model (TRE), which incorporates the basic tenets of SE. In a study examining post-disaster social service workers, researchers found that the treatment group showed significant gains in measures of resiliency and a reduction in PTSD symptoms. Upon 4-month followup, PTSD symptoms had increased slightly but were still statistically lower than those observed in the comparison group (Leitch, Vanslyke, & Allen, 2009). Brief SE (one to two sessions) was used with survivors of the 2004 tsunami in Thailand, with assessment of symptomatology done pre-treatment, immediately post-treatment, 3-5 days post-treatment, and on one-year followup (Leitch, 2007). Measurements were derived from tracking forms that identified six symptoms, three identified by the participant and three observed by the researchers. Results showed 67% of participants had partial to complete improvement in reported symptoms and 95% improvement in initially observed symptoms immediately post-treatment. At the one-year follow-up, 90% had partial to complete

improvement in symptoms and 96% in initially observed symptoms. These changes were based on the researchers' ratings of symptoms severity (Leitch, 2007).

Sensorimotor Psychotherapy. The sensorimotor psychotherapy (SP) approach is considered a psychosomatic intervention and a means of addressing trauma-related symptoms through treating physical sensations in addition to patients' verbalizations in traditional talk therapy (Ogden, Minton, & Pain, 2006). It is used within an attuned therapeutic relationship to increase levels of functioning in traumatized individuals, maintain states of optimal arousal, and teach the brain-body system to more adaptively respond to feared stimuli (Fisher & Ogden, 2009). SP is based on the theoretical assumptions of human information processing, modulation of nervous system arousal, attachment, orienting responses, evolutionary psychology, and the neurobiology of trauma. Treatment includes three phases: developing somatic resources, processing traumatic memories, and integration (Ogden, Minton, & Pain, 2006, p. 46). In a case-study format, SP when combined with cognitive-behavioral therapy (CBT) was found to be an effective means of assisting the patient in controlling her anger by assessing and tracking her physiological sensations and teaching more adaptive techniques to manage anger-related hyperarousal (Flynn, 2010).

In addition to the individual psychotherapy modality, SP has been used in group therapy treatment for treatment of trauma in female patients. After a 20-week program of SP-informed group treatment, patients showed significant improvement in measures of body awareness, dissociation, and receptivity to soothing. Therapeutic gains were observed in a 6-month follow-up (Langmuir, Kirsh, & Classen, 2012). SP is a notable treatment method, yet it is not well-researched and no randomized control trials (RCT) have been performed to assess its efficacy

against other established treatments. Further study is needed to determine its usefulness as an evidence-based technique.

Lifespan Integration. Lifespan integration (LI) (Daniel, 2009) is considered a mind-body treatment technique initially developed to treat trauma symptoms using *birth to present protocol*. LI is cited by Corrigan and Grand (2013) for its relationship to BSP. It is based in the theory that through repetitive exposure to a patient's life timeline, LI can help to develop a sense of fluidity and continuity of self. In this modality, trauma is considered a time disorder wherein a patient's mind and body are continuously threatened by unresolved experiences from the past. Ultimately, the mind-body system is theoretically taught to respond differently to traumatic cues and view past traumatic experiences as resolved and unthreatening.

LI progresses in a systematic manner. It begins with the present-day self-describing of a childhood trauma and the accompanying cognitions and body sensations. The adult self then imagines going back in time to remove the child from the troubling situation and take him or her to a safer place, and then relaying statements from adult to child states such as "you're with me now" or "you're safe." The present-day self then guides the child self, year by year, until the current moment in time is reached. At that point the child is oriented to the healthy functioning of the adult, as a means of reinforcing that the adult is functioning well even in the face of earlier trauma. Finally, the original trauma is again encountered, and the steps repeated, until emotional activation in response to the event is resolved (Shapiro, 2010).

Like SP, LI is seriously understudied and determinations of its clinical utility are relegated to anecdotal descriptions of its effectiveness by adherents in real-world settings. However, LI appears to have commonality with psychodynamic principles and has

acknowledged similarity in terms of its “frame” (e.g., focus on the past) by Corrigan and Grand (2013).

Psychoanalytic psychotherapy. Psychoanalytic and psychodynamic (these terms will be used interchangeably for the purposes of this review) literature is massive: a search of these terms returned almost 35,000 hits in one database alone. Thus, a thorough review of these concepts from a theoretical and applied basis is outside the scope of this study. Key concepts will be explored, however, as they pertain to psychotherapy and the origins of Brainspotting. Shedler (2010) provides comprehensive reviews and discussion of contemporary psychodynamic philosophy and intervention as well as thorough analyses of existing research.

According to Shedler (2010, contemporary psychoanalytic or psychodynamic therapies are based on classical psychodynamic concepts but mandate significantly less time than orthodox analysis (e.g., sessions once or twice a week versus five or more). The basic tenet of psychodynamic therapy is to make unknown aspects of the patient known, as they are manifested in, and influenced by, the therapeutic relationship and as they improve the patient’s sense of well-being and overall functioning. Shedler notes that elementary understandings of psychoanalysis mistakenly cite outdated Freudian theories that seldom reflect how psychodynamic concepts are understood and utilized today. In fact, Freud himself retracted many of his original ideas now seen as potentially reductionist, sexist, or largely inaccurate (Shedler, 2010, p. 98).

Several features reliably distinguish psychodynamic therapy from other therapies according to Shedler (2010, pp. 98-100): focus on affect and expression of emotion, exploration of attempts to avoid distressing thoughts or feelings, identification of recurring themes and

patterns, discussion of past experiences with a developmental focus, focus on interpersonal relationships, and exploration of fantasy life.

Empirical evidence is vast, thorough, and supportive of the efficacy of psychodynamic therapy. Moreover, effect sizes have been equal to those found in other therapies considered to be empirically supported and evidence based. Patients of psychodynamic therapy tend to maintain therapeutic gains and many actually improve significantly post-treatment. Other therapies, such as CBT, are shown to be effective, in part, because more skilled therapists tend to utilize techniques that are actually psychodynamic (Shedler, 2010). In other words, elements that underlie the efficacy of CBT over time are actually those consistent with psychodynamic theory. Manualized versions of short psychodynamic supportive psychotherapy (SPSP) and CBT were compared in a randomized clinical trial with depressed outpatients. No significant post-treatment differences were found between the two approaches (Driessen et al., 2015). Luyten (2014) also reached similar conclusions.

Despite their ostensible efficacy, many empirically supported treatments for trauma (such as trauma-focused cognitive-behavioral therapy and EMDR) have high non-response and dropout rates, and they fail to meet the complex needs of real-world patients with multiple diagnostic features (Schottenbauer, Glass, Arnkoff, & Gray, 2008). According to these authors, psychodynamic therapy better accounts for multiple etiologies and presentations. This can include simple versus complex trauma, attachment history, developmental issues, personality, and childhood problems as related to adult adjustment problems.

Psychodynamic therapy was found by Leichsenring and Leibling (2003) to yield large overall effect sizes in the treatment of personality disorders. Their study analyzed 25 studies published between 1974 and 2001 with patients suffering from long-term dysfunction of

cognition, impulse control, affective regulation, and interpersonal relationships associated with personality disorders. Psychodynamic therapy was found to have a 1.08 effect size for self-report measure and 1.79 for observer report (p. 1223).

The Diagnostic and Statistical Manual (DSM 5) of the American Psychiatric Association is used by most mental health clinicians and is considered to be the baseline document on which psychological diagnoses are made. Lending support for psychodynamic-based assessment and diagnosis, Gordon (2014) compared the Psychodynamic Diagnostic Manual (PDM) with the DSM 5 and International Classification of Diseases (ICD-10). The author notes the latter two tend to approach psychopathology from an isolated symptoms perspective, while the PDM takes a biopsychosocial approach with an emphasis on personality characteristics as the person develops. The Psychodiagnostic Chart (PDC), an operationalized version of the PDM, was found to have greater satisfaction among psychologists than the DSM 5 or the ICD-10 in terms of diagnosis, treatment formulations, progress reports, and outcome assessments.

Schore (2011) provides a review linking psychoanalytic therapies with neurobiological processes, concluding that the activity of the subjective implicit self is regulated by the right hemisphere of the human brain. According to Schore, the right hemisphere is engaged in psychoanalysis and processes clinical information in connection with the limbic (emotional) system and the brainstem (autonomic functions). This process is implicitly based and has explicit projections from the left hemisphere, primarily in the form of language.

Schore (2011) discusses *regulation theory* as an amalgamation of neurological and psychoanalytic knowledge (neuropsychanalytic). Regulation theory is a model of the implicit self and explains how it develops throughout the lifespan in addition to the etiology of psychopathology. “Implicit affective processes” (p. 75) are fundamental to neuropsychanalytic

therapy and involve “the expression of right brain unconscious mechanisms in affect-laden enactments, and on the therapist’s moment-to-moment navigation through these heightened affective moments” (p. 75).

This has implications for BSP, which shares similar philosophical roots in the incorporation of neurobiology in traditional psychotherapy. Further, Schore’s “heightened affective moments” (2011, p. 75) appears to run in parallel with Grand’s “focused activation” (2013, p. 155). Evidencing the similarity, Grand states:

The therapist has to multitask in order to closely follow the different levels of client communication, while at the same time following the client’s eye/brain/body cues. Paying attention to all these elements is a highly challenging balancing act...the neural attunement aspect of Brainspotting has taught me much about the person-to-person attunement of the listening process...I am thinking about their brain all the time, and I’m seeing and feeling information flowing down the vast, complex synaptic highways as I listen to their story. (p. 65)

Neuropsychological Bases

Dual attunement. BSP differentiates itself from other forms of talk- and body-based therapies by its ability to “predictably access the brain stem components of the trauma memory” (Corrigan & Grand, 2013, p. 760). This involves direct attention from the therapist, who observes at which eye positions there is increased unconscious reflexive activity (Outside Window) and locates a Brainspot based on the patient’s subjective internal tracking (Inside Window) or what eye positions are spontaneously identified when a patient verbalizes emotional material (Gazespotting). The therapist’s gaze itself also has therapeutic effects on the cortical and subcortical levels (Corrigan & Grand, 2013). Non-threatening gaze can increase activation of the right anterior insula, which is a structure strongly linked to awareness of body sensations and brainstem (e.g., heartbeat) (Ethofer, Gschwind, & Vuilleumier, 2011).

The neural presence of the therapist has been studied as an integral part of all therapies, whether or not the therapist is consciously aware of its impact on the therapy (Siegel, 2010). Psychotherapy itself can be characterized as a secure attachment relationship, wherein the patient seeks proximity to a stable, attuned other. A resultant working model of security or an internalized self-object of the therapist begins to take hold within the patient and forms the basis for psychological treatment. In other words, “healing within psychotherapy can thus be defined as the ways in which the innate, hard-wired attachment system of the brain is used to enable the patient’s mind to achieve more functional self-regulation” (Siegel, 2002, p. 106).

Types and levels of communication can vary in psychotherapy and include, but are not limited to, Rogerian, Freudian, operant, and cognitive (Staines, 1969). Rogerian theory connotes “accurate empathy” as fundamental to therapeutic communication. Early implementation of Rogerian empathy consisted of verbal reflection of the patient’s emotional state without attempts to change or alter its wording or meaning. This evolved within the theory to include implied emotions or meanings outside the patient’s awareness. This in an intervention bordering on Freudian interpretation, which is a direct statement by the therapist of material outside the conscious, phenomenal world of the patient. Taken together, Rogerian suppositions with Freudian language in parentheses would be as follows: “The counselor (therapist) via his empathic responses (interpretations) brings to awareness (makes conscious) the feelings (strivings) of the experiencing organism (unconscious)” (p. 406).

Operant communication in the form of behavioral reinforcement, along with punishment enacted on the patient by the therapist, forms another basic means of therapeutic communication (Staines, 1969). These are philosophically different from Rogerian reflection or Freudian interpretation; however, both can be reinforcing or punishing in their own right. For example, a

therapist may reinforce authentic self-exploration (e.g., through praise), and not reinforce or even punish resistances to self-exploration (e.g., through redirection or withholding praise). Lastly, cognitive theory, specifically cognitive dissonance, proposes that people wish to have congruence between ideas and beliefs occurring either within or outside the patient. Therapy (dyadic influence situation) presents many, if not innumerable, opportunities for dissonant cognitive experiences within the patient and, therefore, therapeutic change. This writer hypothesizes dissonant somatic or neural states between therapist and patient can also lead to positive therapeutic change if the patient's dysregulation is aided by the therapist's regulation.

Siegel (2001) discusses how the structures of the brain give rise to the mind and how clinical interactions of these structures between therapist and patient promote neural-connectedness. This in itself is a form of communication that both goes beyond and underlies the Rogerian, Freudian, operant, and cognitive communications presented in this section. This level of attunement can encompass the somatic and unconscious processes between therapist and patient and identify a critical "neural bookmark" to traumatic memories and BSP intervention (Corrigan & Grand, 2013, p. 760).

Grand's (2013) Dual Attunement Frame is defined as:

The containment provided for the client by the therapist's simultaneous attunement to the relationship and the Brainspot. The frame allows the client to effectively use the adaptive nature of the nervous system to locate whatever is unhealed and to resolve it internally (p. 154).

A psychotherapist can be described (sometimes disparagingly) as "someone to talk to," and therefore, someone "who listens." However *what* the therapist listens to within the vast amount of information derived from patient verbalizations, implications, affect, psychomotor movements, and so on is much more multifarious and essential to effective treatment. Grand (2013) notes the BSP therapist can listen at a different level than practitioners of other

orientations: “I am thinking of their brain all the time, and I’m seeing and feeling information flowing down the vast, complex synaptic highways as I hear their story” and attend to “eye/brain/body cues” (p. 65).

Orienting behaviors and gaze fixation. Orienting responses are similar across species, including humans, are the initial and most important ways of attuning to the environment, and precede conscious awareness (Levine, 1997). In mammals, orienting primarily involves the upper torso regions to assist the visual and auditory systems in identifying threat, locating prey, or discerning a potential mate; it encompasses the flight, fight, or freeze mechanisms as well (Scaer, 2005). According to Scaer (live presentation, January 21, 2012), the “orienting response...exists specifically for the purpose of aligning all the major sensory systems which are in the head.” The freeze response in particular, a survival mechanism employed to conserve energy, is thought to be harmful to mammals due to the prolonged activation of the vagus nerve, which can cause cardiovascular problems and possibly death (Porges, 1995).

The term *orienting reflex* is further defined as “a complex of subjective behavioral, autonomic, electrophysiological, and other brain reactions directed towards identifying new and significant stimuli.” (Sokolov, Nezlina, Polyanskii, & Evtikhin, 2002, p. 347) This is characterized prominently by *attention*, or one’s experience of stimuli in the environment and awareness of shape, background, and contrast. (Sokolov et al., 2002). Animals, mammals in particular, go through a sequential cadence of orientation to threat and adaptive needs (sustenance, mates, or shelter): arousal, activity arrest, sensory alertness, muscular adjustments, scanning, locating in space, identifying, evaluating, taking action, and reorganizing. Humans are thought to encounter PTSD symptoms when a phase of this progression is truncated and a

subsequent fixed state results. For example, sensory alertness and scanning are similar to hyperarousal and hypervigilance in the DSM-5 diagnosis of PTSD (Ogden et al., 2006, p. 92).

Humans tend to orient visually to superimposed areas of static images, or those with foreground contrast to background (Barth, Zetsche, & Rentschler, 1998). The position of one's eyes also influences the perception of movement and alters the internal experience of vestibular and proprioceptive signals or areas involved in the awareness of space, distance, and balance (Pettorossi, Panichi, Bambagioni, Grassi, & Botti, 2004).

A primary component of BSP as a psychotherapeutic tool is the use of eye position and sustained gaze. Grand's (2013) hypothesis is that vision and use of the visual field are reflective of ongoing neurophysiological processes. Vision is often thought of as a means of looking out at objects, but within this model it is more accurate to view it as looking within.

Gaze is defined as the line from the fovea (part of the eye located near the center of the retina) through the lens of the eye toward the object being looked at (Klier, Martinez-Trujillo, Medendorp, Smith, & Crawford, 2003). Eye position and gaze has been implicated in audiovisual speech perception (Pare, Richler, ten Hove, & Munhall, 2003; Hirvenkari et al., 2010) and perception of approach or avoidance behaviors and emotionality in others (Adams, 2003; Johnson & Farroni, 2003; Stoyanova, Ewbank, & Calder, 2010; Zhang, Zhao, & Zhan, 2011). Eye fixation was found to be more prevalent and of longer duration the greater the danger of a particular stimulus (Chapman & Underwood, 1998; Underwood, Phelps, Wright, van Loon, & Galpin, 2005), and gaze behaviors varied based on the location, speed, and quality of stimuli in the visual field (Underwood, Chapman, Berger, & Crundall, 2003).

Visual imagery is a component of autobiographical memory and is mediated by the precuneus, an area involved in consciousness, self-reflection, and visuospatial processing. This

area of the brain and associated processes are activated during the re-experiencing of an emotional episodic event (Fletcher et al., 1995). The precuneus is divided into three main components: posterior visual, central associative, and anterior sensorimotor regions (Margulies et al., 2009) and is connected functionally to the superior colliculi, an important brain structure that will be discussed below. Parvizi, Van Hoesen, Buckwalter, and Damasio (2006) found in monkeys that the precuneus is connected with other parts of the posteromedial cortex, especially posterior cingulate cortical areas, which lie between the precuneus and the posterior cingulate area. These areas are associated with the episodic memory systems and involve visual imagery (Immordino-Yang, McColl, Damasio, & Damasio, 2009). This is important to understand because the brain function of primates can be likened, in theory, to that of humans.

Movements of the head and neck, and the consequent engagement of the major sensory organs, are innate and relatively congruent across species. In addition to these inborn abilities, survival behavior is patterned after experiences of attempting to survive and incorporated by the sensory organs. The areas of the brain that guide survival responses are those that dictate arousal, memory, emotions, and behavioral response to threat (Scaer, 2005). The supposition is BSP directly engages these brain areas and promotes change at the level of survival responses. Corrigan and Grand (2013) suggest this is in opposition to “economically-driven symptom-reduction approaches to psychotherapy...that [have] little impact on the core feelings about the self” (p. 763). The neurological level at which BSP is thought to work is discussed below.

Interoceptive loops. Craig (2002) discusses a complex afferent neural system that represents subjective human awareness of how we “feel,” which incorporates levels of pain, temperature, energy, stress levels, emotional state, and so on. This can be understood as a more sophisticated sensory awareness than the sum total of the five basic senses and provides an

internal, immediate assessment of “the material me” (p. 655). The idea of the “material me” has existed long prior to the inception of neuroimaging studies in the work of 19th Century German physiologists such as Wilhelm Wundt, who proposed the theory of the “common sensation” (general bodily feelings) (Craig, 2002). Philosopher, psychologist, and physician William James (1912) also wrote of the consciousness of one’s knowledge of “experience itself” (p. 122) as the basis for self-awareness, emotion, and reality. “Things and thoughts are not fundamentally heterogeneous, but are made up of the same stuff, a stuff which we cannot define as such but can merely sense, and which can be named, if we wish, the stuff of experience.” (p. 122).

British neurophysiologist Charles Sherrington (1966) characterized human sensory experience into five categories: teloreceptive (vision and hearing), proprioceptive (limb position), chemoreceptive (smell and taste), exteroceptive (touch), and interoceptive (visceral). Providing a neurological frame for interoception, Corrigan and Grand (2013) state that “awareness of the somatic sensations, emotions, and impulses to action accompanying the trauma narrative involves the interoceptive loops through the anterior insular cortex (AIC). Body sensations are transmitted to the cortex via the spinothalamic tracts which originate in the spinal cord” (p. 761). The AIC is associated with the homeostasis, emotional and relational experience, and self-perception.

Body sensations are relayed to the cortex via the spinal cord and thalamus (spinothalamic tracts). From the thalamus, information is transmitted to the anterior cingulate cortex (ACC) and the insula, which results in emotional feelings. The thalamus (located between the cortex and midbrain) is considered to be a structure that relays perceptual and motor information to a number of other brain areas. The ACC (located between the prefrontal and parietal cortex) is also a processing area for multiple sensory inputs, including motor and visual stimuli. The insula

(located between the temporal, parietal, and frontal cortices) is related to self-awareness, interpersonal experience, and perceptual and motor functioning. Periaqueductal gray (PAG) is also an important relay area for sensory information from the spinal cord, particularly pain and temperature (Corrigan & Grand, 2013). Supportively, primate studies have shown the insula to contain sensory representations of afferent activation related to physiological states of the entire body (Craig, 2002).

A particular brain structure, the superior colliculi (SC) has also been identified by Corrigan and Grand (2013) as a brain structure critical to BSP. The superior colliculi are located in the midbrain and are also known as the tectum (Wallace, Meredith, & Stein, 2008). This structure receives input from the ocular system and incorporates visual stimuli with other sensory systems (Wallace, Meredith, & Stein, 2008). Microsaccades, minute eye movements implicated in BSP, are thought to be generated by the superior colliculi and used to correct errors in visual input. This includes saccadic reaction time and trajectory and communication between the superior colliculi and the frontal eye fields (Meeter, Van der Stigchel, & Theeuwes, 2010).

Collicular maps are reflective of neuronal activity in the SC and follow a hierarchical progression, which includes the retina encoding the position of stimuli. Input is received in the brain within approximately 70 milliseconds; when a certain threshold is reached, the eyes stop and a fixed gaze is achieved (Tabareau, Bennequin, Berthoz, Slotine, & Girard, 2007). More importantly, however, is the brain's ability to not only look outward, but inward. The SC initiates and maintains eye movement and gaze fixation which, in addition to outward visual and auditory input, maintain awareness of internal interoceptive activation related to salient clinical material (Corrigan and Grand, 2013).

The posterior cingulate cortex (PCC) links long-term memory with head and eye movements. Vogt and Laureys (2009) propose six stages of emotional processing involving this and associated brain areas:

1. Extracting self-relevant information from multisensory inputs;
2. Relaying these inputs to memories;
3. Inputs information about the body in space;
4. Orient the head and body via projections to the spinal cord;
5. Activation of intentional behavior;
6. Information is processed into appropriate autonomic and behavioral outputs to the midbrain.

Taken together, these structures make up an interoceptive loop, which acts on nuclei in the brain stem to produce changes in the autonomic nervous system. The set-up phase of BSP (e.g., “where do you feel it in your body?”) necessarily involves this loop, with insula activation as “the point of visceral and emotional awareness” (p. 761) and eye position as a mediating influence on the level of activation. The Dual Attunement Model takes into account the cognitive, neurobehavioral, and dynamic properties of these brain areas to implement the BSP process.

Summary and Conclusions

BSP (Grand, 2013) is based on several existing types of psychotherapy including EMDR, SE, and psychoanalytic psychotherapy. LI and SP were also discussed as psychotherapies theoretically associated with BSP. BSP evolved out of the chronological progression of Grand’s work from psychoanalysis and insight-oriented psychotherapy, to an introduction to EMDR (Grand, 2001), to innovations and alterations to classic EMDR protocol with added aspects of SE, and finally the fortuitous discovery of BSP. This review has also theoretically associated BSP with certain neurobiological brain areas and functions, particularly those involved in interoception and eye positioning.

Associated psychotherapies and neuropsychology form the basis for this study, which is unique and necessary in that it can provide in-vivo information on what actually occurs in a BSP session. Castonguay, Boswell, Constatino, Goldfried, and Hill (2010) state that there is clear evidence for psychotherapy's efficacy and effectiveness, but that that any psychological treatment also has the potential to harm patients (i.e., deterioration). Problems can arise as a result of inadequate management of countertransference reactions, confrontational self-disclosures, adherence to one interventional modality at the exclusion of potentially beneficial alternatives, and so on. To minimize potentially harmful effects in psychotherapy, therapists have the responsibility to monitor change and be aware of deterioration. In addition, they must build therapeutic alliance, prevent and repair toxic relational and technical processes, use techniques with empirical support and at appropriate times, adjust treatment options to meet the needs of individual patients, and recognize their own individuality and unique characteristics.

Acknowledging the potential for harm in psychotherapy, studies such as this one add to the available information for a technique or idea, in this case BSP. This has the potential benefit of elucidating the most helpful elements of BSP and identifying aspects that can produce harmful outcomes. The data analyzed by means of the constructivist grounded theory methodology used for this study are detailed and nuanced, and can be reflective of the same intricacy inherent in any psychotherapeutic interaction. This methodology is considered an academically reasonable way to capture the essence of BSP as it exists in a real-world psychotherapeutic interaction. Given BSP's relatively new nature when compared to other established psychotherapies, more research is required in all areas of study, whether descriptive, correlational, or experimental. This study can capture real-world foundational elements that can be used to fill gaps in existing

literature in a markedly functional manner. The specific elements grounded in actual psychotherapy sessions illuminate theoretical concepts as clinically applied.

Chapter II contained a review of the literature and described a philosophical and clinical basis for BSP as a psychotherapeutic model. Chapter III describes the historical underpinnings of the model used in the study, constructivist grounded theory, and the processes by which it will be used to analyze the data.

Chapter III

Research Model, Methods, and Procedures

The aim of this research study, and the use of the qualitative method *constructivist grounded theory* in particular, is to describe BSP as it is enacted in psychotherapy sessions and support a framework for how future research should be conducted. Because BSP is a complex, nuanced process and relies heavily on a difficult to quantify set of assumptions, qualitative research is best suited to comprehend the nature of this phenomenon. This chapter will include a background of constructivist grounded theory and the procedures used for data collection and data analysis.

Background of Grounded Theory

According to Creswell (2007), grounded theory was adapted from sociology in the late 1960s by Glaser and Strauss, who were dissatisfied with the manner in which research at that time approached knowledge. As opposed to having an a priori set of assumptions about a phenomenon, Glaser and Strauss (1967) posited that “theories should be ‘grounded’ in the field, especially in the actions, interactions, and social processes of people” (p. 63). Eventually, both theorists came to disagree on several key facets of grounded theory and took to criticizing each other’s work. The fissure between these theorists and how each of their methodologies are applied to this study will be discussed later in this chapter.

Aldiabat and Le Navenec (2011) provide a thorough discussion of the roots of grounded theory in symbolic interactionism. Symbolic interactionism is a 20th century approach championed by Mead (1962) and Weber (1978) and encompasses five main concepts: the self-concept, the object, role-taking, looking-glass self, and definition of the situation. The self-concept involves constant communication between the “I” and the “Me.” This process provides

evaluation of the self as related to the self and the self as reflected back by others in the environment. The “I” in this sense is the individual person, and the “Me” is the social, interpersonal self that provides the “I” with evaluations, opinions, and expectations of others. The object can be one of the three following: physical objects (pencil, car), social objects (friends, colleagues), or abstract objects such as a belief or idea. Objects only mean something within this theory as they relate to social interaction between humans and the value or conceptualization placed on them from said interaction. Meanings placed on objects, then, are impermanent and subject to the changing zeitgeist and differing relationships of people over time (Aldiabat & Le Navenec, 2011).

Since humans possess the aptitude of meta-cognition, they can also view the self as an object (“the looking glass self”). Aldiabat and Le Navenec (2011) state: “Taking the self as an object means seeing oneself from the subjective perspective of others. The ‘looking-glass self’ clarifies this self-reference by invoking the idea of the person seeing the self in the perceptions of others, rather like a person sees his or her reflection in a mirror.” (p. 1066). More simply put, humans can see themselves as others see them. The authors continue, recalling the “I” and “Me” interaction, with the former being the active portion of the self that plans and executes goal directed behavior, and the latter functioning in a more passive manner and as the object on which others’ actions are directed. Role taking becomes inherent in this process, since the self as an object exists in part because of the meaning placed on it by others, including the “I.” Put another way, one can imagine oneself as viewed by the self and by the other, and thus a role is derived from this. Through the use of definitions of others and objects, humans are able to define situations in any way they choose. This can be a substantial undertaking, since any definition of a situation fundamentally defines the self in relationship to the outside entity.

Aldiabat and Le Navenac (2011) believe grounded theory and symbolic interactionism are similar for the following reasons:

(a) Symbolic Interactionism provides a guiding framework to collect data about the meaning of a particular type of behaviour and the contextual sources of such meanings, and how they change in and through social and physical time and space; and (b) Grounded Theory methodology affords a systematic approach to generate a theory that illuminates human behaviour as a social process among actors in their interactional context. (p. 1068)

Supportively, Creswell (2007) describes grounded theory as a “design in which the inquirer generates a general explanation (theory) of the process, action, or interaction shaped by the views of a large number of participants.” (p. 63). This approach is motivated by curiosity and shuns a hypothesis that precedes data collection, creating an opportunity for as pure an experience of the phenomenon as possible, and therefore, an accurate depiction of the construct.

In an epistemological sense, knowledge is grounded in the data, not in a priori theory dictating the interpretation of the results. Strauss and Corbin (1998) outline several important assumptions motivating grounded theory and provide a framework for both the epistemological and ontological underpinnings of the approach. First, there is the need for the researcher to experience the world in vivo and derive knowledge directly from the original source of knowledge. Meanings about the world come from the symbolic interactions of the participants with others and objects, and people make choices and take action based on the arrived upon assumptions. Grounded theory allows for beliefs, theories, and perceptions to change as situations evolve and people interact different and dynamically over time. This takes into account the inherent subjectivity of human experience and the multiple factors pervasively and uniquely influencing the individual. In addition, it posits that people take active roles in making meaning of their environment and experiences.

To more fully understand grounded theory, a brief discussion of Husserl's transcendental phenomenology, as described by Moustakas (1994), may be helpful. "It emphasizes subjectivity and discovery of the essences of experience and provides a systematic and disciplined methodology for derivation of knowledge" (p. 45). As in grounded theory, phenomenology "utilizes only the data available to consciousness" (p. 45) and "adheres to what can be discovered through reflection on subjective acts and their objective correlates" (p.45).

Contemporarily, grounded theory studies can be approached in two main ways, reflecting the fissure between Glaser and Strauss. Strauss's work was considered by Glaser to be too systematized, thus missing some of the richness and detail of studied phenomena. Strauss's critique of Glaser is of a reciprocal nature, suggesting that Glaser's work lacks some organization and academic rigor (Heath & Cowley, 2003).

Creswell (2007) outlines two common approaches to grounded theory, which reflect the factors contributing to the original methodological disputes between Strauss and Glaser. The first is considered to be a systematic and analytic way to arrive at a theory of process, actions, or interactions within an area of study. The researcher is allowed to enter the field as many times as he or she needs to get a satisfactory sample of information from a population. Each time the researcher returns from the field, new information is compared to the existing categories and added as necessary or altered to fit new awareness or novel ideas. This process is called the *constant comparative* method of analyzing data, a technique that encourages perpetual reevaluation of ideas. Now with a set of categories acquired from the field, the researcher finds a *core phenomenon* and then returns to the data to find additional phenomena that revolve around that core entity. These additional phenomena are made up of causal conditions, strategies, intervening conditions, and consequences. Causal conditions are factors that may have caused

the core phenomena to exist, strategies are actions taken due to the core phenomenon, intervening conditions are situational factors that act on the strategies, and consequences are the results of utilizing the strategies. Finally, the researcher uses a method called *selective coding* to develop hypotheses about the categories that will assist in developing a model explaining the overall phenomenon. What form this takes is up to the researcher and dependent on the discoveries made during the research process.

The second means of applying grounded theory, and the one used in this study, is a social constructivist perspective as outlined by Charmaz (2006). Constructivist grounded theory emphasizes complexity and uniqueness in varying realities and recognizes fundamental variability in human experience. Rather than concentrating on methods, more importance is placed on individual feelings, beliefs, ideologies, values, and assumptions of the research participants. This type of application will be discussed in depth in the following data analysis section.

Procedures

Participants. This study included 16 participants, eight clinicians and eight patients. BSP trained clinicians were found through the researcher's association with the Rocky Mountain Brainspotting Institute (RMBI). RMBI president Pie Fry, PsyD, authorized administrative assistants to request clinician participants via email from a pool of associated members of RMBI. Clinicians were asked to contact this researcher and meet the following criteria:

1. licensed to practice psychotherapy in their state of practice according to their individual discipline (e.g., clinical psychology, medicine, social work, etc.);
2. completed at least phase II BSP training;
3. acquired at least three years of BSP experience;

4. self-identify as BSP psychotherapists.

The recorded BSP session was from a normal, scheduled psychotherapy appointment and was not to be outside of the scope of the already agreed upon treatment regimen between patient and therapist.

Patient participants had to have met the following criteria to be considered for this study:

1. be over the age of 18;
2. have an established clinical relationship with the clinician;
3. per the clinician's clinical judgment, the potential participant is able to freely and consciously choose to participate or not participate in this study;
4. not currently meet criteria for the following DSM-5 diagnoses: neurodevelopmental disorders, schizophrenia spectrum and other psychotic disorders, dissociative disorders, or primary substance abuse disorders;
5. per the clinician's judgment, possess psychological stability to the degree that harm would be *very unlikely* to occur as a result of participation in this study. This stability must have been present for greater than one year.

Overall, patient participants exhibited symptom stability, which was evidenced by their ability to perform activities of daily living, including taking care of basic physiological needs such as feeding and bathing. In addition, there was a reasonable amount of social structures in the person's life, for example, the existence of natural supports in the form of family and friends and occupational or academic relationships. These all encouraged the ability to effectively manage general life stressors so they were not significantly debilitating to the individuals' functioning. Patients signed a disclosure of information form which abided by the federal HIPAA Privacy Rule. Participants were sent an informed consent form (See Appendix A and

B), a list protocols (Appendix C) and an official invitation (See Appendix D and E) and contacted to set up a time for the data to be collected. They were all given a reasonable amount of time to ask questions or raise concerns about the process of this study prior to participation. Participants were told explicitly that they could end participation at any time and without penalty.

There has been a notable convergence among mental health clinicians in terms of what term is used to describe recipients of mental health services (Sharma et al, 2000). Common terms include “patient,” “client,” “consumer,” or “survivor.” This particular study surveyed various providers of mental health care and determined there is a lack of universality among clinicians regarding their chosen term. This researcher chose the term *patient* quite deliberately. Client is a term used by many professions to indicate a recipient of a service. Often this arrangement is of a business or financial nature, for example an attorney-client or accountant-client relationship. Consumer is a term that suggests a measure of passive depletion of a resource and can easily have negative connotation. Survivor seems rather specific to a certain existential experience of physical subsistence.

The word *patient* is of Latin and Greek origin, loosely meaning one who suffers, endures, or hurts (patient, n.d.). As determined by Sharma et al. (2000), preference for a particular term is subject to age, gender, type of site, diagnostic features, or employment status variables, as well as whether the person is a provider or recipient of mental health services. It can be extrapolated, then, that terms are based on personal preference. This researcher does not believe that the terms client or consumer fundamentally incorporate the suffering commonly involved in presenting for mental health services. In other words, it is supposedly unlikely that someone would wish to have psychotherapeutic or psychiatric care if he or she felt psychologically healthy. Both terms

necessitate a business-oriented relationship centered on monetary exchange but do not necessarily involve suffering. Survivor is omitted because of its relatively miniscule percentage of preference among providers and recipients (0.0% and 7.0% respectively) (Sharma, 2000).

Data collection. Collection of data occurred in the offices of RMBI-associated clinicians in rooms set up to provide confidential psychotherapeutic treatment. The therapists were sent a digital audio recorder to be used in the session. The device was returned in a self-addressed, postage-paid, certified package that was sent directly to the Michigan School of Professional Psychology, where it were signed for by Ann Smith, PsyD. Of the 16 participants (eight patients and eight therapists), each dyad underwent one 45-minute BSP session, which was audio recorded, and one post-session debriefing conducted by the therapist that lasted approximately 15 minutes (See Appendix E . A written transcript was derived from each therapy and debriefing session for a total of eight transcripts. This made up the data set.

Throughout transcription and analysis of the data efforts were made to keep the identity of participants hidden. The data exists only in digital form on the personal computer of the researcher, as do the transcripts. They are also stored on a cloud drive for back-up purposes. The data will be kept for a period of seven years to in accordance with American Psychological Association guidelines. After that time, it will be destroyed.

Data analysis. Data was analyzed using the constructivist grounded theory approach as outlined by Charmaz (2006). This form of analysis has emerged in the past decade and emphasizes process. It involves sequences of minute events, which lead to insights into the larger whole of a phenomenon.

Coding.

Coding is the first step in constructivist grounded theory data analysis and serves to describe meanings and actions occurring in the data. It forms the framework for ongoing analysis. Through this process, the data was broken up into component parts or properties, which allowed the researcher to illuminate implicit actions and meanings, locate tacit assumptions, compare data with data, and identify any potential gaps in the data.

The first step in the process, initial coding, helped the researcher remain open to theoretical possibilities and begin to separate data into categories and illuminate processes. Initial codes were seen as provisional and were altered as analysis progressed and comparisons between codes were made. Charmaz (2006) illustrates three types of initial coding, which are word-by-word coding, line-by-line coding, and incident-to-incident coding. This study employed the line-by-line method, which Charmaz notes is commonly used by grounded theorists and is especially effective when dealing with processes captured by interviews, observations, and narratives.

“Detailed observations of people, actions, and settings that reveal visibly *telling* and *consequential* scenes and actions lend themselves to line-by-line coding” (p. 50). The reason for coding lines, as opposed to complete sentences, is that important information may be overlooked if the data are read for general themes in common sentence-by-sentence fashion. The line-by-line method has been shown to elucidate unique ideas and ways of observing the data. This was also chosen specifically as a means of reducing bias by limiting the researcher’s ability to unconsciously assume meaning from a typical, full sentence. Line-by-line coding enhances confirmability within trustworthiness which will be discussed in further detail below.

Charmaz (2006) discusses specialized codes called *in vivo* codes, which are terms used by the participant possessing a meaning distinctive to them. *In vivo* codes often reflect a general

term that has a specific meaning within a particular context, such as an organization or group. This was of particular use when studying BSP, as there was some language or terminology exclusive to this paradigm or possibly, to a larger extent, the psychotherapeutic community. *In vivo* codes helped give context and crystallization to assumptions, actions, and imperatives to the studied phenomena. An example of an *in vivo* code from this study is the word *just*, which provides important contextual information and is discussed in further detail in the next chapter.

The second phase of the coding process was *focused coding*. Focused coding took the most frequent or significant codes from the pool of line-by-line codes and began to group them into categories and imperatives relative to the topic of study. In other words, certain frequent or important codes were used to explain larger segment of the data and expunge irrelevant or inconsequential data. An example of focused coding was *patient clarifying therapist directives*, which eventually became an aspect of *negotiating eye positioning*.

Next, *theoretical coding* is a sophisticated level of coding that used the codes selected during the focused coding process. This is a process used to relate codes to one another and lay the groundwork for developing theory. It integrated codes into a coherent, analytic summary. An example of theoretical coding is *negotiating eye positioning*, which eventually became an aspect of the linking phase.

Memo-writing. *Memo-writing* is an important early step in the grounded theory research process to help analyze data and codes. It is a conversation of sorts within the researcher himself to bring to the surface thoughts, questions, concerns, comparisons, and connections. Memo-writing was a time for the researcher to compare pre-existing ideas to current preliminary conclusions as a means to help direct or re-direct continuing study.

The memo-writing process began with *clustering*, a non-linear, flexible technique to visually diagram relationships between theories and categories derived from the data. The researcher started with the main research question in the middle, and ideas started to branch out to smaller subclusters of related material. This researcher worked quickly, used his intuitive processes, and performed the clustering process several times until current knowledge was exhausted. After clustering, *freewriting* was a way to synthesize the clusters into written material, evoke thoughts and feelings in the researcher, and spur new ideas (Charmaz, 2006).

From the above process, memos were created in the form of narrative statements that defined categories, explicated facets of the categories, and specified conditions under which the categories arose, were maintained, and changed. Additionally, categories were related to one another to help represent the researcher's theoretical or substantive explanation of what was happening within the data. Memo-writing formed an evolving, and increasingly more specific core of the emerging grounded theory (Charmaz, 2006).

Theoretical sampling, saturation, and sorting. *Theoretical sampling* was a means of identifying important data that were advanced into a working theory. The main purpose was to move from descriptions of participants' experience to gaining a meta-analytic understanding and conceptual and theoretical development. This was achieved through a process of *abductive reasoning*, which included making theoretical conjectures and then comparing them against original data. In moving toward formation of a hypothesis, abductive reasoning was an opportunity for the researcher to consider multiple theoretical explanations for a phenomenon, form hypotheses underlying each explanation, check them against data, and then pursue the most reasonable explanation. This makes use of the constant comparative method, wherein possible hypotheses were continually tested and re-tested against the data.

Theoretical sampling aimed to make categories specific and explanatory, ground conjectures in the original data, analyze connections between categories, and make theoretical statements more parsimonious. Using this analytic technique too early in the process can result in prematurely discarding categories or returning unfocused or inaccurate categories. Thus the data had to already have been scrutinized meticulously through the coding and memo-writing processes.

Saturation occurred when data analysis no longer resulted in new theoretical insight.

Glaser (2001) states:

Saturation is not seeing the same pattern over and over again. It is the conceptualization of comparisons of these incidents which yield different properties of the pattern, until no new properties of the pattern emerge. This yields the conceptual density that when integrated into hypotheses make up the body of the generated grounded theory with theoretical completeness. (p. 191)

The researcher then worked toward the integration of theories and clarifying and diagramming connections between categories in a procedure called *theoretical sorting*. The following steps were used:

1. Sorted memos by the title of each category
2. Compared categories
3. Used your categories-carefully
4. Considered how their order reflects the studied experience
5. Thought how their order fits the logic of the categories
6. Created the best possible balance between the studied experience, categories, and theoretical statements about them. (Charmaz, 2006, p. 117)

Trustworthiness. As discussed by Shenton (2003), the idea of *trustworthiness* has been put forward as a qualitative research equivalent to validity and reliability in more positivistic quantitative studies. Shenton (2004) suggests the work of Guba (1981) is a viable means of evaluating the academic rigor of a research study by assessing credibility, transferability,

dependability, and confirmability. The respective quantitative parallels are internal validity, external validity, reliability, and objectivity.

Credibility. The purpose of credibility is to ensure that this study is measuring what it intends to, in this case actual BSP sessions and not another form of therapy or practice. Using systematic recruitment methods can provide evidence of credibility. Recruitment occurred via email requests of self-identified brainspotting practitioners who are associated with a BSP organization, RMBI. To be included in the study, each practitioner had to be licensed, have completed at minimum Phase II of BSP training, have at least three years of experience providing BSP therapy, and self-identify as a BSP psychotherapist. Transcripts included in analysis were also assessed by the researcher for face validity, and each was consistent with a psychotherapy session implementing BSP processes.

The methods, procedures, and results of the study were subject to scrutiny by the dissertation committee, which also included the developer of BSP, David Grand. His positive assessment of the credibility of the data as accurately portraying BSP sessions is further proof of valid measurement. In addition, two randomly selected transcripts were independently reviewed by the dissertation chairperson for clarity and accuracy based on the methodology and BSP framework.

The methodology's focus on free-choice and reduction of the possibility of coercion necessitated the assurance of participant honesty. Therapist participants, who voluntarily participated, were directed to follow a prescribed cadence of patient recruitment aimed at reducing the power differential in the therapist-patient dyad. It was made very clear that any participant could withdraw from the study at any time without negative consequence from their therapist, the researcher, or associated institutions.

My background is also an assurance of credibility. I am a Phase III BSP practitioner and a licensed psychotherapist with both Master's and Specialist degrees in clinical psychology, in addition to finishing all requirements for a doctoral degree but completion of dissertation. I have been independently practicing psychotherapy and performing psychological testing since 2007 and has also been a mentee of David Grand since approximately that same time.

Transferability. Transferability assesses the ability for the results of this study to be generalized to other contexts or populations. In other words, what is the degree to which the elements of BSP identified in this study can be also seen in other BSP sessions? This is difficult to assess because of the methodological focus on description rather than efficacy or effectiveness. Rather than rote transference of the results, it can simply be suggested that the results may offer additional guidelines for incorporating the identified essential elements into practice and for future research.

Dependability. The repeatability of this study is readily achievable in terms of participant recruitment, data collection, and constructivist grounded theory analysis. Even with the exclusions (e.g., Phase I trained BSP clinicians, schizophrenia spectrum diagnosis), there are likely many available participants for replication of this study.

Confirmability. Confirmability attempts to preserve as much objectivity as possible in the sense of reducing biases that may negatively impact the results. Positivistic ideologies expect researchers to be devoid of personal motivation, unconsciously-held biases, political proclivities, and so on. This researcher does not believe absolutely objective or apolitical states can be achieved in research. With that stated, this researcher is admittedly a practitioner of BSP (in addition to other psychotherapeutic approaches) and has undergone approximately a decade of treatment primarily incorporating BSP therapy. Many will view this as a limitation that inhibits

the ability to provide an objective assessment of BSP. This is an absolutely warranted consideration, and one that has been routinely evaluated from the inception of this project in 2010 to the present moment. I would like to very clearly acknowledge that unconscious biases are inherent in this document based on long-standing contact with the subject matter.

In the service of reducing bias, my chairperson continually issued challenges to assess for motivations that could taint the research; both those within and outside awareness. Therefore, it was brought to my attention routinely that I have had long-standing immersion in the BSP community, both as a patient and clinician. I was continually motivated to write with extreme clarity and not assume that my reading audience could readily understand the ideas presented in this dissertation. For example, comments were made such as: “As evidenced by? How do you know this?” or “Be crystal clear. Translate this sentence. Give a specific example.” Peer-reviewed journal support was continually required to aid in clarity and provide evidence to support assertions. Finally, I met with my chairperson and a member of the school’s Institutional Review Board (IRB) to discuss issues of trustworthiness and the emerging findings of the research.

In addition, I consider myself to be a critical thinker with intrinsically skeptical personality characteristics. Not only did I once regard psychotherapy as a deceptive and phony institution, I also initially considered BSP to be a rather improbable means of “helping.” My initial reaction was that I was being coerced into spending a great deal of time and money for something that was fundamentally unhelpful. However, BSP promoted clinically-significant changes in terms of my problems, which were sustained long-term based on continual reassessment of the initial concerns. Readers may consider that my history is not so much a

diminishment of scholarship, but a distinctive advantage in the critical assessment of BSP and evidence of confirmability in the research.

The systematic procedures of coding, memo-writing, theoretical sampling, saturation, and sorting were a non-linear manner of understanding, testing, and theorizing about a phenomenon, in this case, BSP. Engaging with data in this way aimed to answer the research question, *what are the essential elements of a Brainspotting session?*

This chapter described the philosophical history of constructivist grounded theory, the procedures for data collection and analysis, and the way these were used to thoroughly and accurately describe the research question. Chapter IV will be a presentation of the research findings.

Chapter IV

Presentation of Findings

Constructivist grounded theory analysis of brainspotting (BSP) sessions returned three conditions underlying six identified phases of BSP therapy. The conditions and phases presented themselves through the constructivist grounded theory procedure of coding, memo writing, theoretical sampling, saturation, and sorting. A *condition* is defined as “something essential to the appearance or occurrence of something else,” “an environmental requirement,” “the physical or mental state of a person,” and “a state of being.” (condition, n.d.) They include the therapeutic recursion condition, maintenance of attention condition, and psychodynamic condition. These are to be considered non-hierarchical phenomena and are presented first because of their ubiquitous nature. The therapeutic recursion condition is presented initially due to its pervasive existence in the other two conditions and all six phases.

A *phase* is defined as “a particular state in a regularly recurring cycle of changes” and “a distinguishable part in a course, development, or cycle.” (phase, n.d.) The six phases include chief complaint, constriction, linking, expansion, de-escalation and conclusion. Intermingled in the presentation of both conditions and phases are in vivo codes, or words having a specific meaning unique to the essential elements of BSP.

Please note that the bracketed word “pause” in the following verbatim transcript excerpts indicates a period of time without verbalizations by either patients or therapists. This is a period of time significantly longer than pauses occurring in the typical course of conversation. These sometimes lasted up to a minute or more.

Therapeutic Recursion Condition

This condition is concisely described in this study as *continual reassessment of subjective affect*. It first arises with therapists asking the patients to rate their level of affective feeling from 0 to 10. This is an initial assessment occurring in the chief complaint or constriction phases, and is reassessed continually as the session progresses. Subjective assessment by patients occur both in a quantitative and qualitative sense, with the latter encompassing a wide range of emotional states. Regardless of degree and quality, the *where* of the affect seems to have primary importance and will be discussed further during in the constriction phase.

Therapeutic recursion is the most important condition of BSP, since it is inherent in the other two conditions and in all six phases. It can be seen as an element revolving around the subsequently discussed chief complaint phase, whether in the beginning, middle, or end of the session. Therapists are observed continually reconnecting with aspects of the chief complaint in a recursive manner. In other words, patients are repeatedly exposed to the initial chief complaint throughout the session as novel cognitions, feelings, or memories emerge and are verbalized.

Therapists seem to flexibly apply this condition in response to patients' shifting mental and physical states. Rather than relaying specific quotes to describe this pivotal condition, it will be incorporated into each condition and phase, and lend an understanding to the overall essential elements of BSP.

Maintenance of Attention Condition

This condition is concisely described as *emphasis on continual noticing and observing*. Therapists encourage ongoing attention to somatic or mental phenomena that occur in relation to the chief complaint. This type of attention is reinforced by the therapist throughout the BSP session. This manifests in therapist directives to “notice,” “notice the connection,” “observe,”

“keep observing,” “see what comes,” “stay with that,” “just be with that,” or “explore.” The verb “notice” is considered an in vivo code with a unique meaning in BSP, based on its frequency and use across transcripts. This emphasis appears to encourage maintenance of ongoing attention with an attitude of mindful acceptance of what naturally occurs. When patients make verbalizations that could be interpreted as self-limiting or judgmental, therapists redirect patients to this type of attention.

Interference may occur in the form of patients’ defenses or therapists’ over-intervention. This type of attention is facilitated by a particular stance taken by therapists, which can be termed affirming, curious, encouraging, and supportive. Notably, while therapists’ have a curious and open stance, there are instances of stark directivity. In one sense, this can be interpreted as interfering with the patients’ natural process; however, directives often have the function of facilitating, rather than truncating, patients’ intrapsychic movements. A statement indicative of this would be “Why don’t you just explore that? Let yourself go and see what happens.”

There is also an apparent expectation that patients’ awareness will shift, as if there is an assumption that awareness will move somewhere beyond the current state. Further, the expectation is that awareness will go somewhere unexpected. Therapists reside in a place wherein patients’ processes are a mystery that will unfold if uninhibited. One therapist states, “Let it just keep coming however it needs to. Just keep observing without judgment.” Another therapist subtly confronts defensiveness: “Just wondering about the need for protecting yourself,” followed by “just notice.”

Connected to the above concepts, therapists also convey a sense of faith in basic physiological processes. This seems to focus mainly on peripheral nervous system (PNS) functions, including both the autonomic (ANS) and somatic (SNS) divisions. For example,

therapists encourage patients to “keep breathing” or “bring your awareness into your body...you said ‘I feel like I just have to throw up.’” This evidences attention to respective ANS and SNS functions. The following is exemplary of this:

Therapist: Just follow your body’s impulses. Let your mind, body do whatever it needs to.

Patient: My leg is really feeling like it’s twitching – my right leg. Like, it wants to run away.

Therapist: Just keeping following the impulse in your leg so your mind, body does whatever it needs to do.

Patient: It really wants to run.

Therapist: Just keep letting it do whatever it needs to do.

The above evidences the therapist’s support and allowance for natural physiological impulses. Again, there are directive statements with supposed intention of facilitating an anti-directive attitude in the patient.

Psychodynamic Condition

This condition is concisely described as *conceptualization of the chief complaint in a historical context*. This is enacted through recollections of past experiences as a means of informing the current problem or problems. Patients recall salient past events that include abuse and neglect, dysfunctional relationships, psychic conflict, or general pain associated with early development. Therapists also incorporate dynamic objects into the patients’ here-and-now experience and draw on the accompanying emotional experience based on these prior relationships, often drawing on patients’ history.

The following is an excerpt evidencing this focus:

Therapist: [S]o what we’re going to be working on today is a trauma that happened back when you were a child. How old were you?

Patient: Four.

Therapist: Okay, and can you just tell me a little about what happened?

Patient: I was tied down to a tree – a tied to a tree, and I was terrorized by my brother and his friend who dressed up in a trench coat and hat so I couldn't see his face and he...they told me he was the boogeyman and was going to get me. And I could not run away. I couldn't. All I did was scream and no one came to help me or anything. And it continued for a long several minutes.

Another example:

Therapist: Okay, so what I'd like you to do is, you said this has been going on for two or three weeks. I'd like you to kind of go back and see yourself before it started with her, as if you're watching yourself like a movie, notice what moment, or moments, when things begin to shift for you.

Patient: I don't know.

Therapist: Just take your time.

Patient: I just can't see it at all, it's like gradual, and it's just a gradual buildup and it started to escalate through that period.

Therapist: So, again, watching it escalate what were the kinds of things that happened. The buttons it pushed in you that caused it to escalate.

Patient: I'm getting better, although I'm getting restless, unwilling to do it. Too many roadblocks in my way to do it. There's avoidance, I'm avoiding something.

Therapist: Be with that knowledge and see where it takes you.

Patient: Something, like, dropped to the earth...

Therapist: That's what it feels like?

Patient: Yeah, I don't even know what that is.

Therapist: Well, go back to what you said, that you felt you were getting better, but also feeling restless. Like you were wanting to do certain things but there's some blocks in the way, like you were trained to follow her instead of following what you want. Just go with that knowledge.

Patient: Yeah, that's the path to despair. You know, I don't even know what that is, but I do know what that is.

Therapist: Then what was it?

Patient: That I'm really angry. Really, really angry.

Therapist: Can you visualize her?

Patient: I can feel her.

Therapist: What do you feel?

Patient: It's like a rising. It's like she's tucked away here, and she's tucked away here, and I feel a rising up from the floor. She's here.

Therapist: She's here right now?

Patient: Yeah, once that started.

Therapist: Once what started?

Patient: That switch from the calm to the restless, that's what it seems like.

Therapist: Do you feel like you are with her right now?

Patient: No.

Therapist: Could you get her to come to the door and invite her in?

Patient: Yes.

Therapist: Ok, why don't you do that.

Patient: She's here.

The above dialogue suggests something within the patient is fueling a sense of anger. It is unclear from the transcript whether "she" is an aspect of the patient herself, or a person existing outside her. In either case, psychodynamic therapy often includes insight into prior relationships that inform the presenting problem. The therapist continues to aid in the patient's in-the-moment connection with the "she" object through visual description and fostering a fantasied interaction.

Therapist: ...can you describe her? What does she look like?

Patient: Um, blonde hair, curly, white dress, looks like a doll. An angry doll.

Therapist: Uh huh. And how are you and she interacting right now?

Patient: Um, we are now.

Therapist: Would you like to, or just maintain where it is?

Patient: I'd like to. I mean I'm a little afraid. Of her anger.

Therapist: Could you let her know that? And start there?

Patient: Yeah, she seems surprised.

BSP sessions show patients and therapists managing dual awareness between current and past aspects of the self. This is enacted both in the sense of how the current self is experiencing the past self, and vice versa. Therapists relate these dynamic interactions in some manner to the chief complaint and correlate to somatic sensation and eye location. The following is a passage involving a patient experiencing a range of painful emotions associated with being harassed and eventually fired at work:

Therapist: So bring the present day self, who has really embraced the spiritual path, who is attracting new people to you, let her step into the office with this two years ago part that got fired. Can you be with her now?

Patient: [Pause]

Therapist: Okay, let your present day self be there with the part of you from two years ago, that's been frozen in that office. Look into her eyes. She does not know what's going on right now, everything is swirly and confusion. Be with her. Can she feel you?

Patient: I think so.

Therapist: Okay, keep breathing into it and seeing her, let her see you now – as she shows you everything that happened.

Patient: [Pause] Yeah, the old [patient's name] was just feeling abandoned, lost. All the sudden no stability, nothing. I'm trying to have the new [patient's name] hugging her, telling her "it's okay."

Therapist: Let her know you're here for her now – you feel really abandoned and lost, I hear you. I hear the depth of your confusion, I hear your abandonment, I hear your loss. Let yourself keep receiving her, you don't need to fix her, she needs your witnessing.

There's something that you've been carrying from then to now. So let yourself witness her.

Another example involves a patient engaging with the projected awareness of a deceased father:

Patient: [T]here are probably more things that my dad did and said that had meaning and were meant to help me and others that were just abusive. And I just rejected him so, I rejected all of it. I rejected the good along with the bad. I didn't want to hear anything that he had to say to me, even if it helped me. I didn't want any connection to him at all period.

Therapist: Notice what happens in your body in this moment when you say that.

Patient: [Pause] You know, it's like he's here.

Therapist: He's here? He's passed away right? Okay, so in sensing him here, notice what happens in your body – let me ask you a question, do you want him here right now?

Patient: Oh, I think he came to tell me something.

Therapist: He came tell you something, okay.

The presence of the patient's father seemed to arise naturally out of a chief complaint associated with shame and lack of empowerment. The therapist is emphasizing the feelings present at the moment, and facilitates in the moment communication with the patient and her father:

Therapist: And also notice if there's anything you need to speak to him.

Patient: [Audible tearfulness] I spent my whole life trying to get even with you. And I just hated you so much for what you did to me. I also hated you for what you did to my brother. It's like you never really cared about anybody but yourself. Not really, you just sort of pretended. But I mean, like really deeply, did not care about what you did to us.

Therapist: And notice if he speaks to you in response.

Patient: I feel so defenseless. And I feel that way right now.

The following not only engages a prior external relationship, but incorporates a dynamic child part within the adult patient. And an interaction between aspects of the self are again facilitated:

Patient: I felt so small and so young inside sometimes.

Therapist: You feel so young inside.

Patient: And I try so hard to act like it's okay but it's not.

Therapist: Is that how you acted with him? That everything was okay but it wasn't?

Patient: It's so not okay.

Therapist: Yeah, tell him it's not okay.

Patient: It's not okay!

Therapist: I pretended so much but it wasn't okay.

Patient: I love you so much.

Therapist: You loved him so much?

Patient: And he hurt me so much.

While these are explicit examples of past dynamic objects being incorporated into the present work, the psychodynamic condition is implicitly present throughout and across BSP sessions. The implication is that the presenting problem is an active representation of something held over from the past.

Each condition is present as a BSP session develops and informs the subsequent interactions. Next, the chief complaint, constriction, linking, expansion, de-escalation, and conclusion phases will be described in the context of the underlying conditions.

Chief Complaint Phase

The initial phase of a BSP session involves negotiation between therapist and patient participants about where focus should be applied. Aspects of this process include encouragement to expose the self to emotionally activating material, asking clarifying questions, and eventually identifying a singular issue to address with BSP. This arises in the form of psychic conflict, emotion, maladaptive behavior, memory, or cognition.

A chief complaint is defined as “a subjective statement made by a patient describing the most significant or serious symptoms or signs of illness or dysfunction that cause him or her to seek health care” (chief complaint, n.d.). Broadly, this is a means of identifying “what hurts” and has value in that it forms a baseline for the interactions and processes that follow. This baseline is referred to continually throughout a BSP session (therapeutic recursion). Some BSP sessions indicate there has been some discussion about the chief complaint prior to the recording of data.

For example a therapist stated:

So the topic that...you discussed with me was about what we'd like to work on with the activation is around your spouse not revealing as much information or not telling the truth or you're suspicious of him not telling the truth.

This suggests some means of communication occurring prior to the recording of data and a chief complaint has resulted from a process occurring outside of this data set. However, it does appear that a somewhat defined focus has been achieved and is accompanied by an emotional state of suspiciousness that indicates other psychological states have been excluded.

Another began with a therapist stating: “Okay, so what we're gonna be working on today is a trauma that happened back when you were a child.” This clearly entails a mutually known phenomenon between therapist and patient with an agreed upon degree (traumatic) and time

(childhood) context. The statement also suggests that the therapist and patient have already decided on a chief complaint to be addressed in this session. Another example follows:

Ok, so what I'd like you to do is, you said this has been going on for two or three weeks. I'd like you go back and see yourself before it started with her, and as you're watching yourself like you're watching a movie, notice what moment, or moments, things began to shift for you.

There are also phenomena that can be considered inhibitive of developing the initial focus. This may be something deemed irrelevant to the clinical context of the session, such as something found humorous by the participants. In response to this, the therapist states: "Okay, just set that aside. All right, so why don't you – you know, the topic that you said that'd probably be a good thing to get started was..." with the patient following with a specific, previously discussed issue: "the relationship with my daughter."

Other BSP sessions begin without a predetermined focus. These begin with statements such as, "so we have to decide what to work with," or a therapist directing the patient to "just say whatever it is that you're thinking about and we can explore it...so then we'll just see what specifically you want to work with." "Just kind of randomly talk about, like, the areas that maybe you wanna work on or that you're aware of activation around" is another example of a more general, versus specific, entrance into this phase.

In either case, the initial engagement with the chief complaint is a process involving attuned attention from therapists to patients' problems, followed by assessing and negotiating what is most immediately painful and worthy of clinical attention. In the service of identifying the chief complaint, therapists ask questions to aid in clarification such as, "So which is more activating to you given that story and not sure what happened there with the neighbor?" Or "So do you want to talk a little bit about the hurdles and getting over it from the past, and see where we're at with it all?"

Even after a chief complaint is decided upon, (e.g., distractibility) further questioning by the therapist is employed to gain a clearer understanding: "...can you describe to me a little bit like of when you're starting to do something and how distraction comes? Or how distraction shows up for you?" This appears to be a process of delineating the chief complaint until a concise, unitary focus is achieved and conscious understanding is confirmed by therapist and patient. Even when a patient entered with an idea of where focus should be applied, there can still exist some ambivalence. The following excerpt evidences the way the therapist and patient address this.

Patient: I'm torn because I know the stuff we've talked about real [inaudible]. But at the same time I realize I do it as well, sometimes, probably not as much.

Therapist: Okay.

Patient: And, I don't know, I go back and forth between how he is and how, you know, like I said – he makes a story so it sounds like he wants it to versus whether I am...like this weekend I was like, am I super paranoid? You know what I mean? Am I – do I make stuff up in my head? You know what I mean? Or look at things negative instead of...does that make sense?

Therapist: Yes.

Patient: I guess because I – because I did the same thing, like I withheld information because I could tell the reaction was going to be worse than I thought. So I'm like, I'm not going to tell him the whole story then. Does that – you know what I...?

Therapist: Yeah, yeah. So which is more activating to you given that story and not sure what happened there with the neighbor, right?

Patient: Right.

Therapist: Which feels more activating to you, that or your self-doubt?

Patient: Quite honestly, I think it's my self-doubt.

Therapist: Okay.

Patient: I think that's what I came to this weekend. I was thinking a lot about it.

Therapist: Okay, yeah.

This progression evidences an initial awareness of the chief complaint, seemingly based in part around prior knowledge, and the movement toward a unitary focus which in this case is self-doubt. This is in contrast to other possible options, conceivably anger, anxiety, mistrust, paranoia, and so on.

When arriving at this place, a final confirmatory statement can be made, for example, “So that sounds like that’s what you want to brainspot today” or “All right, so there’s guilt and shame...so that’s what you’re aware is at the core of it.” This lays the cognitive and somatic foundation for the constriction phase.

Constriction Phase

This phase can also be described as narrowing of attention through a process of identifying a somatic state associated with the chief complaint. Constriction emphasizes *where* the chief complaint is felt (expressed physically) as opposed to a who, what, why, or how means of understanding it. The constriction phase serves an important exclusionary function in the process of BSP. It delimits the possibilities available to immediate awareness and focuses patients on phenomena proximately relevant to the chief complaint. Next, patients rate the degree of felt intensity of the identified body area on a quantitative scale of 0 to 10. Notably, this does not always occur in a quantitative sense, and may be described qualitatively with words like feeling the sensation “stronger,” “more,” or “worst.” More often this process occurred prior to the linking phase; however, it sometimes surfaced after. Regardless, the constriction and linking phases are considered theoretically distinct.

BSP therapists and patients have an agreed upon assumption, although not explicitly stated, that a physical sensation will accompany the emotionality of the chief complaint. Not

only that, but it can be immediately available to patients' awareness and it will have a discernable lower and upper limit of intensity. Therapists ask various types of questions to constrict patients' awareness and rate it quantitatively. The adverb *where* is used consistently across therapists in the service of identifying the location of sensations felt in the body in relation to the chief complaint. These include some variation of questions such as "where are you feeling that?" or "where do you feel it in your body?" In the case of a chief complaint of guilt and shame, the therapist inquires "can you get in touch with that right now...so where are you feeling that?" There is an element of immediacy to the constriction phase that stands concurrently with the historical context of the chief complaint.

Therapists are observed not only directing patients to activation related to the chief complaint, which can be described as an area of distress or discomfort, but to spots seemingly in direct opposition. For example, the therapist asks, "And where in your body do you feel most grounded, calm, and connected?" And the patient responds "Where my body is touching the couch, like my seat and my hamstrings, my knees, lower back." While this occurs sporadically in the constriction phase, this particular type of awareness is more prevalent in the conclusion phase and will be discussed more fully there.

The in vivo code *activate* is a salient piece of the constriction phase and surfaces most often in noun (activation) or past participle (activated) forms. Activation is a byproduct of the chief complaint, and it appears to relate to the psychosomatic arousal accompanying an identified emotion. Activation is located by a process of inquisition and negotiation between therapists and patients. Locating activation is similar to the inquisition and negotiation observed in the chief complaint phase, although this process is completed far more quickly. For example, a therapist asked, "all right, so when you're thinking about this incident, if you were to take a body scan,

where do you feel it in your body?” The patient then responds “my chest.” The following is an example of a manner of locating activation dictated by the patient’s internal awareness:

Therapist: So bring your awareness to your body like you talked before – you said “I feel like I just have to throw up.”

Patient: Yeah.

Therapist: And notice on a scale of 0 to 10 – zero is neutral, 10 is highly activated. How activated is that sensation of not being able to find a place and just feeling like something has to throw up?

Patient: Five or six.

Therapist: Okay, so notice where you feel it strongest in your body.

Patient: Stomach and my ribs and armpit area.

Another example is as follows:

Patient: It was bringing up a lot of anger. I knew somewhere that I knew better.

Therapist: Yeah.

Patient: So the conflict, the internal conflict.

Therapist: So just notice that you’re having an internal conflict, and see if anything comes up with that, and see where it goes, having the awareness.

Patient: It comes to feeling good enough, or something.

Therapist: So this thought that you’re not good enough.

Patient: That I’m not smart enough, that I’m not competent enough, and they just triggered it.

Therapist: Hmmm. Be aware that there’s something inside you that got triggered, this thought or this idea. That you’re not good enough, that you’re not competent enough.

Patient: And that I should accept the situation.

Therapist: And that you should accept the situation. Notice what happens in your body when you speak those words.

Patient: Anger.

Therapist: Do you see where the anger is held in your body? Scan your body, see what happens.

Patient: I can feel my shoulders tightening.

Therapist: Bring your awareness to the tightening in your shoulders.

Another example is as follows:

Therapist: Okay, so right now, just sort of tune into yourself with everything you just said and what I'm hearing is two things and see what's cooking stronger for you: "it doesn't matter what I want" or "where am I in the picture? I don't know how to make my life work?" Something with your dad? And "I'm wanting the approval and recognition." So of all those things that you spoke, notice if there's anything sort of triggering you now in the moment. You know, like the strongest, because I know that they all...

Patient: Yeah, probably the recognition part. And the word that sort of also jumped in there for me was encouragement. You know, you have children, and you know how if they're trying to encourage them, you know it helps people think that they can know how to do something. And I just don't think I got that much.

Therapist: Okay, so just be with that sense of "I didn't get that much and it's affecting me today." And on a scale of 0 to 10, zero is nothing, 10 is highly disturbing...how disturbing is it?

Patient: Like an eight.

Therapist: And if you scan your body from the top of your head, to the tips of your toes, where do you experience it the strongest?

Patient: Probably somewhere here.

Other times it occurs with a less overt cue from the therapist, and arising more naturally from the patient's verbalizations:

Patient: Yes, that was the last straw. But I think the constant harassment, it was getting to the point of harassment. And the more I fought them, the more people said, "You don't fight against them, nobody wins." And the more I fought against them, and not by fighting, just by standing up for myself, everyone said, "No you say 'yes ma'am, can I have another?'" That's what I was told I was supposed to do. And nobody ever stood up to her the way I did, where I said "document it." And they turned up the heat and eventually realized I wasn't just going to get up and quit. And it left a bad taste in my mouth.

Therapist: A bad taste in your mouth. So right now, as you're talking about it, do you still kinda feel that bad taste in your mouth?

Patient: Yes.

Therapist: Ok so bring your awareness to your mouth and that bad taste in your mouth.

Another example is as follows:

Therapist: Okay, so you feel that sensation of making yourself small with distraction. And when you think about the fact that that's what's going on, what are you experiencing in your body?

Patient: Well, I got sad – kind of feeling sadness in it – what I – I became aware of this part of my body.

Therapist: In the belly area.

Another example of a spontaneous means of ascertaining the bodily-held location of somatic activation is as follows:

Therapist: Okay, so when you think about your self-doubt, what are you noticing inside?

Patient: Well, it makes me sad. And I think that's what I started to realize is I'm – that it's a – that it's probably more a lack of self-esteem and things like that make me question everything or make me – and it's not like some of it didn't come – isn't real. You know what I mean? Because we know that a lot of it was real. But it's like, is it the self-esteem that makes me question or is it my history with bad people that's lowered the self-esteem? You know what I mean? Like...

Therapist: Yeah. Yeah. So you just said you feel sad. And I notice your eyes got really red. Can you connect with that right now?

Patient: Yeah. Yeah.

The in vivo code *just* is a word in adverb form that also serves a delimiting function. Just is a word aimed at excluding other psychological actions in which the patient could engage.

Consider the following statements: “just notice” (as opposed to judging), “just take your time” (as opposed to rushing), “just be with that” (as opposed to pushing against), “just keep following your body's impulses” (as opposed to restricting impulses), and “just notice where you feel it in

your body” (as opposed to other means of “feeling”). With the chief complaint established, and an areas of somatic activation identified, the linking phase follows.

Linking Phase

This phase is a process of connecting the chief complaint and the associated somatic area with an eye position. This is achieved in three major ways: in a systematic manner dictated by therapists, a systematic manner dictated by patients, or by observation of spontaneous directionality of the eyes apparently outside patients’ awareness. This reflects inside window, outside window, and gazespotting as described by Grand (2013). It should be kept in mind that BSP therapists typically use an expandable pointer when engaging with patients’ eye positions.

A systematic application of the linking phase appears as therapists providing clear directions to patients about navigation of their gaze:

Therapist: Okay, so where do you connect with [sadness] the most – when your eyes are here, here, here, or here?

Patient: Well you know me, so my original thought is over here but I know when I originally got sad I looked down. You know what I mean? I looked, like, here, but I...

Therapist: So let’s try that. Let’s go down.

Patient: Okay, all right. Yeah, that feels sad.

Therapist: Okay, all right. Just notice that and let’s see what comes from that.

Another example of a systematic approach to finding an eye position:

Therapist: In your core, okay. So let’s start there with the guilt and shame. How does that sound? All right. So do you notice it more in your core when your eyes are in that direction, this direction, or that direction?

Patient: In the middle was the worst, I think.

Therapist: Okay, at, above, or below?

Patient: Below.

Therapist: Okay, all right, can you give me a SUDS [Subjective Units of Distress] read on that 0 to 10? Ten being the worst?

Patient: Seven.

Another example:

Therapist: All right, so what we're going to do right now is we're actually going to find an eye position that goes with that felt sense in your chest, okay?

Patient: Okay.

Therapist: So is it more activating over here, in the middle, or over on this side?

Patient: It's more over there.

Therapist: More over here? Okay. We're going to fine tune here and let me know when it feels the most...

Patient: Right there.

Therapist: ...activating. Okay, now is it more activating up high or down?

Patient: Low.

Therapist: Low? More high up?

Patient: Right here.

Therapist: Right here, okay.

Patient: Up the middle.

Therapist: Right there? Okay.

And another example of linking felt somatic activation with an eye position:

Therapist: I want to first find a spot that corresponds with the pit of your stomach. So look at the pointer, tell me if you feel the feeling go higher or even lower looking in the middle?

Patient: It's higher in the middle...can you go back to the middle?

Therapist: Okay, I can go to the right slower if you need.

Patient: Yeah, to the right slower.

Therapist: Where do you feel it the strongest?

Patient: Right about there.

Therapist: Is it up?

Patient: Back to where it was.

Therapist: Middle? Or down?

Patient: I'm going to say right about there actually.

The above example evidences the negotiation-based interaction of the linking phase. It is clear that the patient has the ultimate ability to direct the therapist in determining eye location. Another factor is the development of the spot from a general to specific. The therapist begins by offering options such as “middle” or “right” and then responds to the patient’s directives within the “middle” area. The therapist is observed checking the validity of the location with clarifying questions and making subsequent adjustments.

As in the constriction phase, areas on the visual field can be correlated to experiences affectively contradictory to the chief complaint. Prior to the following transcript excerpt, the patient has identified a physical activation in the chest associated with a past traumatic event. The therapist directs the patient to locate an area of different activation, in this case a sense of feeling grounded:

Therapist: And now where in your body right now do you feeling the most grounded?

Patient: My – my calves.

Therapist: Calves. Okay. And we’re going to find an eye position that connects with that felt sense of being the most grounded in your calves. I can see that you’re already looking over there. Okay, so is it more over on this side?

Patient: Right there.

Therapist: Right there? Okay, down a little more? Right here?

Patient: Yeah.

The linking phase is also present in the conclusion phase of BSP and is observed as spontaneous eye positions arising from alterations in the chief complaint. Linking can be rather simple: a felt body sensation with an accompanying eye position; or it can be significantly more complex: an absence of feeling as compared to an initial felt activation (chief complaint), then connection to a sensation accompanying the positive affective alteration, and finally, an ensuing eye position. Linking can incorporate newly discovered cognitions, variation in long-term memories, or discontinuation of negative affective states and is related to therapeutic recursion.

The following selection suggests linked areas in the visual field have been established over time, and seem to be familiar to this patient:

Patient: ...I want to go to my usual spot, can you tell? I'm, like, in the middle but I want to head in this direction for some reason.

Therapist: Let yourself go where you need to go.

Patient: Because I think it's safe. I don't know why. You know what I mean? It's like is – this spot...

Eye positioning linked with the physical sensations accompanying the chief complaint leads into the expansion phase of BSP.

Expansion Phase

This phase typically occurs following the constriction and linking phase and results in an escalation in patients' affective states. This escalation appears to occur regardless of affective state and includes feeling states such as sadness, vulnerability, confusion, anger, fear, anxiety, worry, and so on. Notably, these phenomena are evident even in feeling states that are not typically considered expansive, such as vulnerability. These manifest as an increase in the degree of the felt state and thus subjective numerical ratings rise. In parallel, patients' verbalizations

begin to expand on thoughts and recollections related to the chief complaint, and more detailed or novel elements are illuminated.

During the expansion phase, patients will describe alterations in awareness and perception and often display immersion into mental images. In contrast to the constriction phase's immersion in the *where* aspects of the chief complaint, the expansion phase can incorporate the *who*, *what*, *why*, and *when*. As such, more capacious depictions of the chief complaints emerge. For example, one patient does not exceed nine lines of transcribed material in any single paragraph of transcribed material during combined chief complaint, constriction, and linking phases. However the expansion phase results in 48, 14, 26, 45, 13, 26, 17, 32, and 29 lines (in order of occurrence). While this is a relative outlier when compared to the other six transcripts, another transcript contains ratios of five to 13 for the same phases.

As apparent as an increase in verbalization is a surge in episodes of silence. Pauses, beyond those typically seen in conversation, are more prevalent during the expansion phase of BSP. One cannot discern with certainty whether an internal escalation evidenced by silence parallels the external escalation evidenced by increased verbalization. However, the frequent accompanying quantitative and qualitative increases in subjective affect suggests a discernable increase independent of explicit verbalization.

The escalation of affective states occurs even when the chief complaint is engaged from a “grounded” or “calm” place in the body and an associated eye position:

Therapist: Your stomach? All right, we're going to start processing on the resource eye position where you're feeling the most grounded. Okay? So just go ahead and bring up the incident, notice what you feel in your body. Just notice what comes up.

Patient: [Pause] I'm being, like teased and terrified at the same time and they're not – they're not listening to me at all. And I'm – I don't know what to do. And they're – they're – they just continually are like – he's like trying to grab me and – and I'm trying to get away but I can't because they have my arms tied around the tree. And I'm trying to

kick ‘em and I – I can’t. I can’t hit ‘em. And I’m obviously crying and stuff and they won’t – they won’t stop me or help me. And, well, my brother won’t help me. I know that’s who it is. My brother is there but I don’t know who the other person is. I just know he’s supposedly the boogeyman and he’s – he’s – he looks like him. I can’t see his face because it’s covered up and he’s got a hat on and a trench coat on and – and I’m just – I’m trying to do everything I can to just get away but I can’t. So...

Therapist: Notice in your body where you’re feeling that right now.

Patient: Yes, my stomach and it’s kind of a – almost like your stomach is flipping but it’s not, it’s almost...now it’s moving. It’s moving towards my legs. [Pause] My hands are – my hands feel sweaty.

Therapist: Do you notice your breathing?

Patient: I feel really angry about it. Really do. And betrayed. All this time later I still feel that way about this. [Pause] And then they’re – then when he does let me – when they let me go, he – his friend reveals who he is and, you know, I’m so terrified. They threatened me not to ever tell anybody. And I didn’t. I never told anybody. [Pause] That’s about it on that.

Therapist: Just notice where you’re feeling it right now.

Patient: It’s more in my legs and chest now.

Therapist: Okay, just take a deep breath into that sensation. Notice what comes up.

Patient: How I look at my brother now and it’s – I feel – I feel all the things he’s done for me over the years. It’s robbed him and I of any type of meaningful type relationship. And I only – I see him very limited. A couple time a year, that’s it. And I feel bad about that. I think that’s why I was probably nervous or anxious in school and how I was – how I didn’t deal with anger and stuff in school, too. And how it helped me, I guess, dissociative things and helped me develop a dissociation in order to survive the everyday life stuff and – and now – and now I’m thinking about work and how I did things at work dealing with the inmate situations and things like that too. And how I developed a whole different personality type being able to just block it out ‘cause I had to block all that stuff out that he did to me over the years whenever there was a family function or something I had to. So at work, too, I would do the same thing – on fire calls or rescue or any stuff like that.

Therapist: Notice where you’re feeling it in your body.

Patient: It’s all in my feet now. And how – I guess how the anxiety still is a problem for me. It’s – I have the ability to mask it for people and they don’t – they don’t realize that – I’m falling apart inside but they can’t see it. They look to me – they’ve looked to me over the years as being someone that would help them or lead them and I was able to hide it.

Still, sometime I still can, not as much, though, anymore. It's still – it's very much a struggle.

The above passage reflects the increase in verbalization of the patient, as compared to other less “activated” phases of the session. This enhancement temporally follows the constriction of attention on somatic areas associated with the chief complaint. It is also clearly descriptive of the maintenance of attention condition, as the therapist is observed continually facilitating the patient's attention on body sensation. The psychodynamic condition is present with the clinical focus applied on past events informing current struggles. Additionally, there is discussion of dissociation, a basic psychodynamic ego defense. It is also implied that past behaviors and emotions were previously unconscious but are now available to immediate awareness. The escalation of affect and increase in subjective self-assessment ratings is followed by the de-escalation phase.

De-escalation Phase

The de-escalation phase can also be described as *movement toward positive alteration of the chief complaint* and is often accompanied by a reduction in subject activation and a decrease in verbalization. It should be noted while there are some alterations that can be described as resolution, not all chief complaints seem to be completely resolved at the end of the session. However, all transcripts in the study result in some semblance of shift from negative to positive affect. The following evidences this:

Therapist: Okay, so let your brain get curious about what your body is going through in its vigilant ways. Let your brain observe this body.

Patient: It doesn't want me to get hurt.

Therapist: Just notice as you're feeling the confidence.

Patient: [Pause] It feels like my brain has calmed down a bit.

Another patient stated: “I feel sadness around the idea of the boat and all it represents. But it doesn’t feel the same. It’s not urgent or as panicky or as sorrowful.”

This phase is observed occurring up to several times during the course of a full BSP session; however, it tends to be most starkly present in the last third of the session. Although de-escalation can comingle with the conclusion phase, it is theoretically distinct because it may or may not lead directly to the conclusion of the session. A recurrent theme within this phase is movement of the felt somatic activation through the body, frequently from the core (e.g., stomach or chest) to the extremities (e.g., hands or feet). The following is an excerpt describing de-escalation:

Therapist: Okay, just notice where you feel it in your body. Just paying attention to that, just see where it goes.

Patient: It’s in my chest but it’s going through my legs.

Therapist: Okay.

Patient: [Pause] It’s [pause]...It’s frightening and – but I know now it’s not real. And the anger is – not as serious. [Pause] It’s leaving. It’s in my feet now. It’s leaving. [Pause] It’s – it keeps bringing me back. My mind wants to lead me away from it but it keeps bringing me back to it. It’s not allowing me to leave.

Therapist: Just notice that.

Patient: It’s just – it’s – I’m still there.

Therapist: What does your body need in order to let it go?

Patient: I guess just the music and breathing that helps it the most. So, I find that if I can remember the breath – if I could ever remember to breathe back then that probably would’ve helped a lot. Because breathing for me helps to get of it with the music. It keeps me calm or gets me to a level calm. [Pause]

Therapist: Where is it now?

Patient: It’s leaving my feet. It’s pretty well gone.

This progression illuminates both the decrease in verbalization as evidenced by frequent, long pauses and movement of the body-felt sensation “leaving the feet.” The in vivo code “squeezing the lemon” is employed in the following passage:

Therapist: We’re gonna try what’s called the squeezed lemon. Which that means is, like when you’re squeezing a lemon, every last little drop out of there. So I want you to just bring up the incident and I want you to just bring up the incident and I want you to try to get the activation level up as high as you possibly can, as high as you possibly can, like you’re squeezing – and then notice what happens, notice where you feel it in your body.

Patient: It’s in my and it’s – there’s not much of an activation right now. It’s very little.

Therapist: Okay, we’re going to go back over to your resource, the grounding eye position over here. Can you go ahead and go over there?

Patient: Okay.

Therapist: I want you to go there and I want you to do the same thing on that eye position. I want you to bring it up and like you’re squeezing a lemon there.

Patient: [Pause] It’s leaving my feet again.

Therapist: Good just notice that.

Patient: I feel more calm about it. I’m not as anxious and it’s – it’s – it’s okay. I’m all right with it.

Interestingly, this progression is in line with a rapid movement through the previous phases of the session. The chief complaint is briefly re-engaged, attention is narrowed to a body area associated with it, the feeling is linked to a previously identified spot in the visual area, and there is a brief escalation of affect. Across BSP sessions there is a subsequent rapid de-escalation and resolution of the activation that leads to the conclusion phase.

Conclusion Phase

This phase occurs at the end of a BSP session and involves comparisons between current mental and physical states and the original chief complaint. Therapists are observed facilitating this phase through requests for patients to “connect” or “check back in” with the original chief

complaint. Patients' descriptions include feeling "clearer," "calmer," "lighter," "better," or "more connected." Therapists attend to these positive changes closely and encourage psychological contact with these affective states, their physical location, and accompanying visual-field correlates. This statement evidences this: "And how about considering spending – even when you're on the airplane – time on that [calmer] spot and recalling this [calmer] body sensation and just see where it goes."

The conclusion phase seems to serve as a solidification of therapeutic gains made in the session, set up future work, and provide context for the larger picture of therapy. The following is an example of this phase with a patient who initially presented in the session with a chief complaint of shame and lack of empowerment. She had experienced accompanying somatic activation in her abdominal area and throat:

Therapist: [C]lose your eyes, notice how it feels inside your body. And what do you sense in your solar plexus?

Patient: Like a clearness.

Therapist: And what do you sense in your throat?

Patient: An openness.

Therapist: So at this moment, when you think about it doesn't matter what you want, on a scale of 0 to ten. Zero is neutral, Ten is highly disturbing, how disturbing is it?

Patient: It's a zero, because it does matter what I want.

Therapist: Ok, so the truth is it matters what you want.

Patient: It does matter what I want, what I need.

Therapist: Ok, so when you're ready, I took the pointer away, we're going to come to closure. Stay with the awareness, "it does matter what I want and what I need," and when you're ready, open your eyes and your eyes will land on a spot that will be your anchor for this new truth. Does the new truth have a color, or a sound, or a tone?

Patient: It's that blooming flower.

Therapist: So that blooming flower color is...

Patient: Purple.

Therapist: I recommend that you would focus on that every day and sit with this new truth “it does matter what I want and what I need.” And ideally if you want to say that affirmation 100 times a day for the next 40 days your life will be transformed.

Patient: Okay.

Therapist: But it’s good as much as you can to set this in for the next few days.

The above is representative of the trend to reinforce affective alterations occurring in BSP sessions, with particular attention placed on, in this case, a “new truth.” The therapist recommends a cognitive intervention to be practiced beyond the session and incorporates an awareness of a specific color. Also of note, the therapist reenters the constriction and linking phases to determine a spontaneously-occurring spot within the visual spot. The implication is that it will be paired with the newly acquired cognition for future reinforcement.

The following is a passage featuring a patient focusing on a specific traumatic event in his past, with somatic activation expressed in his chest:

Therapist: Now come back to your activation spot, when you bring it up over here, what do you get?

Patient: Nothing, really. Very little. Very, very little. I’m trying to – my mind is trying to rationalize that it was just kids doing what kids do. And they didn’t mean to do it but it turned out different for me. But it’s – yeah, I’m all right with it.

Therapist: If you notice the difference between what the activation level was when we started and where it is now?

Patient: Yes. Yeah, it’s very little activation at all right now. Which is good.

Therapist: Scale of 0 to 10?

Patient: One or less. I’m really – I’m really – I’m good.

The above shows the therapist re-engaging the patient with the chief complaint, and directing a comparison between the two states. And another example of this:

Therapist: Okay, so we're just going to take it one last time, bring up what we originally started working on. Where's the activation level?

Patient: Less than one. I'm good.

Therapist: Okay, I'm going to take away the pointer.

Patient: It's gone.

Therapist: Okay, how are you doing?

Patient: I'm all right.

The following is from a session with a patient with a chief complaint of self-doubt and sadness felt in the eyes:

Therapist: So if we check in again around the self-doubt and the sadness that we started with, where would you say you are now with it? Zero? There's not activation?

Patient: Pretty – I mean, yeah, it's pretty – I feel pretty good.

Therapist: Okay.

Patient: I do. I feel much lighter. I think the biggest thing is gonna be my sister but it's such a mixed bag of, you know, I – and I think that's why it continues is because there's really no – I don't think there is an answer to her because it's so complicated.

Therapist: Well, maybe in subsequent sessions I think we need to do some more work and just kind of see if anything can shift on that piece. But that clearly is playing a part in some of the self-doubt.

Patient: Oh, absolutely.

The therapist is checking in on any alterations that have occurred, and tying into conceptualization of the chief complaint. The following is an excerpt from a session with a patient working with addictions, whose somatic activation surfaced in stomach discomfort and an awareness of a certain area of the brain.

Therapist: ...just tell me about your stomach on a scale of 0 to 10.

Patient: It's feeling pretty relaxed. There's nothing pressing.

Therapist: So you can take the headphones off now. And just sort of bring your awareness back here, and there's further thought or question or orienting yourself. Wiggle your toes and feel your feet on the ground.

Patient: My eyes are feeling like they're cross-eyed now.

Therapist: Yes, so kind of let them kind of orient yourself to the room and to me being here with you.

Patient: It's really weird. It's a really strong cross-eyed feeling.

Therapist: Just kind of like close your eyes and open them, close them and open them, and then close them and be aware that there's that observer that's really going to take charge of making choices now. And when you open your eyes, let your eyes settle on a spot that helps to imprint that in you. So when you put your eyes in that direction, it can bring this back and let it keep processing.

This exemplifies the therapist alluding to ongoing or future emotional processing. It provides markers and directives for extending therapeutic benefit beyond the conclusion of this particular BSP session.

Nonconforming Data

Constructivist grounded theory lends itself to having very little nonconforming data, especially when line-by-line initial coding is utilized. An entire line of transcribed material nearly always has some theoretical merit, even if only several words of the sentence elicit a code. For example, the sentence "You know, maybe I'm 'shoulding' myself...I don't know..." was coded as *patient expressing what ought to be and feeling confused*. Presumably irrelevant verbalizations such as "mmhmm" or "hmmm" were coded as, for example, *patient verbalizing understanding of therapist's directive*. Line by line coding does, however, omit words hanging in isolation at the end of a sentence. For the example, the line "...they're inside of me.' What do you hear and sense in this moment with..." was coded as *therapist assessing patient's current*

sensory awareness. The final word “him” was omitted because it did not have any pertinent action, interaction, belief, and so on, in line with constructivist grounded theoretical analysis. Because of the lack of a priori hypotheses and open, flexible application, all data is considered valid on a line by line basis, and the vast majority of initial codes were grouped in some manner. On the level of theoretical coding there was a cluster of codes involving psychoeducation of the patient, often about neurobiological functions. While this occurred relatively often, the psychoeducation did not fit the overall theory well as a unitary construct. Instead, it was ingested into the conclusion phase as it tended to exist temporally at this point in a BSP session.

Chapter IV has presented the findings of constructivist grounded theory analysis illuminating essential elements of BSP sessions. These included the therapeutic recursion condition, the maintenance of attention condition, and the psychodynamic condition, as well as six phases that included the chief complaint, constriction, linking, expansion, de-escalation, and conclusion. Chapter V will summarize the first four chapters, compare findings with relevant literature, discuss limitations of the research, provide recommendations for future study, and discuss how the findings may be used in various settings.

Chapter V

Discussion and Conclusions

Chapter I introduced the research question, including its social and clinical relevance and definition of its terms. Chapter II reviewed relevant literature and organized references thematically in an effort to position this study within what already exists. Chapter III described the constructivist grounded theory research model, as well as its associated methods and procedures. Historical and theoretical frameworks, concepts, and processes of constructivist grounded theory were discussed. Chapter IV presented the findings of this study, accounted for all salient data, and discussed discrepancies and nonconforming data. Chapter V will compare findings with relevant literature, discuss limitations of the study, provide recommendations for future research, and discuss how findings may be used.

Comparison of Findings to Relevant Literature

This study identified six phases and three pervasive conditions as essential elements of BSP. The chief complaint phase is a development of initial focus for the BSP session. The constriction phase involves a narrowing of attention, which centers the patient on phenomena proximately related to the chief complaint. The linking phase correlates constricted attention to a clinically relevant eye position. The expansion phase is a temporary increase in subjective assessment of affect that is accompanied by an increase in verbalization and perceptual alterations. The de-escalation phase marks an alteration in the chief complaint, and is associated with a decrease in subjective assessments of the complaint in addition to an increase in positive affect. The conclusion phase is a means of closing a BSP session and identifies and reinforces therapeutic gains. The therapeutic recursion condition mandates that each phase is flexibly and continually reengaged based on shifting psychophysiological states in accordance with the chief

complaint. The maintenance of attention condition requires one to continually notice and observe the patient's self in a curious manner. Both the patient and therapist maintain close attention to the patient's process in this phase. Finally, the psychodynamic condition conceptualizes the chief complaint in a historical and relational context.

BSP and EMDR. The findings of this study and literature contained in Chapter II have theoretical and literal underpinnings. BSP and eye movement desensitization and reprocessing (EMDR) have a clear relationship as previously discussed. BSP arose spontaneously from the clinical application of EMDR, and elements of this study are reflected in EMDR literature. The history taking phase of EMDR (Shapiro, 2001) is similar to the development of an initial focus within the chief complaint phase of this study. Both ascertain what symptom or problem will be addressed at that time. Also, the identification of visual images, negative beliefs, emotions, and sensations in EMDR is akin to the constriction phase of this study. Finally, the reinforcement of self-calming activities and continuation of progress in EMDR is reminiscent of the process of wrapping up and identifying therapeutic gains (conclusion phase) in this study.

To further compare EMDR to BSP, BSP possesses a specificity that the former lacks. Engagement with a chief complaint is delimited to a specific awareness, often a relevant body sensation in both. In BSP, the eyes become relatively fixed, although research suggests that even in a fixed state the eyes move almost imperceptibly in horizontal microsaccades (Meeter, Van der Stigchel, & Theeuwes, 2010). In EMDR, the eyes move much more dramatically in a back and forth manner at a prescribed cadence and in a prescribed duration. EMDR, then, can be considered to rely more heavily on a deductive reasoning approach with the supposition that generally applied dynamics will result in therapeutic change.

While this can largely also be said for BSP, there seems to be a divergence in the general-to-specific versus the specific-to-general stance taken by BSP. These ideas are understood predominately in the sense of eye positioning and movement. However, on a larger scale they may reflect Shapiro's (2001) CBT emphasis versus those of Grand's psychoanalytic foundation.

A major point of conflict within the EMDR literature is equivocal conclusions about the necessity of eye movements (Logie, 2014). While this study does not resolve this, it does support the primacy of eye position as a major component of gaining therapeutic changes. The linking phase of this study emphasizes careful negotiation between therapists and patients on what direction of the eyes best fits the activation found in the constriction phase. Participants appear to be quite sure that different eye positions produce pronounced alterations in their subjective assessments, which is clearly depicted in the data of this study.

BSP and SE. Somatic experiencing (SE) therapy (Levine, 1997) focuses on bodily-held sensations associated with traumatic events. The primacy of somatic activation present in the constriction phase is akin to the awareness of physical sensation in SE, which confirms SE's influence on BSP. Further, the body resource of BSP (Grand, 2013) comes from SE and is observed in the positive body sensations in the de-escalation and conclusion phases (and occasionally in the constriction phase) of this study. More generally, there is an emphasis on the impact of past traumatic events (psychodynamic condition) and being with patients directly through unpleasant affective states fueled by underlying trauma (maintenance of attention condition).

BSP and SP. Sensorimotor psychotherapy (SP) is based on several theoretical assumptions that have reflections in this study; however, modulation of nervous system arousal, attachment, and orienting responses stand out. The process of directing, clarifying, and

negotiating eye positioning within the linking phase reflects underlying alterations in the subjective affect of the patient, which can be understood as variations in nervous system state. The patients and therapists, through negotiation and clarification, can be viewed as co-modulating the nervous system. Therapeutic recursion allows for repetitive reassessments of patients' neurophysiology, and ensuing modulating adjustments are made based on therapists' clinical decision-making. A study using SP found improvements on measures of body awareness, dissociation, and receptivity to soothing (Lingmuir, Kirsh, & Classen, 2012).

BSP and attachment theory. Attachment and ways of relating are clearly important throughout these interactions and can be considered a facet of the psychodynamic condition. BSP therapists in this study are described as affirming, curious, encouraging, and supportive. These are characteristics that can be enhancing of connection and thus foster healthy, secure attachment. Scaer (2005) notes that therapists treating trauma and stressor-related disorders are often attempting to process, consolidate, control, and manage symptoms, and that individual and cultural attachment are primary means of soothing the "out-of-control-autonomic flood" (p. 182) of this diagnostic category.

Autonomic soothing is reflected in the conclusion phase of BSP, wherein patient participants describe feelings of enhanced connection and better understanding of the self. Positive changes are heightened by warm attunement of the therapist and accentuate healthy alterations in initially unpleasant affective states, which can be likened to soothing. Finally, orienting responses in SP involve movements of the head and neck similar to the movements necessary to find an eye position in the linking phase of BSP. The location of the eyes dictated by head, neck, and shoulder positioning clearly alters internal states in patient participants. These

movements are classically considered a looking outward; however, in BSP they are a looking inward at the patient's own self (Grand, 2013).

BSP and orienting responses. Research on orienting behaviors and gaze fixation suggests that movements of the eyes, head, and neck are the initial and most important means of orienting to the environment. Orienting reflexes are complex psychophysiological processes that dictate one's attention (Ogden, 2006). It seems that through the various phases of BSP in this study, clinical interactions manipulate these reflexes in a therapeutic manner. Maintenance of attention to clinically significant neurophysiological states, coupled with recurrent, therapeutic exposure to them, is central to BSP and explanatory of many of its essential elements. Orienting reflexes are central to BSP's essential elements.

BSP and psychodynamic psychotherapy. Grand's (2013) psychoanalytic training and the associated psychodynamic literature discussed in Chapter II are reflected in the psychodynamic condition of this study in addition to other areas. Shedler's (2010) discussion of past experiences with a developmental focus in psychodynamic therapy has clear parallels to the manner in which BSP therapists engage patients. In parallel to Shedler, there is a focus on affect and expression of emotion, identifying attempts to avoid distressing affect, identifying recurring themes and patterns, and attention on past relationships as related to the current therapeutic relationship (Shdeler, 2010, p. 99). Psychodynamic therapists use these behaviors decidedly more often than their CBT counterparts (Blagys & Hilsenroth, 2006).

The exploration of fantasy life (Shedler, 2010) seems in line with some aspects of the expansion phase, as in the illumination of novel aspects of the chief complaint, and spurs perceptual alterations and increased affect. For example, when tearfully discussing a fantasied relationship with her childhood self, a patient described alterations in light near and around the

therapist. These perceptual shifts had unique meaning within the context of the patient's chief complaint and associated emotional processing.

Maintenance of attention itself seems to promote the inductive, psychodynamic condition as described above. Induction, simply put, relies on movement from the specific to general. This is also in line with the interaction between the constriction and expansion phases of BSP. The chief complaint phase itself is a process of achieving a specific, often unitary, awareness associated with patients' clinical problem or problems. These are then delimited to a precise, bodily-felt, somatic sensation and then extend outward in both a psychological and physiological sense. This is evidenced by an escalation of subjective affective ratings and, usually, a stark increase in verbal output. Therapeutic recursion brings patients "in" to a precise problem and "out" to other phenomena generally associated with the initial clinical problem; back directly to the original issue and back out to associated processing.

BSP and neurobiological attunement. The maintenance of attention condition is a process of continual noticing and observing of internal psychophysiological phenomena. Mindfulness is described by Kabat-Zinn (2012) as a meditative awareness of the present moment in a nonjudgmental manner. Grand's (2013) term is focused mindfulness, which has a unique meaning in BSP in relation to existing relevant literature. Focused mindfulness is subject to a set-up process arising from concentration on a singular issue or situation. In this study, chief complaint phase parallels the set-up phase wherein an initial focus is developed into a unitary clinical issue.

Neuropsychologically, the maintenance of attention and therapeutic recursion conditions are related to the dual attunement frame of BSP and interoceptive loops, respectively. The maintenance of attention condition reflects the attunement of the therapist to the patient's direct

awareness of him- or herself. This attention, preceded by the chief complaint and constriction phases of this study, is a primary component of what elicits positive affective alterations.

Corrigan and Grand (2013) suggest that the therapist's gaze itself has therapeutic effects on both cortical and subcortical levels. Non-threatening gaze patterns are thought to positively mediate brainstem functionality and inform awareness of body sensations (Ethofer, Gschwind, & Vuilleumier, 2011). The maintenance of attention to patients by therapists in this study indicates the presence of critical brain-to-brain connections. This type of attention is evident when therapists observe and note relevant reflexive behaviors, make therapeutic reflections, provide clarification, and create other connection-enhancing, therapeutic moments.

Further evidence of this is Schore's (2011) *regulation theory*. This construct is an amalgamation of neurological and psychoanalytic knowledge, also known as neuropsychoanalytic theory. Of this, Schore writes that neuropsychoanalytic therapy involves "the expression of right brain unconscious mechanisms in affect-laden enactments, and on the therapist's moment-to-moment navigation through these heightened affective moments" (p. 75). The essential elements of BSP identified in this study appear to accentuate self-regulation through the neural connectivity of the therapist-patient dyad. Recursively reconnecting with the chief complaint and its associated somatic activation is a means of engaging "implicit affective processes" (Schore, 2009, p. 2) in a highly focused manner. BSP seems to have the ability to neurologically constrict the patient around his or her chief complaint with subsequent emotional expansion and processing. Therefore, it can be stated that BSP is a neuropsychoanalytic practice and Grand is a neuropsychoanalytic theorist.

The *where* focus of the chief complaint (within the body and in the visual field) is unique to BSP and is an important element of promoting self-attunement in the patient, and

interpersonal attunement between the therapist and patient. Grand (2013) suggests that BSP therapists can listen at a different level, which can add to the understanding of what is clinically relevant in the chief complaint phase. The simultaneous attunement to the clinical relationship *and* the linked eye position has a neurological effect unique to BSP. The repeated exposure through therapeutic recursion to this simultaneous attunement may be what leads to the de-escalation of pathological affect and the positive alterations evident in the conclusion phase.

Interoceptive loops are part of the human nervous system and represent how we “feel.” These loops provide assessments of pain levels, temperature, energy, stress levels, emotional states and so on. Neurobiologically speaking, body sensations are relayed to the cortex via the spinal cord and thalamus. From the thalamus, information is transmitted to the anterior cingulate cortex and the insula, which results in emotional feeling (Siegel, 2012). Intriguingly, therapeutic recursion can be conceptualized as an outward reflection of interoceptive loops. Stated another way, the recursive nature of BSP may allow for therapeutic access to interoceptive loops and therefore deeply healing interactions between therapist and patient. The aim of accessing interoception is to reduce pathological states while creating and reinforcing more adaptable states within the context of the therapist-patient dyad.

In summation, BSP is rooted in, and related to, several existing philosophical orientations and psychotherapeutic models. It positions itself as an amalgamation of EMDR, SE, and psychodynamic therapy yet adds novel means of approaching psychotherapy. No other therapy uses the eyes in the manner that BSP does. The functioning of the midbrain and interoception, in particular, provide a framework for the neurobiological theory of BSP and inform its technique.

Limitations of This Research

As discussed in Chapter III, critical judgments about credibility (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity) must be made. Sampling of populations in this study involved considerable attention to ethical standards of studying in vivo psychotherapeutic treatment. Selection criteria was based on excluding individuals who could be viewed as easily coerced or who might be at risk for harm and including those who could freely choose to participate. The approach resulted in a self-selection bias that may be viewed as reducing rigor and control over intervening variables.

Because of lack of reporting of demographic information, it was impossible to conclude with certainty the age, race, or socioeconomic status of the participants in a comprehensive manner, and gender can only be assumed. Therefore, conjectures about the essential elements of BSP in relation to varying population characteristics cannot not be made with any accuracy. In addition, all data collection occurred in private, outpatient settings, which may limit the ability to extrapolate to inpatient populations or community mental health settings. These factors are major diversity limitations in this study and should be better accounted for in future research.

The inclusion and exclusion criteria limited the researcher's ability to examine certain diagnostic categories, such as dissociative disorders, that BSP may actually be effective in treating. Thus, support for BSP's use with the excluded diagnoses is reduced. Phase I trained BSP clinicians were also excluded, which may limit the ability to examine BSP's application by less trained versus more highly trained clinicians.

Recommendations for Future Research

Given the relative lack of scholarly literature, a greater preponderance of studies are required to provide support for BSP efficacy. Nevertheless, the conclusions arrived at by this

study may guide future research. To begin, it may be helpful to discuss what type of methodology would be most efficacious in describing the clinically pertinent aspects of BSP. Clearly, this particular study is of a qualitative nature. Contemporary psychological research has adhered to primarily quantitative approaches to knowledge, which in and of themselves may not have the ability to most accurately depict effective elements of psychological experiences and therapeutic changes.

This study has relied on minute details of interactions inherent in BSP and not on quantitative assessments of therapeutic outcome, although reasonable conjectures about therapeutic outcomes can and have been made. This is reflective of a focus on description as opposed to explanation, which is mirrored in variations of psychotherapeutic approaches. Research in general has historically been a means of achieving positive changes in society. More recently, however, academic science has pushed for productivity in the sense of gross number of publications and grants. This is a focus that probably serves monetary interests of academic institutions, rather than emphasizing greater good at the expense of financial compensation. Knowledge translation (KT) (Granak & Nakash, 2015) is a creative means of disseminating health and psychological research that maximizes the positive impact on communities served. Based on this research, it is important that academic study accentuate the level of direct benefit to individuals in the community, rather than monetary compensation.

BSP research, particularly this study, has no financial motivations. The focus is wholly on what appears to be occurring in the data sets and is incentivized solely by what will enhance clinical effectiveness. It is suggested that BSP research accentuate the desire to be curious about what may help, with a critical eye on BSP as a reflection of its recursive self: does this modality appropriately impact the health of the patient at this very moment? Supportive of this, KT is

defined by Tetroe et al. (2008) and inspires an effectiveness-based approach (as opposed to efficacy) with terms such as “capacity building,” “dissemination,” “impact,” “knowledge communication,” and “translation” (p. 168). In the service of benefitting the community directly, KT can also be defined as “translating research into practice” (Woolf, 2008, p. 211).

The work of Scaer (2001, 2005) has been cited intermittently throughout this study and is a theoretical motivator for the ideas contained in it. Scaer (2001, p. 176) suggests moving beyond pathological symptom focus of psychological distress to “consider the neurophysiological basis for the dysfunctional behavior due to experienced-induced changes in neural structure.” Both Scaer (2005) and Grand (2013) are theorists unique in terms of their manner of conceptualization and potential treatments. The integration of neurophysiological underpinnings, contemporary psychodynamic principles, tolerance for ambiguity, sociocultural influences, and clinical acumen cannot be accounted for by prominent acronym-based interventions such as “Your Very Own TF-CBT Workbook” (Cohen, Mannarino, & Deblinger, 2012).

Despite this study’s utilization of qualitative methodology, this researcher suggests both quantitative and qualitative approaches to knowledge are important, particularly in psychological research. Mixed methodological studies may be of greatest benefit in an attempt to incorporate the strengths of each, while reducing limitations. Scaer (2001, 2005) presents theories about the insidious nature of the etiology of trauma and stressor-related disorders, which can have roots in experiences often considered to be routine or relatively minor. Post-trauma symptoms can develop due to surgery, whiplash injury, or pregnancy complication even after physical healing has resolved. BSP research may consider incorporating patient populations with these underlying experiences and their associated syndromes and examine BSP’s unique ability to access the midbrain as a means of healing.

Based on the elements of BSP identified in this study and as stated by Grand (2013), it seems BSP can be used with anybody with a functioning nervous system and therefore across a wide range of diagnostic categories. As evidenced by the therapeutic changes that seemed to occur after long periods of silence, BSP can be applied with minimal verbalization. This fact suggests BSP research may be appropriate for underserved populations, such as in deep urban areas or in international, non-industrialized cultures. The frequency of psychotherapy sessions necessary to achieve long-term therapeutic gains (weekly or more) is often only affordable to those with expensive private insurance or who are able to fund it out of pocket. Others without these means have access to only minimal, often emergency-based, intervention. While excluded from this study, patients with schizophrenia spectrum and other psychotic disorders and dissociative disorders should be included in future study. BSP's focus on deep, neurological attunement may very well have positive effects on these debilitating disorders. I view schizophrenia and dissociative disorders an intense "ungrounding" of the self that may be effectively treated by the "grounding" elements of BSP.

BSP may most effectively be used with individuals who are naturally open to being self-insightful and possess a degree of emotional intelligence. Intelligence quotient (IQ) may not necessarily be a factor in terms of full scale intelligence quotient (FSIQ), an overall representation of a person's cognitive abilities. Nonetheless, it would be helpful to account for basic brain functioning as determined by an IQ test as a means of knowing how to best apply BSP. For example, a patient may present with high nonverbal reasoning abilities as measured by the Perceptual Reasoning Index (PRI) and Processing Speed Index (PSI) scores and low verbal abilities as measured by the Verbal Comprehension Index (VCI) on the Wechsler Adult Intelligence Scales-Fourth edition (WAIS-IV) (Wechsler, 2008). The therapist would benefit

from knowing that, while the patient is processing effectively, he or she may lack the cognitive acumen to convey the nature of the processing verbally. The therapist, theoretically, may rely less on overt verbalization during the expansion phase and attune to the patient on a more somatic or visceral level. It is recommended that comprehensive psychological testing, including behavioral, cognitive, and personality assessment be used to guide treatment planning and use of BSP.

Applications of Research

Grand (2013) emphasizes BSP's flexibility and that its use is uniquely based on the patient's presenting issues and the therapist's moment to moment decision making. This characteristic is inherent in the elements found in this study: therapeutic recursion condition, maintenance of attention condition, and psychodynamic condition. Recursion is a process used in mathematics to define an object in terms of itself and relies on the principle of mathematical induction. This principle can be explained through a method of proving a particular mathematical rule in which one must prove a particular rule in part form. A common example in mathematics is in the case of natural numbers. For example, $1 + 2 + 3 \dots + n = \frac{1}{2}n(n + 1)$. This suggests that the sum of consecutive numbers from 1 to n is subject to the previously stated formula. Essentially, it is asserting that when a statement is true for one natural number, then it must also be true for succeeding natural numbers (Stewart & Redlin, 2011).

While not nearly so stringently applied as in the case of mathematics, at least observably, BSP therapists seem to abide by a similar process in that subjective psychological states are continually reassessed against initial states identified in the chief complaint phase. Furthermore, clinical hypotheses and knowledge are reassessed in a recursive manner throughout a BSP session. In mathematics, a theorem is considered proven when subsequent iterations of the

original assertion are determined to be true. Divergently, although BSP seems to progress in a similar manner, the outcome is not assumed to be true. Rather, a stance of openness is taken with the acceptance that hypotheses identified through the recursive processes may be true, untrue, or some variation in between those absolutes. BSP therapists' assessment of patients' truth or untruth is not a dichotomous or complete assessment but rather a curiosity about patients' present reality.

The proving of a rule based on the parts forming it also relates to the psychodynamic condition surfacing in this study. While the term *psychodynamic* has numerous meanings, many may agree that it is deeply nuanced, and subject to many "parts" of a person's psychodynamic diagnosis (PDM Task Force, 2006). Often historical roots act on the whole person existing in the present. When therapists focus in some manner on past parts, it is in the service of informing the present "whole" self. In a sense, a BSP session, or psychodynamic psychotherapy in general, may attempt a theorem-proving type of procedure in that individual parts are recursively compared to the whole of the presenting patient. Theoretically, this may hold up in a mathematical sense in that an existing theorem is compared against "new" numbers, or ones that were not immediately considered during initial contact with the theorem.

The principle of mathematical induction also determines how elements considered to be within a construct are defined, in part, by removal of extraneous data. Induction, as opposed to deduction, fits the basic foundation of constructivist grounded theory in that there is no a priori hypotheses. Furthermore, this is in line with the *no assumptions* stance taken by BSP, which takes an inductive approach as well. Further, psychodynamic therapists may be considered to rely heavily on enhancement of patients' self-awareness as a means of developing increased self-insight. This involves something that may not be immediately self-evident (a confusing

behavior) but be proved (understood) through a chain of reasoning of accepted truths (beliefs the patient may have about oneself). In the case of BSP this is much more flexibly applied.

Following this is the *where* element within therapeutic recursion. *Where* has a specific connotation of physical location but may also have temporal or metaphysical implications when considered in a psychodynamically-conditional context. Where, then, could mean where in time, where in a family system, where in one's mind, and so on. Regarding the interactions of the constriction and escalation phases, the where begins with a here-and-now physical location and expands to other "wheres" through ongoing maintenance of attention.

Quantum mechanics can be described as a study of the behavior of matter on the atomic and subatomic level (Gribbin, 1984). While an exhaustive summary of quantum mechanical theories is far outside the scope of this study, it can be helpful to incorporate some general ideologies within quantum mechanical science. Put very simply, the behavior of things on an infinitesimal level can inform behavior on a larger scale. In chemistry, for example, subatomic behavior can inform atomic behavior, which can aid in the understanding of why and how atomic attraction occurs in the form of chemical bonding (Brown & LeMay, 2011). Again, this takes an inductive approach from specific attention to general awareness.

If one understands quantum mechanics as the study of smaller and smaller things and their more macro effects, one may be able to comprehend the mental health profession on a similar level. Regardless of profession or philosophical orientation, most would agree that mental health care is concerned with the alleviation of psychological distress. Every social interaction has a chemical reflection, both occurring within the person enacting the change (clinician) and the person receiving the enacted alteration (patient). Theoretically, clinical interactions can

occur in varying degrees of time and space, as does anything in both a physical and metaphysical sense.

Psychiatry, for example, relies on a great deal of distance. Philosophically, the distance is created by the concept of objectivity that is borrowed from the medical model, a term first coined by Laing (1971). For cultural context, it may be useful to consider that Laing was a psychiatrist writing in the midst of the cognitive revolution. Psychology, on the other hand, may decrease distance through the therapist's engagement with the subjectivity of the patient. Furthermore, therapies can take the form of engaging with phenomena proximally closer and closer to the "core" of the issue, which may occur at the subatomic level. For example, an interpretation made by the therapist results in a feeling of relief in the patient. This relational interaction will have chemical implications in the brain and body system in terms of neurotransmitter adjustments (Siegel, 2012), which have fundamental implications for atomic alterations.

Mechanisms of change in the case of contemporary psychiatry, for example, rely on relatively infrequent contact with the patient and depend heavily on the action of a prescribed chemical (psychopharmaceuticals) in the body to enact therapeutic change. Psychotropic medications are static in that they are mass produced based on a specific chemical structure; thus, they behave predictably in the body. Humans, however, are not subject to such static states and have a complexity that cannot be accounted for by the chemical structure of the psychotropic agent. Even so, I wish to be clear that I am not opposed to psychopharmacology, and support its thoughtful, measured use as a means of alleviated psychological distress.

If the above is assumed to be true, then it may be further contemplated that each psychotherapy may possess varying degrees of responsiveness to the patient. Therefore,

clinically pertinent affective states within the patient are subject to degrees of precision and intervention acumen of the therapist. Psychiatry may be regarded as a macro-level intervention that is reliant on a chemical agent with a broad action on the body ingested orally. Psychotropic medications are absorbed by the stomach lining or small intestine, metabolize, and eventually cross the blood-brain barrier to facilitate the desired therapeutic changes in the brain (PDM, 2010). A human may or may not be present during the administration of the medicine and the psychotropic agent will, again theoretically, behave the same.

If a human is present, a human brain is also present that is responsive to and reflective on its own nervous system. The human brain can also be responsive to and reflective on the brain of another via observation of behavior, expressiveness, subcortical connection, and so on. This “dosage” can be argued to have a much more precise action on the state of another, particularly when compared to a static chemical. Psychotherapy utilizes a human as the agent of change. A human is an entity that is antithetical to stasis and better described as dynamic and responsive. This entity can react in a manner that may be much more sensitive to nuance and be a more precise assessor of another’s nervous system state. From this perspective, a currently-present human (the therapist) can better intervene on the moment to moment level with the patient’s nervous system state.

Psychotherapy philosophies differ rather dramatically in theoretical assumptions and associated clinical interventions. Therefore, it may be assumed that there is a degree of heterogeneity in the capacity for psychotherapy to enact therapeutic change. Behavioral therapy (BT) relies on external entities to provide reinforcement or punishment to modify outwardly observable behavior in the patient (Mittenberger, 2007). Cognitive-behavioral therapy (CBT), for

example, intervenes with very specific types of thought. These maladaptive thought patterns can be altered through supposed conversion into more accurate or positive thoughts (Beck, 1995).

Psychology itself is a science of epiphenomena, with varying degrees of specificity and outward reflections of discernable biochemical processes. BT and CBT can be considered rather clumsy approximations of neurotransmitter activity. If thought of in terms of concentric circles and in a quantum physical sense, BT and CBT may be regarded as furthest from the center. In parallel with neuroscience, one may understand this in terms of the triune brain with the neocortex the most recently developed and superiorly located, followed by the limbic or mammalian system, and finally, most inferiorly, the reptilian brain made up of the brainstem and cerebellum. BSP is an approach that very consciously attempts to conceptualize and include all these areas. It also emphasizes a curiosity about novel and unique means of understanding a patient's presenting problem based on innate proclivities of his or her innate self.

In this study, BSP was used to treat a range of emotional maladies and presenting problems. The philosophical and practical roots of BSP are strongly related to the assessment and treatment of trauma. Trauma has a tremendous, negative impact on the individual and cultural level and can result in numerous painful, incapacitating, and sometimes peculiar syndromes (Levine, 1997). BSP should be a more available treatment in the United States and internationally as a cross-cultural means of reducing human suffering, especially for those who have been profoundly physically and emotionally wounded.

As discussed in Chapter 1, I, and many others, have experienced significant and outwardly mysterious reductions in athletic performance with accompanying psychological symptoms. As noted, not one coach or health professional considered that these problems were due to anything other than physical injury, surgical recovery, or a character flaw in the athlete.

Grand and Goldberg (2011) offer a compelling alternative to these ill-informed and myopic assumptions. Grand and Goldberg regard the athlete as a person subject to life experiences, namely physical and emotional injuries, that trigger trauma-related reactions and explain the athletic difficulty. Athletic organizations from Little League baseball to the National Football League will require a tremendous amount of education and contact with mental health professionals to make assessment and treatment more readily available. It will take time, research, and clinical contact to alter longstanding cultural norms that contribute to athletic difficulty and inhibit athletes from getting help outside of a solely medical framework. BSP should be used with athletes to treat clinical-level problems and aid in performance enhancement.

Psychology is uniquely tasked with explaining and treating human discomfort on a level that cannot always be visually observed. All research is a means of better comprehending our world, and constructivist grounded theory is a particularly apt means of comprehending BSP. The exceedingly broad scope of psychology encompasses, quite plainly, everything available to the mind. If nothing else is to be taken from this study, psychologists and other health professionals should simply appreciate the unknowable complexity of the brain. Attempts to reduce human suffering to mythical biochemical imbalances (Lorem, Frafjord, Steffensen, & Wang, 2013; Monclieff, 2014) or negative thought patterns are not only lacking in appreciation for complexity, but may eventually be regarded as unethical. These practices have marginalized, even harmed, others throughout human history. In U.S. society, these “others” are frequently those from disadvantaged backgrounds and of cultural heritage dissimilar to the recognized majority, which is decidedly Caucasian and Christian. The essential elements discovered in this

research study and the underlying tenets of BSP form a means of connecting with individuals in a manner that alleviates pain without diminishing the inherent uniqueness of the person.

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Appendix A

Letter of Recruitment (Clinician Participants)

Dear _____,

Thank you for considering being part of this research study, which will be exploring the following question: *What are the essential elements of a Brainspotting session?* Your participation is crucial to the successful completion of this study.

To be eligible for this study, you must meet the following criteria: possess active licensure to practice psychotherapy in your state of practice according to your profession, have completed at least phase II BSP training, have at least three years of BSP experience, and self-identify as BSP psychotherapist in addition to your other psychotherapy orientation(s).

This study is utilizing a qualitative research method called constructivist grounded theory, which will use data from one digitally recorded session with you and a patient and one brief post-session interview. Prior to the recorded session, I will send you a digital recorder to capture the session, and a self-addressed, postage paid package to return the recorder directly back to me.

Should you choose to participate, I will be contacting you to inform you of additional necessary details of the study and to answer any questions you may have. This study has been approved by the Michigan School of Professional Psychology's Institutional Review Board (IRB). For information on your rights as a research participant, contact the MiSPP Institutional Review Board: irbchair@mispp.edu.

Sincerely,

Calder W. Kaufman

Doctoral Candidate in Clinical Psychology

Michigan School of Professional Psychology

Appendix B

Informed Consent (Practitioner Participants)

I, _____, hereby agree to voluntary participation in the research project on Brainspotting conducted by Calder Kaufman. I understand that the purpose of this study is to understand the Brainspotting process as a psychotherapeutic technique. The procedure will entail engaging in one 45-minute Brainspotting session and one debriefing interview lasting approximately fifteen minutes. I understand that my participation in this study will take approximately one hour.

I understand I will be inviting a patient under my care for participation in a recorded Brainspotting session. I acknowledge an imbalance of power is inherent in a clinical relationship. As a means of enhancing the patient’s ability to freely choose participation or non-participation in this study, I will utilize the attached protocols when inviting patients to be in this study.

In terms of benefits, I understand that participating in this study will help foster a better understanding of Brainspotting as a psychotherapeutic technique. Indirect benefits may include increased awareness of how Brainspotting or similar techniques can be implemented in the psychological community as a whole, and be used to reduce human suffering. When my participation is complete, I may request information regarding the general findings of the research by contacting Calder Kaufman at ckaufman@mispp.edu.

I understand that the interview will be recorded and later the interview will be transcribed into a word processing document with no reference to my identity. Any information derived from the research project which personally identifies me will not be voluntarily released or disclosed without my separate consent, except as specifically required by law. State law requires appropriate notification of designated others in the event that I reveal someone, including myself, is in danger of serious harm, including but not limited to abuse, neglect, or threats of harm to myself or others. The original data will be kept for a period of five years according to American Psychological Association guidelines. After which time it will be destroyed.

I understand that my participation is voluntary and that I am free to withdraw from the study at any time without jeopardizing my relationship with Calder Kaufman or the Michigan School of Professional Psychology.

I understand that if I have any questions related to my participation in this study I may contact Calder Kaufman at ckaufman@mispp.edu. This study has been approved by the Michigan School of Professional Psychology’s Institutional Review Board (IRB). For information on your rights as a research participant, contact the MiSPP Institutional Review Board: irbchair@mispp.edu.

I have read and understand the information provided above. My signature means I agree to participate in this study and follow the protocols for invitation of patient participants.

Participant’s Name: _____

Participants Signature: _____ Date: ___/___/___

Witness Name: _____

Witness Signature: _____ Date: ___/___/___

Appendix C

Protocols for Invitation of Patient Participants

The clinical relationship between patient and therapist involves a fundamental imbalance of power. It is important that this power differential be reduced as much as possible to diminish the opportunity for a patient to feel coerced into participation, and taint his or her ability to freely and consciously choose to participate or not participate. As a means of achieving this, the following mandatory protocols have been developed. By signing the informed consent form, you have agreed to abide by these protocols.

1. The following statement must be read verbatim when initially inviting potential patient participants: *“There is some research being conducted on Brainspotting by Calder Kaufman, a doctoral student at the Michigan School of Professional Psychology. Both therapists and patients have been invited to participate. If you would like to know more, here is a flyer and I can provide you further details if you’re interested.”*
2. Offer a flyer to the potential participant and respond to further discourse on the topic of this study only if it is engaged freely by the patient.
3. If the patient is interested in pursuing participation in this study, he or she is to sign the patient version of informed consent and a disclosure of information form which abides by the federal HIPAA Privacy Laws (both included in this packet).
4. An interested patient must meet the following criteria, and is to be excluded if one or more is not met:
 - a. Be over the age of 18.
 - b. Have an established clinical relationship with the practitioner.
 - c. Per the practitioner’s judgment, the potential participant is able to freely and consciously choose to participate or not participate in this study.
 - d. Do not currently meet criteria for the following DSM-5 diagnoses: neurodevelopmental disorders, schizophrenia spectrum and other psychotic disorders, dissociative disorders, or primary substance abuse disorders.
 - e. Per the practitioner’s clinical judgment, the patient participant possesses psychological stability to the degree that harm is *very unlikely* to occur as a result of participation in this study. This stability must have been present for greater than one year.
5. Set up a time for the session to be recorded. It is preferable that this session occur as part of the normal course of established treatment.
6. If at any time throughout the process a patient is deemed to be harmed in any way by participating in this study, the patient no longer eligible to be part of the study and the therapist is to address any concerns, clinical or otherwise, in accordance with the standards of his or her profession.

Appendix D

Invitation to Participate in a Research Study

Michigan School of Professional Psychology



Volunteers are being sought for participation in a research project studying the psychotherapeutic technique *Brainspotting* .

- Who is eligible to participate?
 - Individuals receiving Brainspotting treatment
 - 18+ years of age or older
- What will you be expected to do?
 - Agree to have one Brainspotting session recorded with your therapist
 - Undergo a brief post-session interview with your therapist lasting approximately 15 minutes

If you are interested in participating, please consult with your therapist for more details

Appendix E

Guiding Questions for Post-Session Debriefing

1. What stands out to you about this Brainspotting session?
2. What worked well for you?
3. What did not work well?
4. What are you taking away with you from this session?
5. Is there anything else you would like to say about this session?

Appendix F

Letter of Recruitment (Patient Participants)

Dear _____,

You have been invited by your therapist to participate in a research study. This project's aim is to better understand the psychotherapeutic technique Brainspotting. Your participation has the benefit of adding to the knowledge base of Brainspotting as well as psychotherapy in general. The risks of participation are minimal and are outlined more fully in the Informed Consent Form.

Your participation entails participating in one psychotherapy session with your therapist and debriefing interview lasting approximately 15 minutes. These will be audio recorded, transcribed, and analyzed for their content. Your identity will be hidden throughout the process and the data destroyed after a period of five years in accordance with American Psychological Association guidelines.

Should you choose to continue with your participation, your therapist can provide you with further details.

Thank you for considering being a part of this study.

Sincerely,

Calder W. Kaufman

Doctoral Candidate in Clinical Psychology

Michigan School of Professional Psychology

Appendix G

Informed Consent Form (Patient Participants)

I, _____, hereby agree to voluntary participation in the research project on Brainspotting conducted by Calder Kaufman. I am aware that the purpose of this study is to understand the Brainspotting process as a psychotherapeutic technique. The procedure will entail one audio recorded Brainspotting session and one debriefing interview lasting approximately 15 minutes. I understand that my participation on this study will take approximately an hour.

I understand that my participation is voluntary and that I am free to withdraw from the study at any time without jeopardizing my relationship with my therapist, Calder Kaufman, or the Michigan School of Professional Psychology.

I understand there are minimal psychological, physical, social, and economic risks associated with this study. It is possible that I may experience some discomfort while engaging in this psychotherapy session. I will discuss my thoughts, feelings, concerns, and reactions with my therapist just as I would during the normal course of treatment. If I have concerns specifically about the research process, I am free to contact the researcher.

In terms of benefits, I understand that participating in this study will help foster a better understanding of Brainspotting as a psychotherapeutic technique. Indirect benefits may include increased awareness of how Brainspotting or similar techniques can be implemented in the psychological community as a whole, and be used to reduce human suffering. When my participation is complete, I may request information regarding the general findings of the research by contacting Calder Kaufman at ckaufman@mispp.edu.

I understand that the interview will be recorded and later the interview will be transcribed into a word processing document with no reference to my identity, and the recording will be destroyed after completion of the project. Thus, any data or answers to questions will remain confidential with regard to my identity. Any information derived from the research project which personally identifies me will not be voluntarily released or disclosed without my separate consent, except as specifically required by law. State law requires appropriate notification of designated others in the event that I reveal someone, including myself, is in danger of serious harm, including but not limited to abuse, neglect, or threats of harm to myself or others.

I understand that if I have any questions related to my participation in this study I may contact Calder Kaufman at ckaufman@mispp.edu. This study has been approved by the Michigan School of Professional Psychology's Institutional Review Board (IRB). For information on your rights as a research participant, contact the MiSPP Institutional Review Board: irbchair@mispp.edu.

I have read and understand the information provided above. My signature means I agree to participate in this study.

Participant's Name: _____

Participant's Signature: _____ Date: ___/___/___

Witness Name: _____

Witness Signature: _____ Date: ___/___/___

Appendix H

HIPAA Authorization Form

Patient's Full Name: _____

Date of Birth: _____

I hereby authorize the disclosure of protected health information by the following person:

The following person(s)/facility may receive the protected health information:

Calder Kaufman, Researcher
76 W. Adams Ave.
Detroit, MI 48226

Michigan School of Professional Psychology
26811 Orchard Lake Rd.
Farmington Hills, MI 48334

This information is limited to that which is described in the informed consent form.

I have the right to revoke this authorization at any time.

This authorization expires on (today's date) _____, 2014.

Signature of Participant _____

Date _____

Signature of Witness _____

Date _____

Appendix I

Essential Elements of BSP: Integrated CGT Diagram

