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Fundamental Image Theory: An Integrated Model of Trauma

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Perpetration-Induced Traumatic Stress:

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Abstract

Historically, trauma theory and intervention has focused on "actual or threatened death or serious injury" (*DSM-IV*; APA, 1994). More recently, the field has broadened its consideration to a range of trauma and stressor related disorders, including perpetration induced traumautic stress (PITS; MacNair, 2015). Violence perpetration has negative implications on a personal, interpersonal, and group level, but a review of the literature reveals a significant gap in our understanding of perpetration-induced traumatic stress, including 2 fundamental questions: how does perpetrating violence cause trauma, and how can we treat this trauma? None of the existing psychological models adequately answer the first question, limiting their ability to effectively address the second. Existing literature does reveal that despite the diversity in triggering events and contextual factors, post-trauma symptoms remain remarkably similar between PITS and traditional PTSD, indicating a common-factor scheme for trauma.

This dissertation introduces Fundamental Image Theory (FIT), a new theory to address the gap in conceptualizing trauma and identify common factors across traumatic stressors. It proposes that the common element of trauma is its disruption of the fundamental design God

enacted when creating humans: the *imago dei*. FIT integrates Biblical theology and psychological science to provide a model for healthy human functioning that is sustained through meeting a set of essential needs derived from the *imago dei* (McMinn & Campbell, 2007). FIT explains how trauma interferes with meeting these essential needs and disrupts healthy functioning as result. The model is then applied specifically to PITS to provide guidance for treating the disorder.

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Chapter 1

Introduction

Violence has negative implications on a personal, interpersonal, and group level. The majority of research has focused on these negative implications from the perspective of the recipient of violence, i.e. the victim. Less research has focused on the negative implications for the perpetrators of violence. What research does exist, consistently finds negative implications related to the act of harmdoing.

On the personal level, harmdoing places an individual at elevated risk for significant psychological dysfunction. In studies with U.S. soldiers, killing is a significant predictor of posttraumatic stress disorder—PTSD (Fontana & Rosenheck, 2004; Hijazi, Keith, & O'Brien, 2015; MacNair, 2002; Maguen et al., 2009). Soldiers with killing-related PTSD frequently report more severe symptoms than for other forms of PTSD, including higher rates of intrusive symptoms and hypervigilance (MacNair, 2002; McNair, 2015). One study found that 40% of those seeking treatment for PTSD reported killing another as their traumatic event (Maguen et al., 2010). Studies with Vietnam veterans have found that killing is also a significant predictor of depression and suicidal ideation, while research with veterans of the Gulf Wars and Operation Iraqi Freedom (OIF) found that killing is also a significant predictor of alcohol abuse and anger problems (Maguen et al., 2010). Personal consequences can also take the form of "moral injury," which occurs after "perpetrating, failing to prevent, bearing witness to, or learning about acts that

transgress deeply held moral beliefs and expectations" (Litz et al., 2009). Moral injury has been associated with several harmful outcomes, including a higher risk for developing self-injurious thoughts and behaviors; many veterans describe the moral injury event as the most traumatic aspect of their experience (Bryan, Bryan, Morrow, Etienne, & Ray-Sannerud, 2014; Currier, Holland, & Malott, 2015). Moral injury can become especially harmful when the individual is unable to make meaning of the event (Currier, Holland, & Malott, 2015; Hijazi et al., 2015).

On the interpersonal level, harmdoing places an individual at risk for severe relational dysfunction (e.g., Allen, Rhoades, Stanley, & Marman, 2010; Foran et al., 2013; Hagai & Faye, 2015; Hosek, 2011; Jordan et al., 1992; Taft et al., 20011. Perpetrating violence is linked to increased emotional numbing, which is associated with lower levels of marital satisfaction, confidence in the relationship, marital bonding, parenting alliance, and dedication to the relationship (Cook, Riggs, Thompson, Coyne, & Sheikh, 2004; LaMotte, Taft, Reardon, & Miller, 2015; Riggs, Byrne, Weathers, & Litz, 1998; Sautter, Glynn, Thompson, Franklin, & Han, 2009). PTSD symptoms in general, and "emotional hiding" in particular, are associated with higher rates of divorce. Research also indicates a potential link between harmdoing and increased rates of child neglect (Hagai & Faye, 2015; Ruscio, Weathers, King, & King, 2002). The personal symptoms of harmdoers (dysregulated emotions, e.g., anger) are strongly associated with higher rates of intimate partner violence, while alcohol abuse is associated with a host of negative implications for a family (e.g., Beckham, Feldman, Kirby, Hertzberg, & Moore, 1997; Finley, Baker, Pugh, & Peterson, 2010; Hahn, Aldarondo, Silverman, McCormick, & Koenen, 2015; Novaco & Chemtob, 2015; Possemato, Pratt, Barrie, & Ouimette, 2015; Zoričić,

Karlović, Buljan, & Marušić, 2003). Overall, harmdoing correlates with higher relational dysfunction and social isolation.

On the group level, harmdoing also negatively impacts those associated with the harm-doer. A study found that harmdoing acts as a stressor for all members of the group, not just the individual perpetrator. In-group members are frequently aware of the violence, e.g., through media broadcasts, and "exposure to even lower-level, non-traumatic stressors diminishes people's coping capacity and erodes physical and mental health" (Leidner, Li, & Kardos, 2015, p. 335).

While research on the effects of intergroup violence on indirect experiencers is still very new, some argue that indirect experiences of violence "have not only equal but greater influence on identity…and health" (Leidner, Li, et al., 2015, p. 338). At the group level, common defensive strategies against this cost involve creating a group narrative of "just violence," which reaffirms the boundaries between the in-group and the victim out-group. This defensive group narrative may protect group members from harm in the short term, but leads to a lack of self-correcting behavior in the long term and a potentially more harmful cumulative burden. Non-defensive strategies to address the violence committed by the group may decrease the harmdoing burden in the long term, but in the short term it can increase the health burden as in-group conflict leads to subgroups being blamed, punished, or treated as outsiders (Leidner et al., 2015).

The costs of harmdoing are especially relevant in our modern age. Over 2.5 million U. S. soldiers have deployed for OEF/OIF, and those soldiers are much more likely to kill due to "the proximity of combatants and civilians, the indistinctiveness of the enemy, the chaos of urban environments, and the ambiguity of the front line" (Maguen et al., 2010, p.86). One survey of

OEF/OIF veterans found that 77-87% of combat troops in those conflicts reported firing on the enemy; 48-56% reported killing an enemy combatant; 14-28% reported killing a noncombatant. This is a far cry from the 15-20% firing rates in World War II (Grossman, 2009, p. 24). There is little evidence military personnel can expect a decrease in rates of killing. Despite advancements in unmanned technology, such as drones, ground forces remain extremely relevant in modern conflicts, as demonstrated by recent European pressure on the United States to commit ground forces to the conflict in Syria (Hennigan & Bennet, 2015). Further, those who operate drones also participate knowingly in harmdoing, although they do so at a greater distance.

Perpetration-Induced Traumatic Stress

MacNair (2002) has proposed that this cost of harmdoing can be described as perpetration-induced traumatic stress (PITS). McNair defines PITS as "the form of posttraumatic stress disorder symptoms caused by killing or otherwise committing violence as the stressor" (MacNair, 2015, p. 313). MacNair uses the World Health Organization's definition of violence, which is "intentional use of physical force or power, threatened or actual…that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation" (World Health Organization, n.d.). She found through factor analysis that the symptoms of PITS and PTSD "are not meaningfully different…[suggesting] PITS may be best conceptualized as a form of PTSD" (MacNair, 2002, p. 18). There is, however, a pattern of differences between PITS and PTSD in specific symptom clusters including "[a] more severe aftermath…violent outbursts, intrusive imagery, perhaps a sense of disintegration" (MacNair, 2002, p. 91). Intrusive imagery, especially, appears to be a "major criteria for discriminating the

perpetration groups from the non-perpetration groups" (MacNair, 2002, p. 98) and may be a hallmark of PITS.

It is worth noting that PITS is a separate concept from moral injury, and moral injury is inadequate for explaining PITS. Moral injury involves subjective distress experienced from being involved in, witnessing, or being unable to stop actions that violate deeply held moral beliefs or expectations. MacNair argues that many people engage in harmdoing due to their ideology, not in spite of it, and still develop PITS. This conclusion was supported by research into atrocities committed during Apartheid. Interviews found that for perpetrators on both sides "in every case, committing illegal violence was justified with the good intentions of supporting one's ideological beliefs…[and] repeated brutality was supported by a strong belief in the goodness of one's actions" (Kraft, 2015, p. 367). Interviews indicated that the perpetrators still developed posttraumatic stress symptoms including numbing, extreme remorse, and alcohol abuse, which was frequently described as an attempt to block out intrusive memories and emotions. Work with combat soldiers has also demonstrated that people can develop PITS even when they feel like killing was justified in their situation. MacNair argues that someone can have both a moral injury and PITS, but PITS is not caused by moral injury. Research supports this disconnect between moral injury and PITS: it indicates that "greater perception of moral wrong doing [was] significantly associated with greater posttraumatic growth" (Hijazi et al., 2015, p. 395), suggesting that recovery from moral injury may be considerably easier than from PITS.

Insufficient research. While MacNair's definition of PITS has been used by a handful of researchers (e.g., Mathewes-Green, 2007; Rohlf & Bennett, 2005; Whiting & Marion, 2011), the majority of research neglects the idea of posttraumatic stress symptoms as a result of harmdoing.

This lack of research may be related to several challenges stemming from historical treatments of trauma and ongoing sociopolitical factors.

Historical treatments of trauma did not focus on the perpetrator of violence. The scapegoat theory of violence, proposed by Rene Girard (Boersma, 2006), describes a societal pattern of managing trauma-related distress through displacement. Historically, as distress around trauma builds, a society looks for a cause of the distress and decides "a particular individual [is] the source of unrest, disorder, sickness, or other societal ills" and that individual is punished (Boersma, 2006, p. 137) or scapegoated. Frequently, the marginalized or powerless were scapegoated, as reflected in the historical practice of locking away the physically and mentally ill, poor, cultural outsiders, and social deviants (see Foucault, Khalfa, & Murphy, 2006).

Social justice dialogues arising in the mid 20th century challenged this historical pattern of blaming the victim and argued for the assignment of responsibility to the perpetrator. While a welcome shift from victim-scapegoating, and a positive impetus for research into trauma from the victim's perspective and treating the victim's symptoms, this dialogue shift in the United States also coincided with a movement away from rehabilitation in criminal justice to punishment and longer jail terms. The heightened punishment mentality reduced impetus for research into treating perpetrators (Andrews & Bonta, 2010). Perhaps not surprisingly, this definition of "criminal" continued to target social, economic, and culturally marginalized groups in disproportionate numbers, providing a distorted image of "perpetrator" (Andrews & Bonta, 2010).

Despite overall trends in criminal justice, some have researched how to rehabilitate perpetrators, but usually without examining the trauma of harmdoing. To research perpetration-induced trauma may cause discomfort within our current dialogues partly because it requires a level of sympathy for perpetrators; to suggest those who commit violence or atrocities can be traumatized implies humanity. The act of humanizing and even extending empathy to perpetrators can seem disloyal to those harmed or may feel like it is an attempt to "excuse" the behavior (MacNair, 2015; Miller, Gordon, & Buddie, 1999).

The military represents a group engaged in harmdoing free of the criminal justice discourse, but other sociopolitical factors discourage research into military related PITS. While much of the historical research on PTSD began with the military, it served two primary purposes: originally, to return soldiers to battle, and more recently, "to care for him who shall have borne the battle" (Sigford, 2008). In the first instance, PITS may actually encourage a soldier to seek out combat with escalating involvement rather than avoid it, and in the second instance, nationalistic loyalty discourages a view of soldiers as perpetrators. To ask if killing traumatizes our soldiers "calls into question what their own country is doing to them" (MacNair, 2015, p. 314). As a result, the trauma suffered by soldiers is often placed on the "enemy" or the abstraction "war is hell," much like the trauma suffered by firemen is attributed to the fire. In this way, society continues to manage the distress of war through the scapegoating dynamic described by Girard.

Some of the most robust research into harmdoing has been done with survivors of different conflicts in Africa (see King & Sakamoto, 2015; Kraft, 2015). While the cultural distance likely allows for the research to be conducted without triggering the historical and

sociopolitical defenses described above, it also makes it easy to dismiss the need to apply the findings to the U.S. and other Western militaries. Additionally, the fact this research focuses on the commitment of atrocities and genocide likely does not encourage comfortable application to the U.S. military.

Treatment challenges. The lack of research exacerbates treatment challenges particular to treating PITS. First, there is growing evidence that killing as the traumatic stressor can lead to more severe PTSD symptoms, including more pronounced symptoms of intrusion, such as unwanted thoughts, nightmares, flashbacks, as well as higher levels of hypervigilance (MacNair, 2015; Maguen et al., 2009). The nightmares described by those with PITS contained more guilt-related themes, such as dreams their victims were accusing them, reliving the scene of killing but as the victim, and dreams of two versions of themselves fighting, trying to kill each other. The increased sleep disturbance in PITS may partially explain the more severe cases of PTSD, as insomnia and nightmares are indicated in sustaining and worsening PTSD symptom severity. There is also some early evidence that nightmares focused on violent incidents may increase the occurrence of nightmares and insomnia overall. Additionally, current treatment models for PTSD may be insufficient or even contraindicated; research into prolonged exposure therapy, one of the most common treatments for PTSD, indicates that exposure techniques can be ineffective and even cause an increase in symptoms if perpetrating violence is the index trauma (Pitman et al., 1991).

Treating PITS is further complicated by the risk of addiction to combat:

> The body releases a large amount of adrenaline into your system and you get what is referred to as a “combat high.” This combat high is like getting an injection of

> morphine—you float around, laughing, joking, having a great time, totally oblivious to the danger around you…problems arise when you begin to want another fix of combat, and another, and another, and before you know it, you're hooked. As with heroine or cocaine addiction, combat addiction will surely get you killed. And like any addict, you get desperate and will do anything to get your fix. (Grossman, 2009, p. 234-237).

With the potentially addictive "rush" of combat, those with PITS may not demonstrate the traditional avoidant behaviors found in other forms of PTSD. Instead, they may go out of their way to re-experience the pleasurable symptoms of combat or continue to engage in violent behavior, such as going out "looking for a fight" or engaging in aggressive behaviors towards intimate partners and family members. There is no research yet to demonstrate the cumulative effect of harmdoing, but there is clear evidence in general PTSD research that cumulative traumas worsen symptoms and outcomes (Conard & Sauls, 2014; Interian, Kline, Janal, Glynn, & Losonczy, 2014; Spinazzola et al., 2014). As violence-seeking behavior increases the cumulative perpetration induced traumas and delays treatment, it may increase overall negative outcomes for treatment.

The nexus of combat addiction and burgeoning supply of "war porn" provides a specific challenge to treating PITS. Video cameras such as the ubiquitous GoPro were mounted to rifles and helmets by soldiers in OEF and OIF, and these recordings have been distributed throughout popular internet sites and online veterans communities. One video, which shows a U.S. Army soldier engaged in a firefight, has been viewed 30 million times on Youtube; 76 other videos on the same YouTube channel have over a million views each (Funker350, 2016). While those who post the videos and watch them offer a variety of reasons for the practice (see Looft, 2015), some

argue that the repetitive watching of combat violence resembles the exposure techniques of Prolonged Exposure therapy, an empirically based treatment for PTSD which exposes clients to imagery and real-life situations related to the traumatic event to increase habituation towards the event, thus decreasing symptoms (Foa, Hembree, & Rothbaum, 2007). Unfortunately, some evidence suggests that PE is contraindicated in treating PITS because the "flooding" aspects of exposure can actually aggravate symptoms further, meaning the watching of war porn may have a similarly exacerbatory effect (MacNair, 2002). Finally, combat-addiction behaviors such as watching war porn can harm the very therapeutic relationship necessary for treatment as therapists may react with disgust or judgment, such as the creator of PE who described the habit of watching these war videos as "sickening" (Looft, 2015). More significantly, it tends to foster ongoing adrenaline addiction.

Defining Trauma

If PITS is to be conceptualized as a sub-category of PTSD, the etiological trauma for PTSD needs to be defined in a way that includes perpetration. The psychological definition of trauma, as indicated by the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*; American Psychiatric Association [APA], 1980, 1987, 1994, 2000, 2013) has evolved over time. When PTSD was first defined in the *DSM-III*, the causal trauma was described as "a psychologically distressing event outside the range of usual human experience…usually experienced with intense fear, terror, and/or helplessness" (*DSM-III*, 1980, p. 238). In the updated criteria of the *DSM-IV* (1994), the definition removed the idea of "outside the range of usual human experience" as it became evident that traumatic experience were more common than initially thought, and provided more specifics for the type of traumatic events: "The person

experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others" (*DSM-IV-TR*, 2000, p. 467-468). This description of a trauma allowed, if obliquely, for the perpetration of violence, but it required a specific emotional response—"intense fear, helplessness, or horror"—which does not allow for the range of emotional responses common to killing, including numbness, relief, or elation. The most recent definition for a traumatic stressor, in the *DSM 5* (2013), de-emphasized the emotional reaction component: "exposure to actual or threatened death, serious injury, or sexual violence [by] directly experiencing…witnessing…learning that the traumatic event(s) occurred to a close family member or close friend…[or] experiencing repeated or extreme exposure to aversive details of the traumatic event[s]" (*DSM-5*, 2013, p. 271). This wider definition of traumatic stressors de-emphasizes the victim-only perspective common to previous definitions and does not prescribe a specific emotional response, opening the diagnosis to perpetration-induced traumatic stressors.

While the *DSM-5*'s definition allows for violence-perpetration as an etiological trauma, traditional explanations of the causal mechanisms of trauma do not adequately explain why harmdoing causes a traumatic response. Phenomenological, theoretical, and spiritual perspectives will be reviewed in light of harmdoing and trauma below.

Phenomenology of trauma. Several influential trauma researchers have looked to the described experience of trauma for insight into the condition (see Herman, 1997; Shay, 1995; Tick, 2005). Notably, these approaches go beyond the diagnostic framework of PTSD as it is "a limited construct that captures only part of the impact of violence, ignoring issues of loss, injustice, meaning and identity that may be of greater concern to traumatized individuals and

their families and children or later generations" (Drozdek & Wilson, 2007, p. vi). Instead, these approaches examine the subjective reports of trauma survivors and look for patterns and themes, and for mostly unwanted emotional and behavioral manifestations.

Herman (1997) identified two primary themes in the experience of trauma: terror and disconnection. She summarized the terror component as "an affliction of the powerless…the victim is rendered helpless by overwhelming force" and may be experienced as disempowerment, helplessness, and abandonment (Herman, 1997, p. 33). She described the disconnection component of trauma as fundamentally "shattered trust" (Herman, 1997, p. 51). This disconnection is experienced both in disrupted interpersonal relationships, as it "calls into question basic human relationships" and intrapersonal concepts, as the trauma "shatter[s] the construction of the self" (Herman, 1997, p. 51). Herman argues that this dual experience of trauma as terror and disconnection creates a dialectic of trauma, in which the victim cycles between terror-based hyperarousal and disconnection-based constrictive symptoms.

Herman's conceptualization of trauma is based on the victim's perspective, but stepping outside of this constraint reveals several relevant themes. First, the experience of trauma involves issues of power (either having too little in the case of victimization, or too much in the case of harmdoing) and disconnection. Second, Herman identifies a dialectical component of trauma found throughout reports of harmdoing. On the symptomatic level, PITS is frequently described as a cycle between hyperarousal, which is associated with stronger desires for power and control, and avoidance symptoms, which are associated with disconnection (e.g., numbing, guilt, alienation, substance abuse). This dialectic may manifest in perpetrators to the level of identity formation, especially in cases of ideologically driven perpetration. Several perpetrators

interviewed by the South African Truth and Reconciliation Commission described a "doubling" effect, where they answered questions from two different identities: the "destructive, militarized self" who committed the atrocities with conviction (the dialectic of power), and the "primary civilian self" who saw the actions as harmful and attempted to distance themselves (the dialectic of disconnection; Kraft, 2015, p. 371). This dialectic of power and disconnection was also revealed in behavioral descriptions: "[One interviewee] spoke about the widespread use of alcohol as a way of managing the stress of illegal security operations just minutes after speaking about the excitement and fulfillment of working in the SAP security forces" (Kraft, 2015, p. 371).

Theories of trauma. Theories of trauma have developed along with shifts in psychological thought. We will review three of the most common theories—psychodynamic, information processing theory, neurobiological—and their applicability to PITS. A discussion of behavioral principles is left out despite the prominence of Prolonged Exposure (PE), because they are used to explain PTSD symptoms without much examination of the ontology of trauma.

Freud's theory of repression proposed perhaps the first explanation of trauma. Freud's treatment of trauma began with his treatment of hysterics. In his conceptualization, patients would suffer "reminiscences" or a return of anxiety-provoking memories to conscious attention. They would attempt to repress the memories to manage anxiety, but only partially succeed: they would forget the memories, but remember the associated affect. In this way, even though the trauma was "pushed from conscious awareness . . . [it] continues to have the power to impact the person negatively and powerfully through the presence of various (often somatic) symptoms" (Levers, 2012, p. 49). Initially Freud described these "traumas" in terms of intrapsychic conflicts,

but he later connected these traumas to external events including "premature sexual experience," i.e., childhood sexual trauma. Freud later proposed that these childhood sexual experiences were fantasies rather than instances of actual sexual abuse, perhaps due to societal pressures of the time, but his theory made a lasting contribution to trauma studies: "trauma is understood as that which is subjectively intolerable…and which, therefore, is pushed from conscious awareness in an effort to reduce the associated anxiety" (Levers, 2012, p. 49) but continues to affect the person through other symptoms. This conceptualization clearly influenced the definition of a traumatic stressor when PTSD was defined in the *DSM* and these similarities pose the problem for applying it to PITS: it relies on an anxiety-basis for explaining trauma, which does not match many of the reported emotional reactions to harmdoing.

Information processing theory, the framework for Cognitive Processing Therapy for PTSD, focuses on how memory is encoded and recalled. It argues that people are inundated with information throughout the day and need a way to process the information in a way that allows them to function, rather than be overwhelmed. The primary method of interacting with information is a schema: "a generic stored body of knowledge that interacts with the incoming information such that it influences how the information is encoded, comprehended, and retrieved. Schemata guide attention, expectations, interpretations, and memory searches" (Resick & Schnicke, 1993, p. 10). Schemas act as a set of filters for experience, providing a sort of short-hand for interacting with life's experiences. Information processing theory argues that most people have a just-world belief, i.e., the world is fair, which means good things happen to good people, and bad things happen to bad people. In the case of trauma, this just-world belief is challenged and their existing schemas must adapt. New experiences can be handled in two

primary ways: assimilation or accommodation. With the example of rape, a person could assimilate the experience into their existing just-world schema, e.g., "I was raped because I am a bad person/did something wrong", or a person could accommodate their schema to account for this new experience. Some cases of accommodation can be helpful, e.g., "it wasn't my fault I was raped", while completely altering one's schema (over-accommodation) might be harmful, e.g., "the world is completely dangerous and I can't be safe no matter what I do." This theory argues that these harmful forms of assimilation and over-accommodation cause the lasting distress from trauma. While this theory may be very helpful for understanding moral injury, it does not adequately explain the experience of traumatic symptoms following ideologically congruent violence, as the individual's schema would typically remain unchanged.

Neurobiology explains trauma as biological response: "following a traumatic event or witnessing a traumatic event, the central nervous system (CNS) begins to develop neurochemical pathways and physiological adaptions in order to respond to the system" (Levers, 2012, p. 60). Chemicals which prepare the body for action increase, resulting in more blood flow to the muscles and higher levels of alertness, attention, and memory formation. At the same time, chemicals which regulate processes unnecessary to fight or flight (e.g., digestion or complex reasoning) decrease. The memory systems "have increased reactivity to stimuli following situations" and the memory structures can be altered by the acute stressor, "suggesting a possible reason for symptoms of re-experiencing a traumatic event" (Levers, p. 60). This altered memory may explain why the individual's shift in brain chemistry extends beyond the original event. The imbalance causes the brain and body to remain in a "survival" state: "leading to increased and prolonged excitability and signaling within the CNS" which maintains the high levels of a

chemical possibly responsible for damaging the memory structures, emotional expression, and executive function (Levers, p. 62). The neurobiological reaction may explain many of the similarities between PITS and other forms of PTSD, as the same system is likely activated for resisting violence (flight/defense) and inflicting it (fight). The symptoms which overlap the most, hypervigilance and intrusion, are likely connected to this neurobiological shift, while other symptoms (e.g., extreme remorse) need further explanation (Levers, 2012).

Trauma and spirituality. Research indicates that religious beliefs and trauma are intertwined. The experience of trauma can affect an individual's religious beliefs. The severity of trauma influences how likely someone is to change their religious beliefs after the experience, both in terms of positive and negative change (Hussain, Weisaeth, & Heir, 2010). Combat seems especially tied to a change in religious beliefs. One survey with Vietnam veterans found that 71% of those surveyed struggled to reconcile their religious beliefs with combat experiences, 51% reported abandoning their religion in Vietnam, and 50% indicated that guilt related to experiences in Vietnam caused their religious beliefs to decrease (Sherman, Harris, & Erbes, 2015). Another study found that the experience of killing others and failing to prevent harm weakened religious beliefs, directly and due to guilt feelings (Fontana & Rosenheck, 2004).

Religious beliefs also affect recovery from trauma. A nationwide study in the United States found that using religion was the second most common coping method after the September 11th attacks, with 90% endorsing its use (Uecker, 2008). Positive religious coping (e.g., "seeking support and a closer relationship with the Deity, forgiving others and seeking forgiveness for one's own failings, working together with one's Higher Power to solve problems, and viewing the stressor as an opportunity for spiritual growth") is correlated with decreased

PTSD symptoms over time (Harris et al., 2012, p. 1277). Negative religious coping (e.g., "appraising one's Higher Power as punishing or abandoning, appraising one's community of faith/clergy as unsatisfactory, attributing the stressor to a demonic force, and questioning the power of the Deity"), or religious struggle, is correlated with worse outcomes (Harris et al., 2012; also see Exline, et al. 2011; Exline, 2013; Exline, Grubbs, & Homolka, 2015). Religious comforts and strains—feeling loved and accepted versus feeling alienated, fearful, or guilty—also affect long-term outcomes from trauma. Active prayer, using prayer to cope with and solve a situation, is correlated with positive adjustment, while passive prayer, using prayer to avoid stressors, is correlated with higher anxiety (Harris et al., 2012).

The close relationship between trauma effects and religion may be partly explained by the role of religious coping in meaning-making. Religious beliefs have been described as "a substantial part of many people's global meaning system" that "address issues of existential meaning, which may be called into question by trauma" (Wortmann, Park, & Edmonson, 2011, p. 2). One study found that religious moral beliefs were inversely related to depressive symptoms after war trauma (Hasanovic & Pajevic, 2012). Another study found that intrinsic religiosity was negatively associated with PTSD symptoms, while personal and social extrinsic orientations were positively associated with symptoms (Laufer & Solomon, 2011). A survey of religious interventions in the treatment of PTSD found that clergy-supported "exploration of trauma-related existential conflicts in patients with PTSD is beneficial" (Sigmund, 2003).

This interconnection between trauma and religion has significant implications for trauma treatment. Edward Tick (2005), after years of treating combat veterans, describes war as a "soul wound." He writes:

> And what about the agent of annihilation? Combat veteran Gustav Hasford wrote simply, "What you do, you become." Existentially speaking, the autonomous self, the "I" creates and defines itself by its actions and experiences. In war, that "I" redefines itself in terms of its capacity to cause pain or to endure the threat of sudden violent death, or both…to begin to heal the damage, we must step into the eye of this destructive conflagration…in particular, we must become aware of the spiritual dimensions of war, for therein lies its great power over us. (p. 21-22)

One study used structural equation modeling to assess for treatment motivations of Vietnam veterans and found that loss of religious belief and related feelings of guilt predicted higher utilization of mental health services, while severity of PTSD symptoms did not. The authors concluded that "a primary motivation of veterans' continuing pursuit of treatment is their search for a meaning and purpose to their traumatic experiences…[and] raises the broader issue of whether spirituality should be more central in the treatment of PTSD" (Fontana & Rosenheck, 2004, p. 582).

Despite a preponderance of evidence on the importance of spiritual issues in the effects and treatment of trauma, the integrative literature on religious/spiritual processes largely neglects the issue of combat trauma. In 2001, at an international meeting, members of the Christian Association for Psychological Studies doubted whether they were prepared to address issues of trauma and violence (Walker & Aten, 2012). In response, the *Journal of Psychology and Theology* devoted a volume to the question of integration and trauma. The volume included two articles targeted at combat related trauma. Worthington and Langberg (2012) offered an integrative psycho/spiritual framework for working with self-condemnation as a result of moral

injury, with a focus on self-forgiveness. Tran, Kuhn, Walser, and Drescher (2012) evaluated the relationship between religiosity and PTSD, and found that similar to studies on religious coping, a negative concept of God correlated with more severe PTSD symptoms while a positive concept of God correlated with less severe symptoms. A ten year review of the *Journal of Psychology and Theology* and *Journal of Psychology and Christianity*, the two primary publications for integration literature, failed to find any other articles that addressed working with military personnel and trauma from an integrative perspective.

Dissertation Objectives

A review of the trauma and integration literature reveals a significant gap in our understanding of perpetration-induced traumatic stress, including two fundamental questions: how does perpetrating violence cause trauma, and how can we treat this trauma? None of the existing psychological models adequately answer the first question, limiting their ability to effectively address the second. Therefore, I will propose a new theoretical model to drive conceptualization and treatment of PITS.

Methods. Theoretical models in psychology are much like buildings. Every model rests upon a foundation of assumptions, erects a framework shaped by its function, and is then covered by trappings intended for day-to-day use. The behavioral model exists upon a foundation of empiricism, built a framework of behavioral change, and is covered in the wallpaper of reinforcement strategies, stimulus and control models, behavioral analysis, and so forth.

In a similar way, I will construct my new model: Fundamental Image Theory (FIT). Chapter two and three will build the foundation for FIT by examining knowledge from Christian theology and psychology. Chapters four and five will build the framework of my new theoretical

model, Fundamental Image Theory (FIT). I will use FIT to propose a new conceptualization of trauma in chapter six and apply that conceptualization to understanding the trauma of harmdoing. In the final chapter I will use FIT and this new conceptualization to examine the trauma experienced specifically by soldiers who kill in combat, with clinical considerations included.

Chapter 1 Summary

In this chapter, I introduced the primary questions for my dissertation and reviewed the relevant research that formed these two questions. Here are the key elements:

- Perpetration-Induced Traumatic Stress (PITS) is a form of PTSD with the act of killing or harming another as the primary traumatic stressor
- Traditional and current models for trauma do not explain why harmdoing acts as a traumatic stressor or why it can lead to PTSD symptoms
- Traditional and current models for trauma do not adequately integrate spiritual dynamics into understanding trauma, despite consistent research into the importance of spirituality in the experience and treatment of traumatic events
- This dissertation will propose an integrated model for trauma, Fundamental Image Theory, that describes the common factors of trauma across all traumatic events
- FIT will be applied to combat violence to illuminate why harmdoing causes trauma and explore the resulting clinical implications

Chapter 2

Christian Foundations

Every theoretical model begins with foundational assumptions and beliefs. Fundamental Image Theory (FIT) begins with three key assumptions. First, FIT should be constructed through an integrative approach. Jones and Butman (2013) describe three methods of integration:

> *(1) Ethical integration,* the focus on the application of faith-based moral principles to the *practice* of science; (2) *perspectival integration/[levels-of-explanation view]*, the view that scientific and religious views of any aspect of reality are independent, with the result that scientific/psychological views and religious understandings complement but don't really affect each other; and (3) *Christianizer of science integration,* an approach that involves the explicit incorporation of religiously based beliefs as the control beliefs that shape the perceptions of acts, theories, and methods in social sciences. (p. 36)

FIT will use the third type of integration, labeled *Christianizer of science integration,* referred to throughout this work simply as "integration." In this method of integration, "theological and biblical anthropology will give us… 'control beliefs' [which] are the 'givens', the foundational assumptions that control or shape all other thought" (Jones & Butman, 2013, p. 61).

This method of integration requires an essential commitment to thinking biblically about psychology. As Greidanus described it, the task is "to study reality in the light of biblical revelation" (Jones & Butman, 2013, p. 39). Jones defines integration as

> our living out—in this particular area—of the Lordship of Christ over all of existence by our giving special revelation—God's true Word—its appropriate place of authority in determining our fundamental beliefs about and practices towards all of reality and toward [psychology] in particular. (Jones & Butman, 2013, p. 39)

Rather than viewing Christianity and psychology as dual, equal truths, this assumption establishes Christianity as the foundation for all work that follows.

Second, this system of integration recognizes God's status as Creator of all life. This means special revelation and general revelation do not conflict. The appearance of conflicting information is due to misinterpretation rather than a fundamental disharmony between scripture and science. This may come from misinterpreting the Bible, limited scientific knowledge, or both. (Embedded in this assumption is the acknowledgement that the ideas in this very document are vulnerable to error and represent an attempt at understanding "through a mirror darkly," not an assertion of truth.)

Third, disciplines born of the study of the physical world, including but not limited to psychology, provide a valuable contribution to our Biblically based understanding of persons. Though the Bible contains authoritative revelation, its scope is limited; the Bible does not cover every situation or nuance of creation. General revelation provides important supplementation to the special revelation of the Bible. While Christianity remains the ultimate authority on matters addressed by special revelation, understanding general revelation should include a dialogue between Biblical perspectives and scientific knowledge with mutual influence. The majority of FIT will focus upon psychology, but it will also incorporate knowledge from other sciences and the humanities.

Integrative Psychotherapy

The field of integrative psychology is more than fifty years old and filled with theories, interventions, and research that are beyond the scope of this discussion. The work has been summarized and critiqued well by others (see Johnson et al., 2010; Jones & Butman, 2013; Tan, 2011; Tan, 2013; Worthington, Hook, Davis, & McDaniel, 2011; Yarhouse, Butman, & McRay, 2013). This discussion will focus predominantly on the Integrative Psychotherapy (IP) model proposed by McMinn and Campbell (2007).

IP is organized around the concept of *imago dei,* which makes it an appropriate starting place for an examination of harmdoing. As described in Genesis and other scriptures throughout the Bible, the sin of violence is directly tied to the fact God made humankind in his own image: "Whoever sheds the blood of a human, by a human shall that person's blood be shed; for in his own image God made humankind" (Gen 9:6). This suggests that any understanding of violence and the cost of violence must thoughtfully engage with the idea of humankind bearing God's likeness.

As described by its creators, IP was motivated by three key aims: integration, therapy, and a comprehensive approach. IP integrated on multiple dimensions, both in its treatment of psychological theories (incorporating cognitive behavioral therapy, psychodynamic theory, and interpersonal and family systems) and its treatment of theological perspectives (employing "transtheoretical eclecticism…[they] have attempted to look for a common theological theme" (McMinn & Campbell, 2007, p. 386). This theological theme grounded itself in the doctrine of creation and *imago dei,* while also considering the themes of sin and redemption. IP's function was to provide a "kind of transforming ministry" within the delivery mechanism of

psychotherapy. Additionally, the authors aimed for it to be "comprehensive…[as it] bridge[s] multiple dimensions in psychotherapy…is Christocentric…[and] can be used with both Christians and non-Christian clients" (McMinn & Campbell, 2007, p. 389).

As my key aims differ from McMinn and Campbell, my treatment of IP will also differ. I share the integrative motivation and will review the trans-theological components of their model in detail. While I am concerned with psychotherapy, the same theories they drawn upon have already proven inadequate for explaining the trauma of harmdoing, so I will spend less time engaging with the specific psychological theories used in IP. Finally, I intend to focus primarily on the common factors of trauma. To serve this aim, I will devote some extra attention to the nature and influence of sin throughout the construction of FIT. I will also end the examination with a theological perspective on power, since issues of power are fundamental to violence, both in its perpetration and reception.

***Imago dei* and creation.** "Then God said, 'Let us make humankind in our image, according to our likeness'…So God created humankind in his image, in the image of God he created them…God saw everything that he had made and indeed, it was very good" (Gen: 26-27, 31).

The exact meaning of *imago dei* has been debated throughout time and theology. In their treatment of *imago dei,* McMinn and Campbell propose that:

> The image of God is complex, defying simple explanation or categorization. Rather than choosing one of the [common views], perhaps truth can be found in all three… Jones and Butman (1991) suggest the same: "it seems judicious at this time not to fight for an

> exclusive meaning of the image, but rather to conclude that being created in the image of God means all this and more" (2007, p. 34).

As such, IP uses an integration of the three most common explanations of *imago dei:* the functional view, the substantive/structural view, and the relational view.

The functional view emphasizes how humankind was created to function in specific ways with the world, i.e. what we do. This understands God's likeness in terms of how humankind "relate[s] to the rest of the created order in a way that represents or reflects God" (Jones & Butman, 2013, p. 65). This is reflected in the Genesis texts which describe humans' role as having dominion over the creatures and land of the earth, as well as Adam's placement in Eden "to till it and keep it" (Gen 2:15). This role of humans as managers over the world is referred to throughout the Bible, such as Psalm 8:

> You have given them dominion over the work of your hands; and have put all things under their feet, all sheep and oxen, and also the beasts of the field, the birds of the air, and the fish of the sea, whatever passes along the paths of the seas. (Psa 8:6-8)

McMinn describes this aspect of the *imago dei* as the call "to be responsible managers" (M. McMinn, personal communication, February 1, 2015). IP integrates this aspect of *imago dei* with the parts of therapy that focus on improving a client's functioning, such as a client who cannot perform well at work due to anxiety and engages in treatment to overcome the anxiety disorder so she can succeed at work.

The substantive or structural view states that human nature is a reflection of God's nature on an ontological level, i.e., what we are. This understands God's likeness in terms of what humankind is "made of or possesses, whether that is a substance…or a capacity…distinct from

the rest of the created order" (James & Butman, 2013, p. 65). These distinct attributes have been described alternatively as our rational (e.g., knowledge, wisdom, truth), moral (goodness, love, mercy, holiness, peace, righteousness), and purpose or meaning-making (will, freedom; mental, cognitive) abilities, however there is no final consensus. The phrase used for creating humankind parallels that of the language used in Genesis 5:3, "When Adam had lived 130 years, he became the father of a son in his likeness, according to his image, and named him Seth." This implies that humankind, as a son to a father, bears a resemblance to God and represents him (Grudem, 2009). This aligns with McMinn's application of the structural view of humankind as:

> Carry[ing] a reflection of God's character…With our advanced ontological capacities, we humans tell a larger story even as we live out our individual, family, and community stories. In other words, we are meaning makers. In the context of these meaningful stories we develop and adhere to values and beliefs, and these shape our day-to-day behavior…God created us as meaning-makers. (M. McMinn, personal communication, February 1, 2015).

IP integrates this aspect of *imago dei* with psychology's examination of cognitions, schemas, and in later writings by McMinn, value-driven actions and all forms of meaning making. Meaning making continues to gain significance within the recent psychological literature (Park, 2013).

The relational view contends that humankind's relational nature reflects God's own relational nature, i.e. what connects us:

> The *imago dei* is a verb rather than noun; it is not so much that each individual human contains the image of God…but that we collectively image God as we engage in loving relationships with God and one another. "As is evident throughout scripture, the divine

> image is not primarily individual but is shared and relational." (McMinn & Campbell, 2007, p. 33)

This view highlights the communication between the Trinity as the original example of healthy relationship dynamics apparent during creation—"it is not good that man should be alone"—the emphasis on humans in relationship with God, as well as Jesus's own nature as "the image of the invisible God" who emphasized loving God and loving others above all things (Gen 2:18; Col 1:15). IP integrates this aspect of *imago dei* with interpersonal and family systems views of psychology.

McMinn (personal communication, February 1, 2015) summarizes this framework for *imago dei* in the following chart (adapted from Figure 1.2, p. 36):

Table 1

Integrative Model: Creation

FUNCTIONAL	STRUCTURAL	RELATIONAL
Created to manage	Created to make meaning	Created to relate

***Imago dei* and the fall.**

> When you eat of [the forbidden fruit] your eyes will be opened, and you will be like God, knowing good and evil."…she took of its fruit and ate; and she also gave some to her husband, who was with her, and he ate. Then the eyes of both were opened, and they knew that they were naked; and they sewed fig leaves together and made loincloths for

> themselves. They heard the sound of the LORD God walking in the garden at the time of evening breeze, and the man and his wife hid themselves from the presence of the LORD God. (Gen 3:5-8)

The fall fundamentally changed the nature of humans. Before Adam and Eve ate the forbidden fruit, they had no knowledge of evil and bore the undistorted *imago dei*. After the fruit opened their eyes to evil, their inherent nature changed in all aspects of the *imago dei*, and is reflected in the events that closely followed*:* their functional reality changed when they coped with their wrong by hiding; their structural reality changed as they made meaning of themselves and each other as "naked" for the first time; and their relational reality changed as they hid from God and attempted to shift blame for their actions onto each other. As many clients have stated after a trauma: they could never be the same again—and with this first trauma, neither could humans ever again be the same.

Understanding the effects of the fall on the nature of humans requires a closer examination of sin. McMinn (2008) wrote that "sin engulfs three dimensions: *sinfulness, sins,* and the *consequences of sin"* (p. 38). McMinn uses a metaphor to describe sin that will be helpful in the following discussion:

> [Sin is like] white noise…the obnoxious sound of static, like what you might get if you turned up the volume on your stereo and let the dial rest between radio stations…White noise might not sound unpleasant from this description, but if persistent and loud enough, it can be quite distracting and annoying. (p. 38)

The first dimension of sin is our inherent sinfulness: the white noise is always on, whether we are attuned to it or not. The noise exists from the moment we are born to the moment

we die, as "the inclination of the human heart is evil from his youth" (Gen 8:21). This constant noise is passed on to all humans, so that "all…are under the power of sin, as it is written: There is no one who is righteous, no, not one" (Rom 3:9-10). The white noise of sin may fade from our attention as we become accustomed to it or something else distracts us, but the sound itself (and its damage) never ceases.

As a result of our inherent sinfulness, we enter the second dimension of sin: we make sinful choices; we decide to turn up the volume on the white noise. We decide:

> [To] choose evil. We commit sins…we rebel against God in our thoughts, attitudes, behaviors, volition, and relationships…by putting ourselves first, above relationship with God and neighbors. In doing so we crank up the volume and immerse ourselves in the noise of our own sin. (McMinn, 2008, p. 42).

This decision to sin is intertwined with our sinfulness, and is in fact inevitable because of it: "I do not understand my own actions…for I do not do the good I want, but the evil I do not want…it is no longer I that do it, but sin that dwells within me" (Rom 7:15-20). Even though we may recognize that the noise is annoying or even painful, we find ourselves turning it up again and again.

In the final dimension of sin, we suffer the consequences of sin. The noise of sin, always present and frequently turned louder by ourselves and those around us, deafens us. Since we share this world, we suffer the pain of our sins and others' sins, just as our sins affect those around us: "sin and its effects can be like a contagion that spreads from one to another, eventually corrupting an entire segment of society…sin is costly" (McMinn, 2008; p. 42). The psalms are full of cries out against this deafening aspect of sin:

> My God, my God, why have you forsaken me? Why are you so far from helping me, from the words of my groaning? Oh my God, I cry by day, but you do not answer, and by night, but find no rest. (Psa 22:1-2).

These three dimensions of sin have broken the *imago dei*. While God's image remains in humanity, it no longer resembles the perfect image of creation. For IP, this means humanity is broken functionally, structurally, and relationally. Functionally, "though we are created to manage, we don't always manage well" (M. McMinn, personal communication, February 1, 2015). In psychology this is most clearly seen in ineffective or harmful actions, distorted thoughts, and dysfunctional emotions. Structurally, our sense of meaning-making can become impaired, valuing unhealthy things, making distorted meaning, or even losing any sense of meaning. Psychologically we see this when people lack a sense of fulfillment or joy, pursue goals that only distort their values further, or develop a pervasive sense of hopelessness. Relationally, we form false or even destructive attachments, seen in psychology's needs to address such disrupted relationships as strained marriages, the consequences of abusive families, or social isolation and loneliness.

With the fall, we can expand the model to reflect the changing nature of *imago dei* and nature of humankind (see Table 2):

***Imago dei* and redemption.**

> For God so loved the world, that he gave his only Son, so that everyone who believes in him may not perish but have eternal life. Indeed, God did not send his Son into the world to condemn the world, but in order that the world might be saved through him. (John 3:16-17)

Table 2

Integrative Model: Fall

	FUNCTIONAL	**STRUCTURAL**	**RELATIONAL**
CREATION	Created to manage	Created to make meaning	Created to relate
FALL	Manage poorly in affect, behavior and cognition	Vulnerable to distorted meaning and purpose	Relationships: we break and wound others

Through redemption, God offers transformation for humankind. While sin distorted the *imago dei*, described by Paul as "a veil lies over their minds," Christ came to "set [the veil] aside" so that "all of us, with unveiled faces, seeing the glory of the Lord…are being transformed into the same image from one degree of glory to another" (2 Cor 3:15-18). The nature of this transformative process has significant implications for the current nature of humankind and the *imago dei.*

First, this redemption provides a comprehensive relief to a suffering and broken world, though not all at once. Christ offers freedom and life by making an atonement for the sins of humanity (Rom 7), to be a support for those who suffer (Heb 2), grace and mercy for those who seek it (Heb 3), peace and hope for ultimate goodness (Joh 16), and the Holy Spirit to provide guidance and teaching (Joh 14). The overwhelming nature of sin has been met by God's overwhelming love:

> Through him God was pleased to reconcile to himself all things, whether on earth or in heaven, by making peace through the blood of his cross. And you who were once estranged and hostile in mind, doing evil deeds, he has now reconciled…so as to present you holy and blameless and irreproachable before him (Col 1:19-22)

Second, our current state of redemption is different than glorification. In the final stage of glorification all the effects and influences of sin will be removed, "nothing accursed will be found there any more" (Rev 22: 3). Redemption exists as a liminal state between fall and glorification, which means sin is still active in the world and humankind, in all three dimensions described above.

Third, to be redeemed means to engage in a process. This process begins with a washing and regeneration:

> I will sprinkle clean water upon you, and you shall be clean from all your uncleannesses, and from all your idols I will cleanse you. A new heart I will give you, and a new spirit I will put within you; and I will remove from your body the heart of stone and give you a heart of flesh. (Eze 36: 25-26).

Prior to this regeneration, an individual was "enslaved to sin," i.e. oriented primarily by evil intentions. After regeneration, a person receives freedom and is able to reorient themselves to righteousness, i.e., loving God. This represents a change in options; an individual can choose to orient themselves towards sin or orient themselves towards righteousness, as reflected in Paul's warning, "Do not let sin exercise dominion in your mortal bodies, to make you obey their passions. No longer present your members to sin as instruments of wickedness, but present yourselves to God" (Rom 6: 12-13). By choosing to orient towards righteousness, individuals

can become more like Christ throughout their lifetimes. In this way, the individual is "transformed into the same image from one degree of glory to another" throughout a lifetime of sanctification (2 Cor 3:18).

Fourth, engaging in the redemptive process does not allow an individual to attain perfection. While numerous New Testament writers caution people against being ruled by sin, they also provide signs that perfection is not attainable while alive. John cautions against perfectionistic expectations, "If we say that we have no sin, we deceive ourselves, and the truth is not in us . . . if we say that we have not sinned, we make him a liar, and his word is not in us" and instead we should aim to "confess our sins, he who is faithful and just will forgive us our sins and cleanse us from all unrighteousness" (1 John 1: 8-10). James also states, "all of us make many mistakes" (James 3: 2).

The nature of redemption means that the *imago dei* may become continually closer to the created state through an individual's lifetime, but remains influenced by sin.

Biblical Anthropology of Power

A theoretical framework for understanding harmdoing and trauma requires a consideration of power, which can viewed through the biblical lens of free will. Martin Luther (2012) describes free will as "the faculty of discerning, and then choosing also good" (p. 73). This definition of requires two essential components: (a) the ability to discern, and (b) the ability to choose. The ability to attain these essential components has varied throughout humanity's existence, which Augustine (expanded upon by Boston) described as four different states: created, fallen, reborn, and glorified (Boston, 1964). We will focus on the first three, which have already come to pass.

In the created state, humans had the ability to know and obey God's will (good), but they were not compelled or controlled to act in this way. Accordingly, Adam and Eve chose to disobey God's commandment and ate the forbidden fruit. This choice opened humanity's eyes to evil and disrupted the natural order (the *imago dei)* in such a way that people no longer accurately knew or obeyed the will of God. Humans entered the second state, as fallen. In this state, humans became unable to discern good from evil. God sent the Law so sin could be discerned, but humans still lacked the ability to choose good:

> Yet if it had not been for the law, I would not have known sin. I would not have known what it is to covet if the law had not said 'You shall not covet.' But sin, seizing an opportunity in the commandment, produced in me all kinds of covetousness…for sin, seizing an opportunity in the commandment, deceived me…For we know that the law is spiritual; but I am of the flesh, sold into slavery under sin. (Rom 7: 7-14)

Thus in the fallen state, humans lacked freedom. The atonement of Jesus Christ created a third possible state for humans: reborn. In this state, a person can be inhabited by the Holy Spirit, which provides a person with discernment of good and through this new spiritual life, freedom from sin's power so they are able to choose good. Similar to the created state, reborn humankind can choose good—or not, which Paul describes as the choice between ultimate life or death.

This model of power and freedom can be integrated with the IP model of the *imago dei*. Through redemption humans are freed from the penalty and power of sin and gain the capacity to choose good. But the capacity to choose evil also remains (see Table 3).

Table 3

Integrative Model: Summary

	FUNCTIONAL	**STRUCTURAL**	**RELATIONAL**
CREATION ***able to know and choose good; free***	Created to manage	Created to make meaning	Created to relate
FALL ***unable to know or choose good; enslaved***	Do not manage well	Vulnerable to distorted meaning and purpose	Relationships break and wound
REDEMPTION ***able to know and choose good; free***	Improved functioning	Make more accurate meaning of life and Godly choices	Relate more effectively with God and others

Chapter 2 Summary

In this chapter, I reviewed the primary assumptions to be used in constructing my new model, including the method of integration. I reviewed McMinn and Campbell's Integrated Psychotherapy model and a Biblical anthropology of power, with an emphasis on the elements that will be used to provide the Christian foundations of my proposed Fundamental Image Theory. Here are the key elements:

- The model will implement the Christianizer of science integration method, which states that Christian theology provides the foundational assumptions that shape and influence the integration process
- Humans were created to bear the image of God, which imbues humanity with specific functional, structural, and relational qualities

- The Fall fundamentally distorted the *imago dei*, which causes humanity to exist in a sinful state, act sinfully, and bear the consequences of sin
- Sin limits our ability to have free will, which is defined as being able to discern truth and freely choose our actions
- Redemption through Jesus Christ offers a transformation of this broken image that is comprehensive but ongoing
- In this current state, humans can become progressively closer to the image of God as originally created, but cannot yet achieve perfect restoration

Chapter 3

Psychological Foundations

The primary clinical psychology models used to conceptualize and treat trauma are based on a historical understanding of trauma as "actual or threatened death or serious injury" (*DSM-IV*; APA, 1994). As a result, these psychological models do not adequately explain post-traumatic stress symptoms (PTSS) that result from harmdoing. This disconnect calls for a new model that defines the common-factors of trauma, which can therefore explain how very divergent traumatic stressors lead to similar PTSS. To that end, I want to draw from a single psychological theory that provides internal consistency, a comprehensive framework for understanding psychological health and dysfunction, significant research support, and which aligns closely with the Christian foundations established in the previous chapter. Self-Determination Theory (SDT) fulfills all of these criteria.

SDT provides a comprehensive framework for human functioning. It was developed through decades of empirical research (see Deci & Ryan, 2000; Deci & Ryan, 2004; Deci & Ryan, 2008; Ryan & Deci, 2000; and Lange, Kruglanski & Higgins, 2011 for a review of SDT's history and empirical support). SDT research began within the sphere of social psychology but departed significantly from other theories. At the time, the dominant trends of social psychology focused on the effects of social context on people's attitudes, values, motivations, and behaviors. These theories generally implied or stated explicitly that social contexts teach people what to think, value, need, and do. This has been described as the "standard social science model," and

implies an essentially malleable concept of human personality and functioning (see Barkow, Cosmides, & Tooby, 1995). Some schools of developmental psychology adopted this view, most clearly in social learning theory, while clinical psychology reflects this perspective in theories of behaviorism and conditioning. While SDT maintains the idea that social context influences the individual, it proposes a dialectical model between self and environment.

SDT defines the self as containing three nascent qualities, which are fundamental to human nature. The first quality includes a universal impulse towards growth. Humankind is a "proactive organism…humans are naturally active and [have] natural tendencies towards development" (Ryan & Deci, 2000, p. 233). This assumption is similar to humanistic views of self-actualization. Uniquely, SDT focuses on this growth potential through the lens of intrinsic motivation—activities people engage in for enjoyment or their inherent worth, not for external rewards. The intrinsic value of the activity is the primary motivator, not external rewards or punishments.

Second, SDT states that human nature includes a universal impulse towards integration. This integrative impulse applies both to self-integration "tending towards inner organization and holistic self-regulation" and self-environment integration "tending toward integration of oneself with others" (Deci & Ryan, 2004, p. 5) and the world around them. This "is an active, natural process in which individuals attempt to transform socially sanctioned mores or requests into personally endorsed values and self-regulations" (Ryan & Deci, 2000, p. 235). In this way, people are not simply receptacles for the influences of social context, but engage in active dialogue with their social context and meaning-making.

Finally, SDT states that human nature includes a need for three essential "nutrients:" competence, autonomy, and relatedness. The authors describe these needs as "innate psychological nutrients that are essential for ongoing psychological growth, integrity, and well-being" (Ryan & Deci, 2000, p. 229). As part of the nascent self, these needs apply to all humans and are not defined by social context.

This nascent self—active, integrating, with specific needs—grows in a social context. SDT posits that the development of this nascent self, and its innate tendencies, are affected by factors within that social context, "however proximal, (e.g., a family or workgroup) or distal (e.g., a cultural value or economic system)" (Ryan, 2014, p. 85). Some factors will encourage the active and integrative processes, while other factors will hinder it. The self becomes the product of this dialectic between its nascent self and environment. This foundational dialectic contradicts the assumption of the standard social model, which places the self in a relatively passive role within its social context.

The authors use the metaphor of a plant to illustrate these fundamental assumptions of SDT. A plant is naturally inclined to grow, but requires certain nutrients to grow to its full potential. The environment provides these nutrients in varying amounts, which in turn affects how much and in what ways the plant grows. For example, a plant may react to a lack of sufficient sunlight by forming smaller fruits or not forming fruit at all. Just as a plant may grow towards the sunlight in an effort to get its need met for photosynthesis, individuals proactively respond to their social context to get their essential psychological needs met. The authors label this process the metatheory of the organismic-dialectic, and use it to explain well-being, pathology, and treatment potential.

Well-Being

SDT defines well-being based on two important assumptions. First, it describes people as naturally growth and integration oriented. Second, this integrative growth process requires specific, universal nutrients to occur. The authors describe these needs as "innate, organismic necessities rather than acquired motives…[and] define needs at the psychological rather than physiological level" (Ryan & Deci, 2000, p. 229). This model differs from other drive theories in crucial ways.

SDT gives preeminence to psychological needs over physiological needs. This differs from Hull and Freud's theories, which focus on physiological drives shaping human personality and behavior. SDT argues that physiological needs, while important, are regulated by psychological processes and thus subordinate. In this way, SDT provides a psychological foundation for human nature rather than a biological one.

SDT's assertion that people have an innate growth orientation and proactively respond to their environment also establishes a different orientation towards needs. Physiological drive theories describe needs in terms of deficits: if an individual has an unmet need, the deficit drives the individual to act and behave in ways they learned to satisfy that need, with the goal of returning that need to dormancy. This is a fundamentally defensive orientation to needs; needs are something that must be met, so the need goes away. SDT, however, frames needs within the growth orientation:

> That is, rather than viewing people as passively waiting for disequilibrium, we view them as naturally inclined to act on their inner and outer environments, engage activities that interest them, and move towards personal and interpersonal coherence…innate life

> processes can occur naturally, without the prod of a need deficit. (Ryan & Deci, 2000, p. 230).

Furthermore, while the growth process requires specific nutrients to reach maximum potential, need satisfaction is not necessarily the goal of actions. In this way, needs support action but do not necessarily drive actions: "For example, it is adaptive for children to play, but they do not play to feel competent" (Ryan & Deci, 2000, p. 230). While a person may engage in a behavior specifically to meet a biological need (e.g., calling a family member because they feel lonely), many behaviors are not driven by a need-deficit, and in an optimal environment behaviors are driven by intrinsic motivation.

SDT argues that all people share three essential psychological needs: competence, relatedness, and autonomy. These needs were identified by their role in contributing to well-being and ability to mediate the effects of social context on well-being. Research found that these needs explained between-person effects on well-being and within-person effects; that is, a person's day-to-day experience of "good" and "bad" days correlated with the degree these basic needs were met during that day (Lange et al., 2011, p. 434). Furthermore, research found that these needs applied universally, across domains, contexts, and cultures. Despite continuing research, the authors have not found evidence of any universal needs outside of the original three (see Deci, 2000; Lange et al., 2011).

The first psychological need is competence, which is "people's inherent desire to be effective in dealing with the environment" (Deci & Vansteenkiste, 2004, p. 24). According to this need, people engage in their internal and external worlds in an attempt to feel effective and achieve a sense of mastery. Competence provides several adaptive qualities, as it encourages an

interest in engaging with challenges and exploration, which facilitates cognitive, physical, and social growth. Deci and Ryan (2000) acknowledge apparent similarities between the competence need and other social theories of mastery and locus of control, especially in Bandura's treatment of self-efficacy theory. Bandura's self-efficacy theory developed from incentive theories, which frames self-efficacy primarily within the context of goal attainment. SDT, by contrast, incorporates White's (1959) "innate effectance motivation . . . [which means] the experience of competence in and of itself is a source of satisfaction and a contributor to well-being over and above any satisfaction resulting from the outcomes that competence might yield" (Deci & Ryan, 2000, p. 257). This difference represents a common contrast between SDT and other social theories: it focuses on process—and the intrinsic benefit therein—over goals or tasks.

The second psychological need is relatedness. It is described as the need "to seek attachments and experience feelings of security, belongingness, and intimacy with others" (Deci & Ryan, 2000, p. 252). Many life experiences focus on activities with others and a desire to feel belonging. Relatedness supports such adaptive qualities as cooperation, resource sharing, cohesive social organization, and the transmission of group knowledge to an individual, which supports the maintenance of knowledge across generations. Humans are inherently relational,

The final need of SDT is autonomy. The need describes the desire for "volition… [the] desire to self-organize experience and behavior and to have activity be concordant with one's integrated sense of self…autonomy concerns the experience of integration and freedom" (Deci & Ryan, 2000 p. 231). Frequently, SDT's concept of autonomy is inaccurately confused with internal locus of control, independence, self-determination, or individualism. Locus of control and independence both infer an issue of power over actions. Deci and Ryan contend that

autonomy and these ideas of control do not overlap both because it is impossible to avoid all external (contextual) influence on behavior, and more fundamentally, because autonomy "concerns the extent to which people authentically or genuinely *concur* with the forces that do influence their behavior" (Deci, 2000, p. 330). The concordance of self-beliefs and actions matter more than the control of actions. The capacity to choose one's path, even in the face of powerful constraints, is the third psychological need proposed by SDT.

The type of concordance found in autonomy requires an integration of the self. The authors provide the example of a soldier:

> Entering a village from where shots had been fired, [he] was ordered to kill an innocent person. He was of two minds: as a loyal soldier he believed in the importance of following orders; at the same time he knew that he ought not kill an innocent person. The clash of values suggests that his motive to kill (to follow an order) could not be integrated within the self, so it could not be done autonomously. (Deci, 2000, p. 331)

In this way, autonomy involves the freedom found when values, motivations, and actions harmonize, a freedom from self-conflict, not a freedom found in power or dominance.

Autonomy does not refer to individualism or selfishness. The focus is not on whether or not someone acts from their own power or resources, but whether someone acts in a way congruent with their own beliefs and sense-of-self and community-relatedness. In this way, autonomy does not imply individualistic culture norms:

> Autonomy within Western or Eastern cultures can accrue from relevant values having been fully internalized. For example, persons in an Eastern culture could be autonomous when enacting a collectivistic cultural value, just as persons in a Western culture could be

> autonomous when enacting an individualistic cultural value if they had fully internalized the target value. (Lange et al., 2011, p. 426)

This was supported by cross-cultural research, which found that

> sampled students in Russia, Turkey, South Korea, and the US…showed that the degree to which the participants had internalized (and expressed greater relative autonomy for enacting) the values and regulations for the various practices predicted their degree of psychological health and well-being. (Lange et al., 2011, p. 426)

Autonomy supports several adaptive processes. Autonomy represents an individual's ability to absorb, process, and organize information from the environment (both physical and social) and use it for the purpose of self-regulation and meaning-making. It serves as "the very basis of effective behavioral regulation across domains and developmental stages" and without autonomy an individual responds "automatically by contextual factors" (Deci & Ryan, 2000, p. 254). In this sense, autonomy involves self-determination: a person regulates behavior based on their sense of self, not based solely on external factors.

Overall, SDT defines well-being as the ability for people to fully realize their potential, which is made possible through adequate meeting of the essential psychological needs for competence, autonomy, and relatedness.

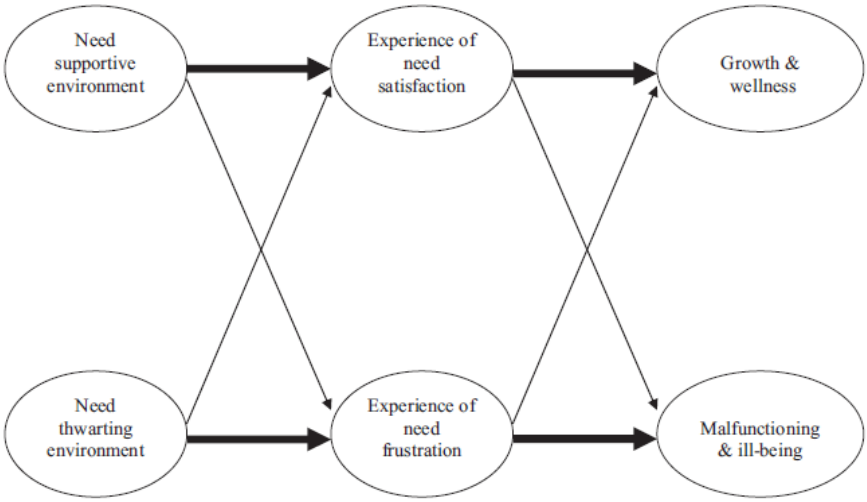
Pathology

SDT assumes that human nature includes a vulnerability for ill-being and pathology. Health requires the meeting of basic psychological needs. When those needs are not met, the deficit impairs an individual's ability to be proactive, integrated, and experience well-being. This deficit takes two primary forms: low need satisfaction and antagonization of needs. The two

represent crucially different types of deficits. In the former, needs are not adequately fulfilled; in the latter, an external force actively obstructs the fulfillment of needs. While low need satisfaction leads to decreased health overtime, need antagonization causes a more severe and accelerated form of damage. This difference can be illustrated with the authors' earlier plant metaphor: "if plants do not get sunshine and water (i.e., low need satisfaction), they will fail to grow and die over time; yet, if salted water is thrown on plants (i.e. presence of need antagonization), they will wither more quickly" (Vansteenkiste & Ryan, 2013, p. 265).

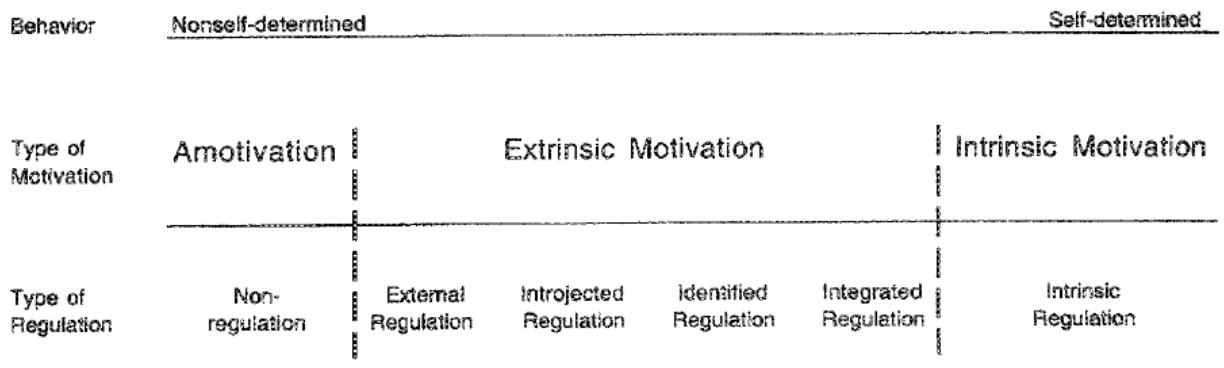
SDT describes three social environments in terms of need fulfillment: need supportive, need depriving, and need thwarting, which means environments can be "actively fostering of, indifferent to, or antagonistic toward the individual's satisfaction of needs" (Vansteenkiste & Ryan, 2013, p. 265). While an individual can access internal resources to manage a deficient social environment, captured in resilience factors, overall the environment will influence the Individual's functioning. This interplay is captured in figure 3.1 (taken from Vansteenkiste & Ryan, 2013).

Figure 1. Impact of needs on health.



Need deficits lead to pathological processes which effect personality and behavior. First, need deficiency will impair the individual's innate growth process, i.e., motivational quality. The vitality of the growth process can be conceptualized along a continuum from low vitality to high vitality. At the lowest end, the growth process has been reduced to a-motivation, "the state of lacking intention to act" (Deci & Ryan, 2004, p. 17). Individuals either act passively, engaging in behaviors with no sense of intention, or cease action altogether. A-motivation occurs most often when a person feels unable to achieve an outcome (competence deficit), the activity or outcomes do not align with their values (autonomy deficit), or they do not experience enough relational security to risk a challenge (relatedness deficit). Within the middle of the spectrum, the growth process has been reduced to external motivation. In essence, a person it motivated to "satisfy an external demand or socially constructed demand" (Deci & Ryan, 2004, p. 17). Finally, at the highest end of vitality, the growth process takes the form of intrinsic motivation: "doing an activity out of interest and inherent satisfaction" (Deci & Ryan, 2004, p. 17).

Figure 2. Regulation styles.



Second, a need deficiency will also warp an individual's integrative tendency, as represented in regulatory styles (see Figure 2, taken from Deci & Ryan, 2000). An individual's ability to integrate the demands of external needs with their own identity is reflected in the methods by which they regulate their behavior. SDT describes six regulatory styles of behavior, which fall along a spectrum of self-determination. This spectrum can range from no self-determination (no integrative tendency) all the way to complete self-determination (fully active integrative tendency). At the lowest end of the spectrum, persons use non-regulation. In this state, individuals have no integrative process to manage the tension between external and internal preferences, and as a result, they are "frozen" between the demands of both and take little to no action. This regulatory style is associated with passivity, distress, and low perceived competence.

The next four regulatory styles represent the dialectical relationship between an individual's own identity and the demands of their external environment. Each stage represents further progression towards integration between the two. At the first level, a person uses an external regulatory style. In contrast to non-regulation, a person is motivated to act, but their motivation is based exclusively on external factors. This is associated with compliance, extrinsic reward pursuit, and punishment avoidance. This style represents the classic sense of external motivation in that the motivator is literally outside the person. The next stage uses an introjected regulatory style. This form of regulation involves taking and maintaining external regulations through internal processes. This form of regulation uses external motivations to regulate behavior, with "internal prods and pressures that is characterized by inner conflict between the demands of the introject and the person's lack of desire to carry it out" (Deci & Ryan, 2000, p. 236). This is represented in "should" rules people often hold for behavior. While the process

itself occurs internally, it is still primarily driven by external factors and has been described as the process "of swallowing regulations whole without digesting any" (Deci & Ryan, 2000, p. 236). Due to this lack of digestion, the integrative tendency is still low, and the motivation still occurs without significant self-determination. This regulatory style is associated with guilt, anxiety avoidance, and self-esteem maintenance. Notably, "introjected regulations have been partially internalized and are thus more likely than external regulations to be maintained over time," which explains why certain "should" rules people hold can be difficult to change Deci & Ryan, 2000, p. 236).

The next two regulatory styles reflect increasing integrative work and self-determination. The identification regulatory style "is the process through which people recognize and accept the underlying value of a behavior" (Deci & Ryan, 2000, p. 236). Rather than simply "swallow" an external factor, persons begin to value that factor for themselves. This is associated with conscious valuing, goal commitments, and acceptance by self. In the identification stage, behavior is still primarily instrumental (done to achieve a goal) rather than intrinsic (a source of enjoyment). The next regulatory style, integrated regulation, represents not only "identifying the importance of behaviors but also integrating those identifications with other aspects of self" (Deci & Ryan, 2000, p. 236). This is associated with awareness, hierarchical synthesis, and congruence. This represents the fullest level of integration possible when behavior concerns extrinsic motivation, i.e. it is the response of an individual to an imperfect environment. The final regulatory style involves intrinsic regulation: behavior is fully responsive to internal factors, and thus is associated with interest and enjoyment.

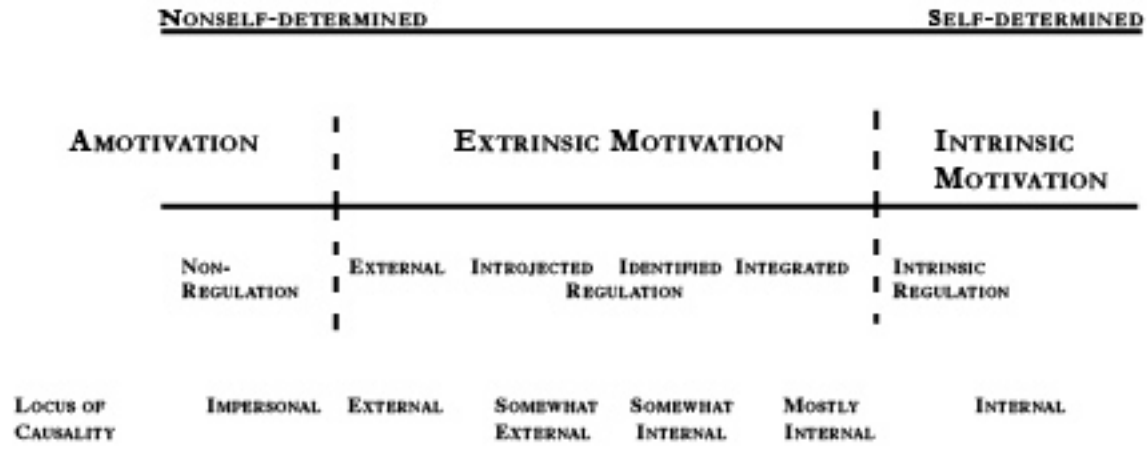
Third, a need deficiency affects persons' enduring perception of their social environment. SDT describes this as a causality orientation, which includes autonomy, control, or impersonal orientations. A person's orientation describes the tendency to "orient towards internal and external cues in a way that gives them [orientation]-supportive or informational significance" (Lange et al., 2011, p. 420). An autonomy orientation interprets information from a position of intrinsic motivation and self-determined locus of control; a control orientation interprets information from a position of extrinsic motivation and self-determined locus of control; while an impersonal orientation interprets information from a position of a-motivation and externally determined locus of control. For example, a person with an autonomy orientation could interpret advice from a friend as an interesting idea, a control orientation might interpret the same advice as pressuring, and an impersonal orientation might interpret the advice as shaming. In this way, orientation affects the interpretation of an event and subsequent response. SDT has found significant empirical correlations between causality orientations and well-being:

> The autonomy orientation has been positively associated with self-actualization, self-esteem, more choiceful self-disclosure, and supporting autonomy in others; the control orientation has been positively associated with public self-consciousness, the type-A coronary prone behavior pattern, inconsistency in attitudes and behaviors, and greater defensiveness; and the impersonal orientation has been positively related to self-derogation, poorer self-regulation, and depression. (Lange et al., 2011, p. 420)

SDT states that people have each causality orientation, but to a differing extent. This tendency towards certain orientations is seen as relatively enduring.

These first three influences of need-deficits can be summarized by their effect on an individual's personality or self. The authors believe these impacts are especially relevant for personality during the early developmental process, but continue to affect people throughout the lifespan. This model is summarized in Figure 3 (adapted from Deci & Ryan, 2000).

Figure 3. Summary of SDT processes.



Finally, need-deficits cause an individual to form maladaptive coping mechanisms, including the use of need substitutes and compensatory behaviors. As a person experiences the insecurity of need antagonization, they often turn to external signs of validation or fulfillment. These need substitutes are defined as "goals that people engage in to compensate for experienced need frustration" (Vansteenkiste & Ryan, 2013, p. 270). The goals are extrinsically motivated and involve external aspirations such as money, popularity, attractiveness, and materialism. While these external goals appeal to a person, they do not meet the essential need that has been frustrated, so they provided only a partial and transient benefit. The focus on extrinsic goals has

been associated with significant negative implications across functioning, intrapersonal, and interpersonal domains including anxiety, health problems, and drug use (see Vansteenkiste & Ryan, 2013, for a summary). Significantly, these negative effects do not decrease even when an external culture (such as a competitive business environment) value those external goals (Kasser & Ahuvia, 2002). In the long term, the use of need substitutes can trap a person within a cycle of need-deficiency, as they focus their behavior on pursuing goals that will leave their essential needs unsatisfied.

People also develop compensatory behaviors to respond to need antagonization. The first compensatory behavior involves the release of self-control. More autonomous forms of regulation increase available energy, while more external regulation styles require the expenditure of energy; intrinsic action is innate and growth oriented, while extrinsic action requires denial of the self. As a result, need antagonization depletes a person's available energy and causes a breakdown in self-control (Moller, Deci, & Ryan, 2006). Due to the negative affect associated with need antagonization, a person may require self-soothing, which may explain why many of these compensatory behaviors include actions targeted at feeling better. Research associates this compensation with behaviors like alcohol abuse, smoking, binge eating, and self-injury (Vansteenkiste & Ryan, 2013).

The second compensatory strategy is oppositional defiance. This strategy "involves a blunt resistance to engage in the socially requested activity and reflects a controlled type of regulation" (Vansteenkiste & Ryan, 2013, p. 272). This strategy activates a person to reject external controls, especially within a relational context. However, this rejection is in response to external factors, not self-determination. It manifests in an inflexible fashion and involves

detachment from relationships. As a result, like the other compensatory behaviors, it will likely frustrate needs further, increasing a person's need deficit. Research associates this behavior with significant impairment in relationships, including increased aggression (Vansteenkiste & Ryan, 2013).

The final compensatory strategy involves the use of rigid behavior patterns. This behavior attempts to establish a sense of structure and security, but through maladaptive methods. Perfectionism is one example:

> These high standards are pursued in a rigid fashion and are typically accompanied by black-and-white thinking…Even small failures to achieve these high standards can give rise to intense feelings of guilt and inferiority, whereas successes are short-lived and often attributed to external and unstable causes. (Vansteenkiste & Ryan, 2013, p. 271)

The rigidity of these patterns discourages self-awareness and nuance, so they frequently miss the unmet need that is being frustrated. Additionally, as persons interact with the world in a rigid and self-critical manner, they likely increase their experience of need antagonization. Research associates this strategy with significant dysfunction, including depression, eating-disorders, anxiety, and impaired moral reasoning, as people elevate their entrenched approach above health and ethics (Vansteenkiste & Ryan, 2013).

While these three compensatory behaviors may involve the frustration of any one or even all three essential needs, each response can be associated with dysfunctioning in a primary domain (see Table 4):

Table 4

Basic Psychological Needs

Competence	Relatedness	Autonomy
Self-Control Releasing	Oppositional Defiance	Rigid Behavior Pattern

Treatment Potential

SDT frames the ultimate goal of therapy as a client establishing well-being which persists beyond the end of therapy. This well-being requires an adaptive dialectic between the self and its environment. Since the self is naturally inclined to be active and integrative, therapy focuses on supporting those natural processes, primarily through the satisfaction of a client's essential psychological needs: competence, relatedness, and autonomy. Ryan and Deci incorporated humanistic psychology into their early research questions, which accounts for several similarities between their focus on an innate growth process and Carl Roger's emphasis on the self-actualizing potential (Deci & Ryan, 2000; Tolan, 2012). The majority of research into SDT concerns how intrinsic motivation and integration can be supported, which is beyond the scope of this discussion (see Deci & Ryan, 2000; Deci & Ryan, 2004; Deci & Ryan, 2008; Ryan & Deci, 2000; and Lange et al., 2011 for some summaries of the literature).

The general consensus of SDT theory and research clusters around two themes. First, people will naturally move towards well-being if their environment provides a sense of competence, relatedness, and autonomy. While specific needs may be more important for certain types of tasks or at different stages, each need is important. Need deficits result in pathologies that include low need satisfaction or need antagonization. These are associated with impaired

initiative, integration, and well-being. Growth is inhibited or distorted, perceptions impaired, and motivational processes shift from internal toward external orientation. As motivational disturbance increases, the likelihood of maladaptive coping mechanisms also increases. A therapist can help a client identify unmet needs, work on satisfying those needs, and avoid frustrating those needs within the therapeutic relationship. Second, people experience greater well-being when their behaviors are internally motivated. It would be effective for the therapist to create an autonomy supporting environment. Further details about SDT and treatment will be explored in later chapters, when we discuss trauma and violence specifically.

Chapter 3 Summary

In this chapter, I reviewed the principle components of Self-Determination Theory (SDT) to provide the psychological foundations for my proposed Fundamental Image Theory. Here are the key elements:

- The self has three nascent, universal qualities: an impulse to grow, tendency to integrate the self with their environmental context, and three basic psychological needs
- SDT proposes a primarily psychological foundation for human behavior, rather than a physiological one, based on the basic need for competence, autonomy, and relatedness
- These basic needs make human behavior and growth vulnerable to their psychological environment, which can be supportive, indifferent, or antagonistic towards their psychological needs
- A need deficit can impair the self-processes of growth and integration, cause maladaptive coping behaviors, and change an individual’s enduring perception of their environment

Chapter 4

Conceptualizing Fundamental Image Theory

Taken together, Integrative Psychotherapy (IP) and Self-Determination Theory (SDT) models provide a foundation for understanding human nature. IP provides a strong understanding of human ontology through its description of *imago dei* and how it relates to human psychology. SDT provides a strong understanding of the self from a process viewpoint: what do people pursue and how do they go about pursuing that? They share a broad approach that allows us to recognize the universal aspects of human nature, with an emphasis on the interaction between the individual and their environment. This universal and dialectical approach provides an important foundation for beginning to understand the common factors of trauma. The next two chapters will weave together the richness of both models, integrating process and ontology into the new framework of Fundamental Image Theory (FIT). This chapter will focus upon conceptualization within FIT, while the following chapter will focus upon the clinical implications of FIT.

Weaving together two different models inherently involves decisions influenced by philosophical values. As described in the second chapter, two key assumptions shape my process. First, FIT is based upon the method of Christianizing integration, which means the integration of IP and SDT will necessarily be informed by a Christocentric understanding. Second, FIT assumes that special and general revelation complement each other. As I integrate IP and SDT, I will do so with the intention of finding where the knowledge of the two views complements each other for a more thorough understanding of human nature.

What is Theory?

To effectively create the conceptual framework of FIT, it is useful to take a moment and examine how we define theory. Janet Tolan (2012) writes that personality theory is:

> A set of assumptions or hypotheses which answer the following questions:
>
> 1. What do we mean by "person" and "personality"?
> 2. How do we understand the way people develop?
> 3. What do we consider "normal", "healthy", or "adjusted"?
> 4. What do we consider "abnormal", "unhealthy", or "maladjusted" and how do these states arise?
> 5. How can people move from 4 to 3?
> 6. How can we best assist in this process? (p. 2)

These questions will provide an outline for the theory presented in the next two chapters. This chapter will establish a basic conceptualization of the self for my new model by answering the first four questions posed by Tolan: how do we understand people and development, both in healthy and unhealthy instances? The next chapter will focus on clinical considerations, specifically, how do we understand and support change?

Question 1: What Do We Mean by "Person" and "Personality"?

FIT begins with the premise that each individual's personality shares a universal aspects of human nature that reflects God's creation of people in his image. For purposes of discussion, it can be helpful to imagine an individual's personality as a braided rope (see Figure 4). In this model, each strand represents a process rather than a static trait. This sets FIT apart from many dominant models in clinical psychology which adopt a trait-orientation with a focus on defensive

strategies, factors of personality, schemas, and so forth. Each strand exists interdependently with the others, affecting and supporting every other strand. In a similar fashion, each individual rope is embedded in the wider tapestry of the world, interdependent with other people, places, and events. While it may be useful to isolate strands of personality for the sake of definition, it is crucial to recognize that the self processes do not exist separate from each other, and any understanding of the self requires a focus on this interdependent and holistic relationship.

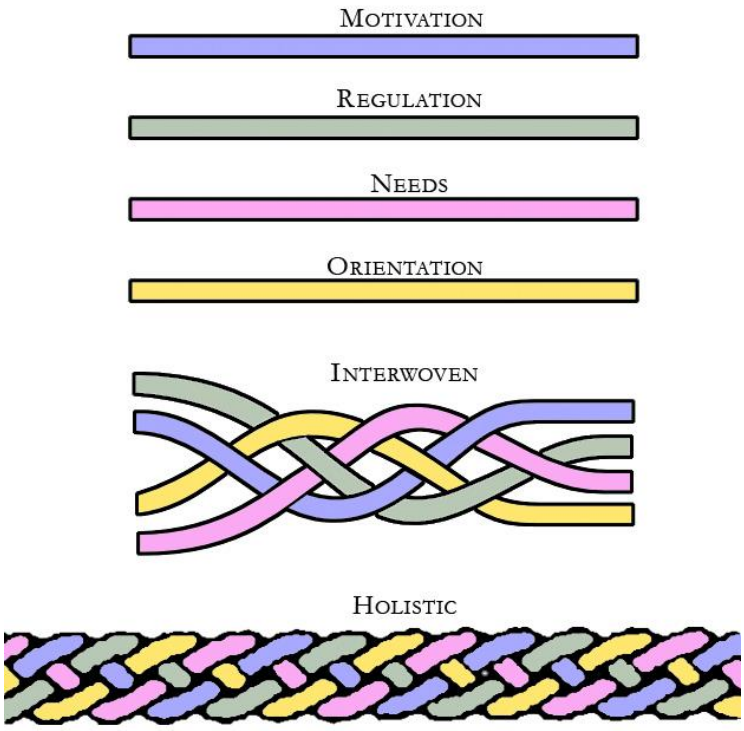


Figure 4. Interdependent self.

FIT does not seek to provide a comprehensive account of human personality, but instead will focus on four strands of personality. As discussed by McMinn and Campbell (2007) and Jones and Butman (2013), a comprehensive theory of human personality is likely beyond the scope of one theory, and this model does not serve as a definitive understanding of Christian

psychology. Despite these limitations, given the impact of trauma on identity, it seems necessary to engage in some discussion of human personality.

Telos motivation. In FIT, the first strand of personality represents the motivational processes of an individual. SDT and IP both make assertions about human motivation. SDT posits that humans possess intrinsic motivations; people are naturally inclined to engage in activities for the inherent enjoyment rather than external rewards. IP adds an ontological understanding to intrinsic motivation: "motivation is presumed to come naturally from being made in God's image. That is, there is something intrinsic in the human personality that makes us desire to be more fully human, more as God created us to be" (McMinn & Campbell, 2007, p. 120).

From the view of FIT, intrinsic motivation can be understood as motivation that reflects the inherent desire of humans to more fully embody the image of God in life, i.e. a *telos motivation.* While the telos motivation is universal, the manifestation of this motivation varies among individuals:

> For just as the body is one and has many members, and all the members of the body, though many, are one body, so it is with Christ…If the whole body were an eye, where would the hearing be? If the whole body were hearing, where would the sense of smell be? But as it is, God arranged the members in the body, each one of them, as he chose…Now you are the body of Christ and individually members of it. (1 Cor 12: 12-27).

This accounts for the variety of activities people find intrinsically motivating, as individuals were created by God with different purposes and gifts. While one person may enjoy teaching, another may enjoy building, and each can align with the individual's telos motivation.

Regulation style. The next strand captures an individual's regulation style, i.e. how the self governs behavior. Specifically, when a person makes a decision and acts, what is the driving force behind the decisions? Four people can stay late at work for very different reasons: one person might stay to earn more money; one might stay because of social expectations; another might stay because they value contributing to the team; and a fourth might stay because they enjoy their work and want to prolong the enjoyment. While the external behavior appears the same, the driver—the regulator—behind the behavior differs greatly.

The two foundational models for FIT provide complementary views on regulation. SDT describes regulation styles along a spectrum from non-regulation to external regulation to internal regulation. In the SDT model, internal regulation leads to greater well-being because it increases a sense of vitality, while external regulation depletes vitality, and non-regulation leads to damaging of the self (e.g., self-harm, out of control substance use). SDT posits that externally defined behaviors (e.g., cultural expectations) can become internalized in a way that supports vitality, and internal regulation is ultimately the goal of the self's integrative, interdependent nature.

IP describes the regulation of behavior primarily within the frame of biblical anthropology: creation, fall, and redemption. In the creation stage, people were internally regulated by the image of God, which was essentially good and healthy. After the fall, sin distorted the image of God, leading humans to act in sinful (i.e. harmful, unhealthy) ways. With

redemption, God offered a process for people to experience progressive renewal of the image inside them, moving them towards greater good and health. This complements the SDT spectrum, seen in Biblical terms as the difference between living freely in the Spirit (internal) vs. being bound by the Law/legalistic (external) vs. being ruled by sin (non-regulation).

FIT begins with the regulation of SDT and IP and frames it within a process orientation. That is, there is a spectrum of regulation styles from non-regulation (consumed by sin) to external (legalistic) to internal (image based), but the description of the regulation style is less important than the process of regulation. Rather than focus on what a person does, the question becomes *how* did a person motivate themselves to do that? For example, in a therapy setting rather than ask if the client engaged in behavioral activation, the question would be how did they try to get themselves to engage? Did they focus on the enjoyment intrinsic to the activity (internal regulation), or did they tell themselves they "should" do that activity (external regulation)? This process orientation is crucial for understanding regulation because how someone regulates impacts their level of vitality, either increasing vitality, decreasing vitality, or actively damaging the self.

Image-derived needs. SDT describes basic psychological needs as "innate psychological nutrients that are essential for ongoing psychological growth, integrity, and well-being" (Deci & Ryan, 2000, p. 229). These basic psychological needs include the need for competence, relatedness, and autonomy. If the self were a tree, these basic needs would be essential nutrients like water, sunlight, and soil. Without the resources to meet any one need, the tree grows stunted or dies.

IP provides an explanation for why these three needs are so crucial and universal to human nature: these needs reflect the three aspects of the *imago dei* described in the functional, relational, and structural theories. The functional theory of *imago dei* aligns well with the competence need: people intrinsically enjoy interacting with the world around them in effective ways. IP adds a purpose for the competence need: to be effective managers. The relational theory of *imago dei* and the relatedness need fit together perhaps the most easily: both argue that people are inherently designed to relate in a way that promotes intimacy and mutual support. IP adds the layer that this relatedness need applies to a need for divine relationship in addition to human based relationships.

A closer examination of the structural theory of *imago dei* also reveals a close alignment with the autonomy need as described by SDT. Thomas Aquinas described the substantive (i.e. structural) theory as the combination of reason and will within human nature: "the power to grasp abstract concepts and to reason on the basis of them, and freely to choose between different possible courses of action on the basis of what the intellect knows" (Feser, 2009, p. 138). Within this model, Aquinas argues that the highest intellect is to know God and the highest free will is to choose God. What matters to freedom in this viewpoint is whether the cause of one's behavior is something in the external nature of the world (i.e. not freedom) or rather one's own free will, which reflects God's nature (i.e., freedom). This explanation of the structural view closely matches with SDT's description of autonomy: "volition… [the] desire to self-organize experience and behavior and to have activity be concordant with one's integrated sense of self…autonomy concerns the experience of integration and freedom" (Deci & Ryan, 2000, p. 231). Combined, this can be understood as the need to create a rational and integrated

understanding—meaning making—which aligns with the individual's actions, i.e. a concordance between the self as God created humanity to be and action. While people may not consciously know or acknowledge the Creator/Created dynamic, it would be expected that all people who engage in behaviors that align with how God created humanity as whole, and designed that individual in particular, would experience increased well-being.

FIT integrates these two models in the idea of image-derived needs: human nature includes a fundamental need for competence, relatedness, and autonomy, because humanity was created in the image of God in functional, relational, and structural aspects.

Free will orientation. The last strand of personality, the self's free-will orientation, represents an integration of SDT, IP, and a biblical anthropology of power. Specifically, this integrates SDT's causality orientations, IP's use of cognitive schemas, and a Biblical understanding of free will. SDT describes the causality orientation as a person's broad tendency to attune to specific information during an event. Most environmental events contain aspects outside of an individual's control (impersonal), an external consequence (controlled), and an intrinsic motivator (autonomous). The causality orientation describes which part of the event a person orients towards (discerns), which affects the overall interpretation of an event and its impact on the self.

These orientations include an autonomous orientation, controlled orientation, and impersonal orientation. For example, students in the school band are required to perform the score on a sheet of music as a test. Performance on the test will determine each individual's chair position within their section, which determines the difficulty of their musical parts. Someone with an impersonal orientation generally finds that a desired outcome is beyond their control and

related to luck or fate. That student might interpret the test as completely depending upon the band director's mood that day which is completely unpredictable. Someone with a controlled orientation generally interprets events in terms of extrinsic motivators. That student might see the test as important because they want the achievement status that comes with first chair in the band. An autonomous orientation understands events in terms of how it relates to intrinsic motivation. That student might see the test as important because the first chair position would involve playing musical parts they find more interesting and enjoyable.

While SDT describes three tendencies and types of information filtered from events, IP describes the structural aspects of the *imago dei* in terms of cognitive schemas. These schemas are "underlying structures that shape one's interpretation of the world…beliefs and assumptions that help people interpret and find meaning in their lives" (McMinn & Campbell, 2007, p. 129). Schemas provide a filter for experiential information, which allows a person to make meaning of their situation. Frequently these schemas cause people to attend to certain schema-congruent information while discounting or distorting schema-incongruent information. The similarities with SDT's theory of "causality orientations" are immediately apparent: both concern a broad tendency to selectively attend to information within our experience.

A biblical anthropology of power adds another layer to this dynamic. Free will, as explored in the second chapter, concerns the ability to correctly discern and correctly choose. A person who cannot discern what is good or righteous is not truly free, even if they act in a way that is good and righteous. Similarly, if a person can discern the good but cannot choose it, they are also limited in their freedom. This dual emphasis of free will—able to discern and able to

choose—provides a complementary perspective to the theories of causality orientation and schemas.

In essence, a free will orientation captures the person's ability to discern and choose information from an event. The first step, as captured by causality orientations and schemas, is a person's process for recognizing information in an event. They may recognize any combination of impersonal, controlled, and autonomous information. The second step is the process of choosing which information is of primary importance, i.e. is defining of the person's experience in the situation. For example, people frequently say, "I know that's the case, but I don't feel it." Even if someone can recognize information in an event, if it does not become a part of their process (e.g., felt, believed), then the person has not been able to "choose" that information. In this way, a person's free will orientation remains process oriented: what is the person's process for discerning and choosing particular information in an event?

Interwoven. The four personality strands—telos motivation, regulation style, image-derived needs, and free will orientation—may be separated for convenience of definition, but exist in an interwoven, holistic state. In the following sections on the process of development, well-being, and maladjustment, it will become apparent that this separation of personality into four strands is primarily symbolic rather than functional. Despite extensive research into the correlations and effects of these parts on each other, only one finding has been consistent: they all interact and influence each other (see Chiniara & Bentein, 2016; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000; Sheldon & Filak, 2008; Talley, Kocum, Schlegel, Molix, & Bettencourt, 2012; Trépanier, Fernet, & Austin, 2013).

Question 2: How Do We Understand the Way People Develop?

Development within FIT concerns the developmental trajectory of human nature, generational development, and individual development.

Development of human nature. Humans live and function on a developmental course as described by McMinn and Campbell (2007) in their review of Biblical anthropology and reviewed in the second chapter. This development, integrated with SDT, affects FIT in three primary ways. First, SDT and IP both acknowledge nascent qualities of human nature. SDT describes the nascent state as the innate impulses towards growth, integration, and meeting basic psychological needs. SDT implies that these innate impulses are born into people without defect, and the distortion comes from having their basic needs unfulfilled or antagonized by the environment. IP, however, recognizes these qualities as the created state of humanity, which reflects the *imago dei*. People retain aspects of humanity's created state, but the image has been distorted by sin, and any person born now will inherit that distortion.

Second, SDP and IP both imply that the nascent state of each human develops within the influence of the world. SDT primarily focuses on this development at the individual level. It states that a person begins with the three nascent qualities of growth, integration, and basic psychological needs. As a person experiences life, the self engages in a dialectical relationship with the world, which creates new internal qualities. For example, children may not value their parents' requests to help with chores, but as they mature they may internalize the value of service and this value becomes a quality of their personality. If persons experience the fulfillment of their basic needs, they will likely be more successful at internalizing extrinsic influences (e.g., cultural expectations), whereas a deficit of basic needs may lead to either passivity in response to

the world or becoming externally determined (i.e. controlled) by the world. Thus SDT's view of distorted motivation and regulation offers a meeting point with IP's view of development.

According to IP, after the fall human development within the world is influenced by sin. As described by McMinn (2008), due to the fall all people develop with sinfulness, a tendency to choose sin, and experience the consequences of sin. While SDT states that not fulfilling basic psychological needs causes a person to turn to extrinsic motivation, the seeking of flawed substitute needs, and harmful compensatory behaviors, IP states that sin became an inherent aspect of development. The fall and universal transmission of sin caused all humans to possess a sinful nature which damages intrinsic motivation (the desire to seek God and become fully human), our regulation style (act righteously), the image of God (seeking image-derived needs), and our sense of freedom (ability to discern and choose rightly). Due to this many-faceted damage, all people suffer the consequences of sin, which can cause further damage to these processes within themselves and others.

Third, SDT and IP both offer a hopeful potential for human development. SDT posits that people have an inherent drive to proactively integrate their experiences in the world with their self-understanding. In this way people become active meaning-makers of their experience in the world and learn to respond to external demands in a self-determined fashion. This process requires the meeting of basic psychological needs, but when those needs are met, it allows people to grow and improve throughout their lifetime. IP offers a caveat detailed above: sin distorted that drive to interact with the world in a creation-congruent, integrative fashion. Rather than leave people in sin, however, God sent his son to save humanity (e.g., John 3:16-17). Those that are reborn in Jesus are freed from sin, so that they are able to know truth and follow God

once more. Further, God called his followers to work in the world to spread the good news of redemption and share his love in service to others. In this way, we understand that while people were created with the integrative drive described by SDT, sin corrupted that drive, but Jesus offers new life with the potential for that drive to be progressively restored through the redemptive process and healing support we can provide to each other.

Combining SDT and IP together, we can make several assumptions: (a) people are born with image-derived needs *and* an inherent tendency to seek substitute needs; (b) people possess a natural integrative process *and* an inherent tendency toward flawed regulation strategies; and (c) since the world is full of sinful people and sinful consequences, the world itself can never perfectly fulfill image-derived needs of people. While SDT acknowledges the existence of need antagonization and its damaging effects, IP shows us that this frustration and need is inherent due to the universal human development of a sinful nature.

Essentially, human nature currently exists within a liminal state between the created and fallen state of humanity. Each person is born between the tension of sin/distortion and redemption/health. Throughout life, people have the potential to experience a renewal process towards greater health or a degrading process towards further distortion and ill-being.

Generational development. FIT understands an individual's development within the larger tapestry of human experience, which includes the development of generations proceeding them. This is reflected in the Biblical tradition of the sins of a father affecting their children, as well as the psychological concepts of family system influence and generational trauma (see Doucet & Rovers, 2010; Duran, 2006; Jacobs, 2011; Litvak-Hirsch & Bar-On, 2007). To continue with the tree metaphor, it can be helpful to imagine an individual as a tree within a

forest. While the tree's growth is affected by the current state of the forest, the soil it grows in often bears the history of the forest in terms of fire, drought, pollution, past geological structures, etc. While the historical events are not readily apparent, they continue to affect the present moment and growth in the forest.

FIT accounts for generational transmission through two primary dynamics. First, generational development affects the "nutrients" available to a person. This has been a prominent theory within psychology, where the family system (e.g., child rearing methods by parents) explains the majority of the generational effects of trauma (see Hogman, 1998; Maxwell, 2014; Roth, Neuner, & Elbert, 2014; Walker, 1999). Second, FIT recognizes that all people are born with distortions to the created/nascent drives of motivation and integration, and their specific distortions may be passed on through their family. This aligns with newer research into the manifestation of historical trauma through epigenetic science and seemingly "unexplainable" vulnerabilities of children of traumatized parents (see Kellerman, 2013; Nestler, 2016; Ramo-Fernández, Schneider, Wilker, & Kolassa, 2015; Smart, Strathdee, Watson, Murgatroyd, & McAllister-Williams, 2015). This historical view of development is important in understanding how harmdoing shapes the individual's entire in-group, not just the people involved directly in the violence.

Individual development. Individual development represents an integration of humanity's development, generational development, and the individual experience. As described above, FIT views people as inherently possessing an overarching drive towards growth (telos motivation) and integration (internal regulation style). Due to the effects of sin, people are born with innate distortions in these processes which lead them to seek substitute needs and employ

compensatory regulation strategies. These processes are further supported or frustrated in an individual's experience of image-derived needs and the "filter" of a person's free will orientation. These processes are essentially dynamic and ever-developing, and can move towards greater renewal/health or greater distortion/ill-being based on the personality processes described previously. In this way, development is never "finished" but represents a life-long developmental process occurring between the individual, the world, and their daily experiences. While some of the processes remain relatively stable (e.g., free will orientation), others can change on a moment-to-moment basis (e.g., fulfillment of image-derived needs).

While there is the potential for ongoing development, certain conditions may cause development to trend in a more fixed direction. There is evidence that the antagonization of an image-derived need, especially early in life, can cause a person to devalue that need over time. As a result, they will be less likely to pursue fulfillment of that need, which leads to ongoing frustration and devaluation. For example, someone who is raised in an environment which antagonizes the need for relatedness and elevates the substitute need of independence is more likely to devalue the need for relatedness later in life (Moller, Deci, & Elliot, 2010). At the same time, there is early evidence that the deficit of an image-derived need early in life may actually increase the depth of someone's requirement for that need later in life, e.g., someone who did not experience the fulfillment of relatedness early in life may require a higher degree of relatedness later in life to experience satisfaction/fulfillment (see Flunger, Pretsch, Schmitt, & Ludwig, 2013; Vansteenkiste & Ryan, 2013). This aligns with the earlier tree metaphor: a tree may require more water after a drought to return to health than a tree that absorbs sufficient water on a daily basis.

The seeking of substitute needs and resulting compensatory regulation styles may fix an individual into a more rigid cycle of behavior. As an individual seeks substitute needs, image-derived needs are left unfulfilled or even actively frustrated. For example, persons who primarily seek achievement may prioritize their own success over their relationships with others, frustrating their need for relatedness. Persons who seek popularity may act in a way that violates their values, frustrating the need for autonomy, etc. When someone experiences need antagonization, they are more likely to develop compensatory behaviors such as external regulation (e.g., driving behavior based on societal expectations) or even non-regulation (adopting a passive approach, directing behavior based on the actions of others, or even self-harming behaviors such as substance abuse or self-injury). As a result of these compensatory behaviors, the individual is even less likely to experience need fulfillment, leading to a more intense pursuit of substitute needs and more rigid reliance on compensatory behaviors. This can develop into a self-perpetuating cycle or pattern of behavior.

While all of these processes remain dynamic, the pattern may appear rigid and seem like a static aspect of an individual's personality. Considering that a prolonged need deficit may increase the requirements for that image-derived need, and thus intensify the compensatory behavioral patterns, more established patterns will likely require longer to alter. Additionally, the more internalized a regulation style, the harder it is to change it. This becomes problematic in the case of harmful introjects: a person has "swallowed" the extrinsic reinforcement and applies it internally, but without a healthy integration with their internal self. Perfectionism represents a classic example of a harmful introject.

Questions 3 and 4: What Do We Consider "Healthy" and "Unhealthy" and How Do These States Arise?

In FIT it is easier to consider the ideas of healthy and unhealthy in relation to each other, rather than as discrete entities. SDT and IP offer complementary definitions of well-being. In the SDT model, well-being occurs when an individual experiences the fulfillment of their basic psychological needs, which supports their engagement in intrinsic motivation, internal regulation, and an autonomous causality orientation. Essentially, a person is healthy if they express the nascent qualities of human nature: to grow in an integrated fashion. IP describes health in terms of the different domains of the *imago dei.* Humans were created to function in a particular way that reflects God image, as seen in functional, relational, and structural domains. People experience well-being when they are effective managers (functional), relate effectively to others and God (relational), and make more effective meaning of life (structural). FIT combines these definitions of health. The internal and intrinsic language of the SDT model is understood as related to the image of God in humanity. Similarly, the SDT language about external and extrinsic motivation, and is understood as related to the influence of sin and demands of the worldly existence (i.e., descriptions of "the flesh" throughout Paul's epistles).

Broadly speaking, each strand of the self falls along a spectrum between the redeemed state and the fall state of human nature. The closer the self functions to the way God intended humans to exist, the overall better well-being the individual will experience. This is similar to positive psychology's focus on eudaimonia, "defined as living a completely human life, or the realization of human potential" (Ryan, Huta, & Deci, 2008, p. 140). This has been supported by extensive psychological research, which supports positive outcomes including better

psychological health, improved work performance, better learning, more positive affect, greater satisfaction in relationships, and more secure attachments when these factors align closer to the redeemed end of the spectrum (Lange et al., 2011).

Each aspect of the personality can range from most unhealthy to most healthy. These spectrums are summarized in Figure 5. The descriptions represent an attempt to integrate SDT terms with IP and Biblical concepts. The language of self-regulation has been altered the most to represent the functional impact of this factor. How someone regulates behavior affects their sense of vitality (Deci & Ryan, 2000; Reis et al., 2000). In SDT research, intrinsic regulation increases vitality while external regulation depletes vitality. Non-regulation is often the result of the cumulative effects of external regulation: all vitality is depleted, and the self usually responds in damaging ways (Vansteenkiste & Ryan, 2013). This dynamic integrates well with Biblical language about the thirsty being refreshed with the living water of Jesus while sin leads to death.

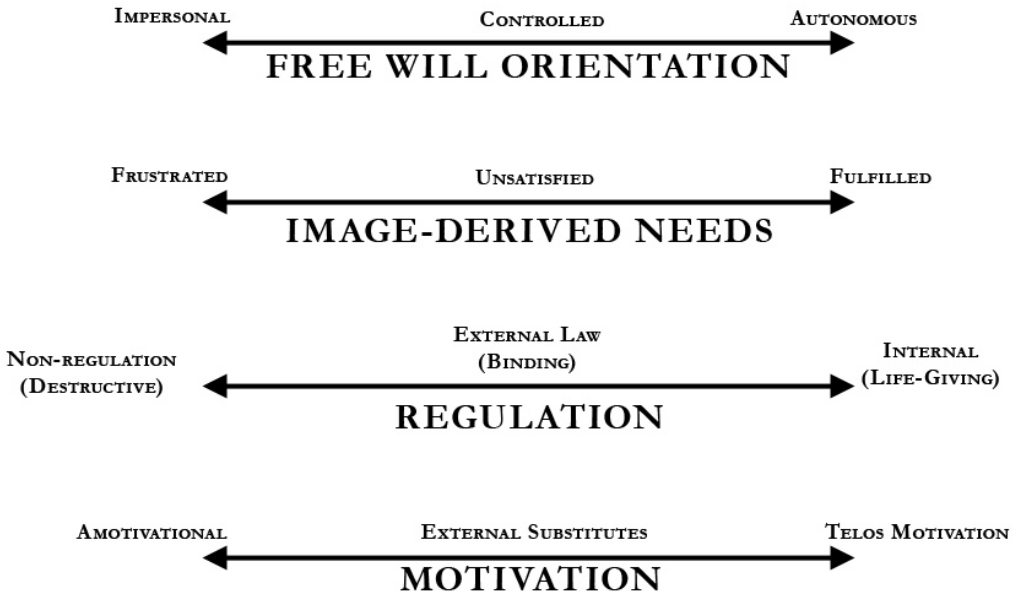


Figure 5. Well-being model.

If we return to the image of an individual as a braided rope, we can conceptualize well-being in terms of the rope's weakness or strength. Each strand of the rope may differ in its relative thickness; the thicker the strand, the stronger. Some strands may appear so thin that they hardly exist, effectively contributing no strength to the rope. Figure 6 provides an example of three possible levels of strength. The example shows the motivation factor on a spectrum from least healthy (a-motivational) to most healthy (telos motivation) with the associated thicknesses of the motivation strand.

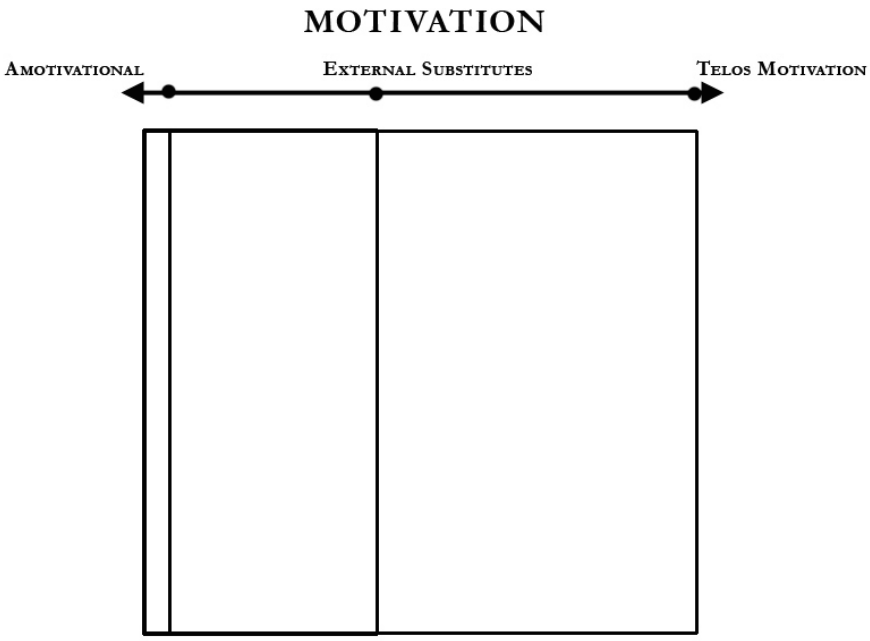


Figure 6. Conceptualizing health.

This visual can be applied to each spectrum summarized in Figure 2.2 to provide a picture of the overall strength of the rope i.e. an individual's overall well-being.

Causes of maladjustment. As described throughout this discussion, the essential cause of maladjustment is the existence of sin and related sins. Sin has placed human existence within

the tug-of-war between the intended health of creation and the disrupted pathology of sin. McMinn's model of sin provides a helpful way of delineating the nuances of maladjustment though the essential cause remains the same. First, humanity has a sinful nature. This has distorted the self in every layer, affecting our telos motivation, regulation style, image-derived needs, and free will orientation, resulting in extrinsic or a-motivational processes, external or non-regulation strategies, seeking of substitute need-fulfillments, and controlled or impersonal rather than free will orientations. Additionally, individuals actively sin/choose to sin. In some sense this can be seen as the fulfillment of those distorted self-processes. This is seen when people pursue extrinsic aspirations instead of intrinsic ones, prioritize substitute needs, engage in rigid compensatory behaviors, and orient towards the controlled or impersonal information in the environment.

Finally, everyone experiences the consequences of sin. This is seen most clearly in the unsatisfied and active frustration of image-derived needs. While fulfillment of image-derived needs can act as a nutrient to other aspects of personality and encourage their renewal towards greater health, unsatisfied image-derived needs can be experienced as a drought, leading to the withering of other aspects of personality. The antagonization of needs is, as so eloquently described by Vansteenkiste and Ryan (2013), like salt on the earth, actively destroying multiple aspects of personality. Due to the nature of sin as a state of sinfulness, acts of sinfulness, and consequences of sinfulness, the fulfillment of image-derived needs is impacted by the individuals themselves, other people (current and generational), and the nature of life in this world.

While maladjustment is the result of sin, it is important not to devalue the impact of choice in the process. Both SDT and Biblical tradition recognize a dialectical relationship

between the self and the world. People are active agents in the process of adjustment and maladjustment, not only passive victims of it.

The role of emotion in well-being. Emotions fulfill a crucial role in the pursuit of well-being. Emotions have been described as having three primary functions: to motivate action, to communicate to others, and to communicate to ourselves (Linehan, 2014). These functions each align with the aspects of the *imago dei* and support the related image-derived needs.

Our functional aspects and need for competence are supported when emotions motivate action. Emotions motivate and organize responses, which are often supported by our biology. They can prompt us to act quickly when we do not have time to analyze the situation. They can also help us overcome obstacles, whether the obstacle be in the environment or in our own mind. For example, the feeling of disgust may cause us to gag up something rotten before we swallow it and suffer the ill effects. The feeling of love may cause us to feel invincible, and thus more willing to endure challenges or difficulties to support others.

Our relational aspects and need for relatedness are supported when emotions communicate and influence others. Emotions cause hard-wired facial expressions, which send a message to those around us. Emotions also influence our body language, tone, and other non-verbals, which we know make up a significant portion of communication. These signals cause a response in other people, influencing them. For example, when we feel angry we can tense up, clench our fists, and speak louder. Those responses will influence other people and evoke some sort of reaction.

Our structural aspects and need for autonomy are supported by the way emotions communicate to ourselves. Emotions can express information that may be outside of conscious

thought, such as intuition or a gut feeling. In these instances it can act as a fire alarm or other warning sign. Emotions can also draw attention to our values and our own sense of meaning. We frequently feel angry or sad because an important value has been neglected or violated, and we may feel joy or peace because important value has been honored (Hayes, Strosahl, & Wilson, 2011). In these ways, emotions help us connect with our own sense of self and what we hold to be important.

While emotions can support our image-derived needs, FIT recognizes that emotions are just as vulnerable to distortion as other areas of functioning. This contrasts with the common adage, "Emotions aren't good or bad, it's what you do with them that counts." Sin impacts our emotions as much as it affects our thoughts and motivations. Linehan provides a useful model for understanding emotions as "justified" or "unjustified." If an emotion (a) aligns with the facts of the situation, and (b) its intensity is appropriate to the situation, it is considered justified (Linehan, 2014). For example, a child is not invited to the same birthday party as some friends and feels ashamed as a result. The child does not want to go to school the next day, but attends with support from parents and after a few days back at school the child no longer tries to avoid attending. If we check the facts and discover the child was purposefully left out, being rejected is a natural prompting event for feeling shame, and avoidance is a natural reaction to shame. The fact the child wanted to avoid but was able to re-engage shows an expected intensity to their reaction. In this situation, the child's emotion appears justified.

If an emotion is based on distorted facts (e.g., flawed judgments, interpretations, assumptions) or the intensity of the emotion exceeds the facts, then the emotion is considered "unjustified." Returning to the earlier example, if the child had decided to avoid school for the

rest of life and engaged in fixed truancy, we could say the intensity of the child's shame reaction exceeded the situation and it appears the child's emotional reaction is not justified. Alternatively, if the child's emotional reaction was guilt, which is associated with prompting events of wrongdoing, we could say the emotion was not justified because the child did nothing wrong in the scenario. (If the child was uninvited from the party after bullying the host, then the emotion of guilt would be justified.)

The concept of justified and unjustified emotions avoids the pejorative framing of "good" and "bad" emotions, but also allows us to recognize that while emotions began as inherently supportive of well-being, they can be distorted and lead to ill-being. Unjustified emotions will prompt us to inappropriate actions, communicate confusing messages, and not assist in accurate meaning-making for ourselves. For example, if a person's emotional reaction is anger in every situation, it may motivate the person to respond with shouting or aggression when vulnerability or calm would be more effective. Similarly, if every event causes the same emotional reaction, it is hard for the person to make meaning for themselves of any individual event. Finally, work by Linehan (2014) and others (e.g., Cloitre, Koenen, Cohen, & Han, 2002; Gross, 1998; Gross, 2013; Tamir, 2011) show that we can in fact change our emotional reactions in the long term, increasing the ratio of justified emotions to unjustified emotions, and through this method promote greater well-being.

Chapter 4 Summary

In this chapter, I defined the primary conceptual elements of Fundamental Image Theory. Here are the key elements:

- All humans share a universal nature that reflects the *imago dei* in four ways, including a telos motivation, regulation style, image-derived needs, and free will orientation
- This nature is affected by several developmental processes: the development of human nature through creation, the fall, and redemption; generational development; and individual development
- Wellbeing and pathology can be conceived as a spectrum between the redeemed state and fallen state of human nature
- Pathology occurs when sin limits an individual's ability to gain fulfillment of their image-derived needs

Chapter 5

Change Process in Fundamental Image Theory

The second half of Fundamental Image Theory (FIT) focuses primarily on the change process, which provides the focus for most clinical interventions. In line with the previous chapter, the change process is understood by integrating the Self-Determination Theory (SDT) literature and Integrative Psychotherapy (IP). This integration will require a Christianizing process of many key SDT concepts, which I will do by using the over-arching narrative of the Bible as guide. In this process, I will answer the two remaining theoretical questions posed by Tolan (2012): how can people change from healthy to unhealthy states, and how can we best aid that process?

Question 5: How Can People Move from Unhealthy to Healthy?

The movement from unhealthy to healthy can be conceptualized as the process by which a person moves from impersonal or external control to intrinsic well-being, i.e. movement towards being more fully human. SDT states that this process is innate to human nature and unfolds through the self-integrative urges of the self. IP and the Bible introduce the complicating factor of sin's influence of human nature. If this healing, integrative process described by SDT has been corrupted by sin, how can people effectively become more healthy? An integration of SDT's theory of integration with the overarching narrative of redemption in the Bible may provide a helpful perspective for FIT.

The internalization process of SDT, described in the organismic integration theory (OIT), begins with the assumption that there are extrinsic factors in life that will necessarily influence our life. This is seen most broadly in the idea of cultural expectations. For example, in the U.S. there are expectations that you will gain an education, hold employment, and provide for yourself and your family. Attending school and achieving good grades may not be intrinsically motivating. If the process remains primarily extrinsic to the self, a person will likely experience a decrease in their intrinsic motivational processes and other aspects of ill-being, e.g., learning that occurs primarily due to external reinforcers is shown to be unstable and less sustainable than behaviors learned due to intrinsic motivation (Deci & Ryan, 2000). OIT states that the self includes a nascent quality of integration, which:

> Is the means through which individuals assimilate and reconstitute formerly external regulations so the individual can be self-determined while enacting them. When the internalization process functions optimally, people will identify with the importance of social regulations, assimilate them into their integrated sense of self, and then fully accept them as their own. (Deci & Ryan, 2000, p. 236)

As described by Deci and Ryan, extrinsic factors can become progressively more internalized through stages of introjection, identification, and integration. In this way people can integrate the cultural value of “industry” into their own self-value structure and experience the pursuit of that value as intrinsically motivating (see Deci & Ryan (2000) for a detailed examination of this process. The degree of internalization can be measured broadly on a spectrum from non-self-determined to self-determined as seen in Figure 7.

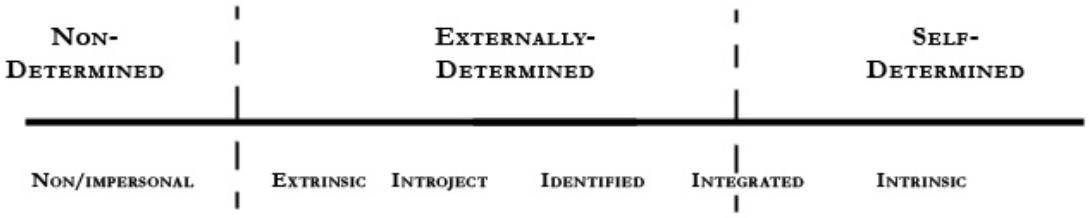


Figure 7. Stages of internalization.

The internalization process of SDT bears striking similarities to the redemptive process described throughout the overarching narrative of the Bible. While the following review of Biblical anthropology will repeat events discussed in McMinn and Campbell's treatment in IP, the review for FIT will focus specifically on an understanding of intrinsic, extrinsic, and impersonal levels of determination as they relate to redemptive process.

Creation and defining intrinsic. When God first created Adam and Eve he created "humankind in his image" and when he "saw everything he had made, and indeed, it was very good" (Gen 1: 27, 31). The creation description makes it clear that the original creation was "good" and numerous scripture verses throughout the Bible make it clear that God is the source of all that is good. This necessarily informs our understanding of intrinsic and well-being. That is, sources of well-being as revealed in the research literature would be expected to connect to God's nature as the source of goodness. This assumption provides a helpful foundation for understanding intrinsic/internal in FIT: intrinsic/internal/self-determined orientations are synonymous with "as God created." Humanity's created nature included the intrinsic qualities of God's image. In this state, God walked in the Garden of Eden with no separation from humans.

The Fall and defining non-determined/impersonal. As described in Genesis, the fall introduced sin into the created order and into human nature. This opened all human's eyes to

evil, enslaved their will to sin, and resulted in an immediate disruption of well-being: in Genesis 4, Cain murdered his brother Abel, and by Genesis 6, humanity's focus has turned so that

> every inclination of the thoughts of their hearts were only evil continually…the earth was corrupt in God's sight, and the earth was filled with violence. And God saw that the earth was corrupt; for all flesh had corrupts its way upon the earth. (Gen 6: 5, 11-12)

During this period, the majority of those in the world thought only of evil. This speaks to the lowest end of the determination spectrum: the non-determined/impersonal state, where the self (as created by God) no longer exists. In this state, God wanted to "blot out from earth the human beings I have created," representing the ultimate level of separation between God and humanity: the desire to erase humanity from his presence entirely (Gen 6: 7). Humans was spared only because of one person, "Noah walked with God" (Gen 6: 9). The description of Noah walking with God points to the remnants of the intrinsic relationship described before the Fall, before humanity was so separated from God's presence.

The Old Testament covenants and defining externally-determined. God's relationship with humanity changed when he began making covenants with humans. He established a covenant with Noah after the flood, promising that he would not destroy humanity again, but warning that he would demand punishment for anyone who committed murder. Later he established a covenant with Abraham, promising prosperity for Abraham and his descendants if he lived righteously. The Law given to Moses represents perhaps the most thorough system of rules, rewards, and punishments. This new dynamic between God and his people aligns with very definition of extrinsic motivation and being externally determined: a system of punishments and rewards that influence behavior (Deci & Ryan, 2000).

The external nature of this state is also represented in God's instructions that the Israelites create a temple for him to inhabit. In this way he lived next to them but separate, apparent in their day-to-day existence but in a fundamentally externalized fashion. This can be seen in the stark contrast between Adam and Eve's ability to walk in the Garden of Eden with God and the many necessary purification rituals required for people to enter God's temple, the prohibition of all but the designated priest on the specified occasion from approaching too closely, and the blinding quality of God's presence on those who emerged from speaking with him (e.g., Exodus 34, 40).

The Law beginning the internalization process. The Old Testament provides numerous accounts about the interaction between the Israelites, the Law, and their relationship with God. Throughout this time, God instructed his people to behave in a certain way, offered promises of prosperity for obedience, punishment for sinful behavior, and frequently appeared as an external power in their lives (e.g., burning bush, storm, fire, etc.). The success of this external approach mirrored exactly what research would predict: externally regulated behavior shows poor maintenance and the behaviors do no transfer once the external contingencies have been removed (Deci & Ryan, 2000). This pattern played out repetitively as many of the Israelites obeyed God's strictures until they experienced hardship or, to their perception, God departed for a time; with the absence of his rewards and punishments, they frequently turned to idols and violated the Law.

If this pattern was so inevitable, why did God allow it to continue for so long? While I cannot claim any definitive answer, the Law's role in the internalization process may provide some possible reasons. In Romans 7:7 Paul writes:

> What then should we say? That the law is sin? By no means! Yet, if it had not been for the law, I would not have known sin. I would not have known what it is to covet if the law had not said, "You shall not covet."

Prior to the Law, the majority of humanity existed in the non-determined/impersonal state, with no sense of power or agency in relationship to sin. The Law provided a method for moving humanity out of the non-determined state of Genesis 6 into the next stage of internalization, extrinsic factors.

God did not leave humanity in a purely external stage, however. People are instructed throughout the Old Testament to conform themselves to the Law, i.e., to internalize it:

> This book of the law shall not depart out of your mouth; you shall meditate on it day and night, so that you may be careful to act in accordance with all that is written in it. For then you shall make your way prosperous, and then you shall be successful. (Josh 1:8)

> Happy are those who do not follow the advice of the wicked, or take the path that sinners tread, or sit in the seat of scoffers; but their delight is in the law of the Lord, and on his law they meditate day and night. They are like trees planted by streams of water, which yield their fruit in its season, and their leaves do not wither. In all that they do, they prosper. (Psa 1: 1-3; see also Psa 63, 111, 119, 143 for more examples).

The Law began the process of internalizing humanity's relationship with God—which had been separated by sin after the Fall—but it could not fulfill the final internalization process.

Jesus and defining identification. In the Old Testament, entering into God's presence was described as an overwhelming and even terrifying experience. Despite God's demonstrable

love for his chosen people, it is easy to see how people struggled to relate to this powerful figure. When Jesus came as a mortal man, he offered people a more relatable figure. People could reach out and touch him, drink and eat with him, and recognize some of themselves in him. In fact, his hometown identified with him so strongly as a simple man, they were unable to recognize his divinity.

Jesus's presence as both a divine son of God and mortal experience provided a crucial bridge for the identification process, as described in Hebrews:

> Since, therefore, the children share flesh and blood, he himself likewise shared the same things, so that through death he might destroy the one who has the power of death. . . and free those who all their lives were held in slavery by the fear of death . . . Therefore he had to become like his brothers and sisters in every respect, so that he might be a merciful and faithful high priest in the service of God, to make a sacrifice of atonement for the sins of the people. Because he himself was tested by what he suffered, he is able to help those who are being tested. (Heb 2: 14-18).

In this way, the bridge between man and God appears to go both directions. In his mortal form, Jesus was able to teach and live with humanity in ways the Lord's overpowering presence had not allowed, but it also showed humanity that through Jesus, God understands the temptation of sin and suffering. Perhaps it is appropriate that Jesus has been called the intercessor between humanity and the Lord, acting as that active bridge of identification. In this state, Jesus represents the temple of God (e.g., Joh 2: 15-25), showing the movement of God's presence in the temple of the Old Testament into the form of a man living with his people.

Interestingly, much of Jesus's ministry identified the limits of a legalistic mindset. He rebuked spiritual leaders for focusing on the words of the Law to the exclusion of living out God's love for others (e.g., Mark 3, Luke 13). This elevation of literal application of Law over the intention of the Law to live righteously—including to love God and love others—provides an excellent example of the introjection stage in internalization. With legalism, a person has taken the extrinsic system of rewards and punishments into an internal system for regulating behavior, but it lacks any significant internalization process which would identify and integrate the essentially intrinsic aspects (e.g., the aspects which reflect God's character) into the person's own self-system.

The Holy Spirit and defining integration. Through the life and sacrifice of Jesus, God redeemed humanity. The exact mechanism is debated throughout theology, but the essential principle remains the same: God reconciled humanity to him through Christ (2 Cor 5: 18-19). With this reconciliation, it became possible for the Holy Spirit to dwell inside people:

> Or do you not know that your body is a temple of the Holy Spirit within you, which you have from God, and that you are not your own . . . For we are the temple of the living God; as God said, "I will live in them and walk among them, and I will be their God, and they shall be my people. . ." But you are not in the flesh; you are in the Spirit, since the Spirit of God dwells in you. Anyone who does not have the Spirit of Christ does not belong to him. (1 Cor 6: 19; 2 Cor 6: 16; Rom 8:9)

This state represents the integration of God into human nature as represented by God's temple becoming the body of his followers rather than a building into which they could only enter part way.

Moving towards internalized health. The redemptive narrative in the Bible shows how the internalizing process described by SDT can still occur despite the influence of sin on human nature, as revealed by God's renewal of his image inside humanity and resulting improved wellbeing. This process of renewal is summarized below in Figure 8.

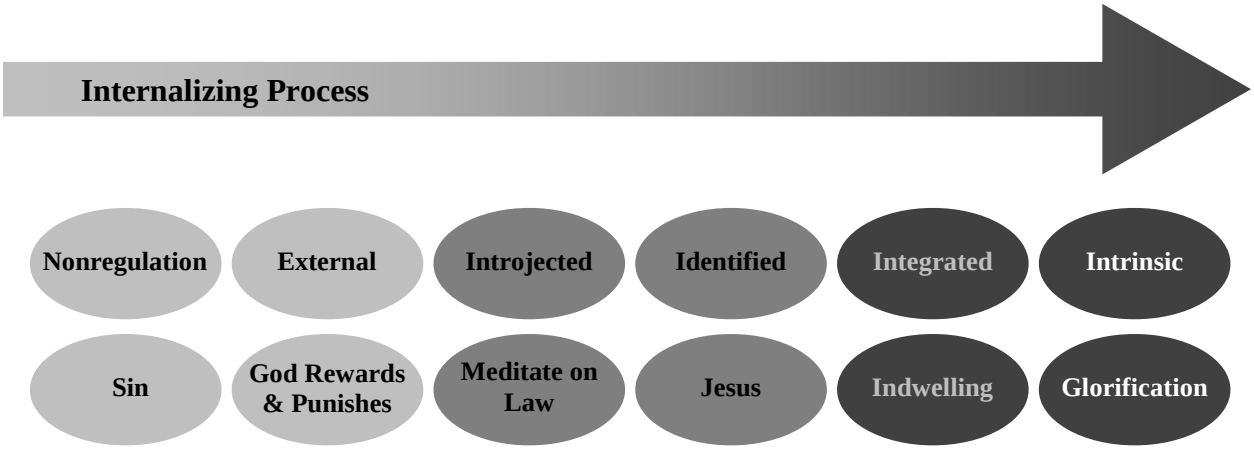


Figure 8. FIT stages of renewal.

What does this mean for becoming healthy today? First, it shows that we can engage in a progressive process towards greater health. Second, it supports the progression from extrinsic factors to introjection, identification, and identification stages. In practical terms, this model can provide a helpful framework for conceptualizing a person's current stage of renewal, which would determine which stage is needed next.

If a person is engaging in an unhealthy pattern of behavior outside of conscious control, it makes sense the first step is for an external party (e.g., therapist, family member, legal system) to define the pattern in the extrinsic framework of rewards and punishments. This can be seen in methods of cost-benefit analysis. The next step would be to support the individual in engaging in

the cost-benefit analysis outside of the external agent's presence (e.g., outside the therapist's office). In some ways, this stage can be thought of as the harm reduction phase; the behavior is still externally determined, which will decrease vitality over time, but it may prevent the self-harming tendencies of non-determined behavior. Once harm has been reduced through introjection, the individuals would be supported in identifying their own values and meaning in that particular situation, followed by integrating that meaning into their overall sense of self and life. In these latter stages the change would become increasingly internalized, allowing for an increased sense of vitality and greater sustainability of the changes.

Question 6: How Can We Best Assist in This Process?

FIT emphasizes three methods of intervention which can support the healthy change process. These will be proposed within the context of therapy, but are by no means particular to the therapeutic relationship. Ideally they would be present across relationships to support health in our communities. Furthermore, these skills do not represent the only methods of assisting change, as many clinical interventions from other psychological traditions would likely be helpful, but they represent three skills specifically supported by the integration of SDT, IP, and the Biblical narrative. These three processes, based on an integration of Biblical and psychological disciplines, can be summarized as the processes of reconciliation, service, and encouragement.

Therapeutic stance. Before discussing specific intervention strategies, it is important to establish the therapeutic stance within FIT. Considering the dialectic between the self and world, the therapist's own health will necessarily impact the therapy. This is true across all self-processes, but can be summarized by defining the therapeutic stance along a spectrum similar to

the model of internalization: the therapist could range from impersonal to controlled to integrated. An impersonal stance would be described by passivity and de-emphasis on the therapist's responsibility (e.g., effect) in the healing process, with an emphasis on the client directing all of treatment. A controlled stance would be described by expectations of compliance by the client, with an emphasis on therapist being directive and the "expert" role of the therapist. These two stances represent opposites manifestations of an equally unbalanced approach. Ideally, the therapist would adopt an integrated stance, described by awareness, congruence, and intentional engagement with the client.

This integrated stance is reflected in the language of the interventions described below. The therapist actively and intentionally engages with the therapy, in a way that enhances the autonomy of the client. The therapist is fundamentally seen as supporting the client's movement towards health, not controlling it.

Be reconciled. In first Corinthians, Paul writes about the ministry of reconciliation. He describes the process by which God reconciled humanity to him, and ends with the description of Christians' role in the ongoing process:

> That is, in Christ God was reconciling the world to himself, not counting their trespasses against them, and entrusting the message of reconciliation to us. So we are ambassadors for Christ, since God is making his appeal through us; we entreat you on behalf of Christ, be reconciled to God. (1 Cor 5: 19-20)

In describing the appeal God makes through Christians, the phrase "be reconciled to God" involves a passive verb "to be." This implies that Christian are not actively reconciling others, but they are entreating others to accept what has already been done (Osborne, Briscoe, &

Haddon, 2011). This aligns with the idea of spreading the "good news;" Christians are not called to be saviors, but to tell the world they have already been saved, if they accept it.

This distinction connects directly to the first process by which we can assist others in changing: we highlight existing information, as an offering. This implies two crucial dynamics. First, this intervention is not focused on changing, altering, or doing for the patient, but rather on highlighting what has already been done. It may be easiest to think of this in terms of an intervention aimed at the client's free will orientation. If a client processes information through a controlled orientation, they will miss autonomous information that already exists in the situation. For example, a client discusses an unexpected or unwanted job change and focuses only on their lack of control in the situation. The therapist could highlight the aspects of the new job which align with their intrinsic interests. Second, this intervention fundamentally offers someone a choice, it does not coerce or compel them to accept the information. Highlighting new information while also acknowledging their current perspective allows them to see both. Importantly, the phrasing of "but" or other invalidating moves, rather than "and" and other complementary moves, introduces an oppositional element which undercuts this dynamic of expanding information awareness. To fine tune our example, the therapist could acknowledge the client's perspective and offer the new information as an addition, e.g., "It is frustrating not to have control over your work site, *and* it seems like this new job connects with your interest in communications."

True to the integrated stance of the therapist, the intervention of reconciliation requires active intention by the therapist and a supportive stance, rather than a position of authority or control. While highlighting existing information may sound simple, it requires the therapist to

become adept at recognizing autonomous information in experiences and finding a way to highlight that information in a choice-supportive manner. This approach shares similarities with Dialectical Behavior Therapy's validation strategies, which were adopted from Carl Roger's Person-Centered Therapy tradition (Linehan, 1993; Tolan, 2012). These traditions can provide additional guidance on the reconciliation intervention, and demonstrate that interventions from other psychological traditions can be used within FIT, when they are applied in an autonomy supportive fashion.

Serve others. The language of service fills the New Testament, calling people to follow the model of Jesus and act as a servant to the Lord and each other:

> For you were called to freedom, brothers and sisters; only do not use your freedom as an opportunity for self-indulgence, but through love become slaves to one another. For the whole law is summed up in a single commandment, "You shall love your neighbor as yourself. (Gal 5: 13-14)

This type of service involves the love described at length in Corinthians 13 and represented by Christ's life and how he served (see John 3, 13, 15). In terms of therapeutic interventions, this intervention focuses on fulfilling the image-derived needs of the client. Notably, in this servant role the therapist's priority is not teaching the client how to get their needs met, but actively working to fill those needs through the therapeutic relationship. Helping the client find ways to meet their needs will be addressed in the third intervention, encouragement.

Identifying needs. While every image-derived need contributes to overall well-being, various needs may impact daily functioning to differing degrees. Attending to those processes can provide insight into which needs a client currently experiences fulfillment and which might

involve a deficit. The autonomy need generally relates to regulation style and telos motivation. As a result, it has been associated most strongly with protecting against burnout, task performance, and work engagement (Chiniara & Bentein, 2016; Trepanier et al., 2013). The competence need generally relates to internal resources prompting action and activity, and is associated most strongly with task performance, positive affect, and protecting against negative affect. The relatedness need generally relates to generating positive affect and the energy needed to protect social ties. It is associated most strongly with positive affect, as well as pro-social behaviors towards individuals and groups (Chiniara & Bentein, 2016; Trepanier et al., 2013).

The pro-social behaviors of the relatedness need should not be underestimated; in addition to building and maintaining relationships which will contribute to the client's own need for relatedness, these pro-social behaviors also encourage autonomy and competence need fulfillment for other individuals and the community culture. This provides perhaps the most long-term protective factors for the health of the community as a whole. Conversely, the lack of these pro-social behaviors can lead to systemic frustration of all image-derived needs (Chiniara & Bentein, 2016).

All of the needs contribute to a sense of vitality, but considering the different processes affected by the needs can help identify which needs may need more attention than others. This process is summarized in Table 5 below.

Table 5

Effect of Needs on Functioning

	Autonomy	Competence	Relatedness
Subjective energy	Yes	-	-
Positive affect	-	Yes	Yes
Negative affect	-	Yes	-
Task performance	Yes	Yes	-
Engagement	Yes	-	-
Pro-Social Behaviors	-	-	Yes

Prioritizing needs. The fulfillment of some image-derived needs influence well-being more in the short versus long-term (Reis et al., 2000). First, autonomy fulfillment appears crucial in both short and long term fulfillment of needs. Autonomy is correlated primarily with the competence need in the short term, and both the relatedness and competence needs in the long term. This indicates that the therapist-client relationship should strive to be autonomy supporting at all times. Autonomy supportive relationships are described as "(a) providing a meaningful rationale, (b) acknowledging the behaver's perspective, and (c) conveying choice rather than control" (Deci, Eghrari, Patrick, & Leone, 1994, p. 124). This further emphasizes the posture of the therapist as transparent, intentional, validating, and offering choices rather than directing behavior.

Second, the competence need appears more important in the short term. This finding complements IP's perspective that it can be beneficial to target the functional domain and related symptoms first. On a day-to-day level, competence correlates most strongly with both autonomy and relatedness, which indicates that increasing competence satisfaction may provide the most immediate benefit across all need fulfillment. Since competence is associated with decreasing negative affect, increasing positive affect, and improving task performance, it can also provide the fastest subjective improvement in well-being. Increasing competence fulfillment will enhance the client's internal resources, which will enhance their ability to continue in therapy. However, competence is not as strongly associated with engagement as autonomy, which further speaks to the necessity for an overall autonomy-supportive relationship to maintain the client's engagement in therapy.

The competence need involves the need to "succeed at optimally challenging tasks and to be able to attain desired outcomes" (Luyckx, Vansteenkiste, Goossens, & Duriez, 2009, p. 278). Within the therapeutic relationship, the therapist can support this need through the skillful use of positive feedback (Mouratidis, Vansteenkiste, Lens, & Sideridis, 2008). Factors which contribute to effective feedback include perceived honesty of the provider, attributions to effort and strategies rather than abilities (e.g., "You tackled that in a clever way" rather than "You are smart"), emphasizing self-referenced improvement rather than social comparison, and to make sure the standards for the positive feedback are clear, specific, and not excessively high (Mouratidis et al., 2008). The therapist does not need to artificially create situations or tasks for the client to achieve success, but rather focus on highlighting instances when the client has demonstrated competence. It is helpful to remember that competence is more focused on process

than task achievement. Even when a patient appears to "fail" at every task they set for themselves during the week, there is likely some aspect of their strategy or effort that can receive genuine praise.

Finally, it is crucial to fulfill the client's relatedness need for long-term health. When someone experiences relatedness satisfaction, they are more likely to engage in pro-social behaviors which will meet the needs of the people and community around them. This will encourage healthier, need satisfying environments which will be better able to meet the client's needs even once they have left therapy. Relatedness is supported through the experience of feeling truly known and accepted. While many standard therapy techniques for rapport building and empathy will prove useful for satisfying these needs, the emphasis of Person Centered Therapy on unconditional positive regard, focus on supportive relationship building in Compassion-Focused Therapy, and interpersonal awareness in Interpersonal Process Therapy, may offer some specific, helpful strategies (see Gilbert, 2010; Teyber & Teyber, 2010; Tolan, 2012). Therapists could also do worse than meditating on the definition of love described in Corinthians:

> Love is patient; love is kind; love is not envious or boastful or arrogant or rude. It does not insist on its own way; it is not irritable or resentful; it does not rejoice in wrongdoing, but rejoices in the truth. It bears all things, believes all things, hopes all things, endures all things. (Cor 13: 4-7)

While the relatedness need is especially helpful in long-term health, it is also strongly correlated to the competence need in the short term (Reis et al., 2000). Optimally, a therapist would seek to

fulfill all three needs in every session through an approach that is autonomy supportive, provides positive feedback, and engages in rapport building.

Encourage. Throughout the scripture, Christians are called on to encourage and teach each other as part of the redemptive process: "And let us consider how to provoke one another to love and good deeds, not neglecting to meet together, as is the habit of some, but encouraging one another, and all the more as you see the Day approaching" (Heb 10: 24-25). In FIT, the therapist encourages the client to engage in the healing process by progressively internalizing health. As described above, internalization usually unfolds through the stages of non-determination, extrinsic factors, introjection, identification, and internalization. The therapist can provide perspective on the current stage of the client and help guide the client towards the next stage. This can be seen in some sense as the therapist's role in agenda setting.

FIT clearly calls out the power of agenda setting, which influences how a therapist chooses and shapes their specific interventions. This should not be confused with CBT's concrete idea of agenda setting, but rather the guiding principle that organizes a therapist's interventions and goals within session. For example, a client recounts a difficult interaction with a family member. If the client is in the non-determined stage, the therapist might help the client identify the pressures they experienced in the situation, connecting with extrinsic factors. This could take the form of increasing emotional awareness, using perspective taking for increased cognitive awareness, motivational interviewing, any standard clinical intervention that supports the targeted process—as in all work within FIT, the exact techniques are less important than the process itself. If the client is in the introjected stage, his/her language might be filled with "should" statements, and the therapist could focus on helping the client identify their own values

or “voice” in the situation, free of the should restrictions. Again, techniques are less important than a focus on process. In each interaction of the example, the therapist has a specific agenda: the goal is to encourage the client into the next stage of internalization.

Chapter 5 Summary

In this chapter, I defined the primary mechanisms of change in Fundamental Image Theory, with an emphasis on clinical interventions. Here are the key elements:

- Biblical narrative provides a Christian understanding of the internalization process described by SDT through the lens of redemption and renewal, as summarized in Figure 8
- This renewal process describes the stages of change from pathology towards greater wellbeing in FIT
- This process can be promoted through the specific strategies of an autonomy-supportive therapeutic stance, reconciliation of free will, serving the client’s image-derived needs, and encouraging the client’s growth into the next stage of renewal
- Existing psychological interventions can also be used to promote this renewal process, as long as they are applied in an autonomy-supportive fashion and appropriately target the client’s current stage

Chapter 6

Relationship Between Trauma and Killing

> In my extensive work with vets, another thing I learned is that PTSD is not best understood or treated as a stress disorder, as it is now characterized. Rather, it is best understood as an identity disorder and soul wound, affecting the personality at the deepest levels. (Tick, 2005, p. 5)

Trauma has traditionally been described as an overwhelming, fear-provoking event (Levers, 2012. As discussed in the introduction, this definition does not properly account for the traumatic symptoms experienced as a result of killing others. While the most recent definition of PTSD in the *DSM 5* (2013) allows, if obliquely, for the existence of perpetration induced traumatic stress (PITS), existing models of trauma do not effectively account for its occurrence. Trauma research has largely focused on the experience of victims rather than the harm-doer. This leaves us without an effective theory for understanding why harmdoing can cause posttraumatic stress symptoms and as a result, without an organized approach for treating PITS.

In the previous chapters I established the new theoretical model of Fundamental Image Theory (FIT), based on the integration of SDT and IP and grounded in a process orientation to understanding the self. In this chapter, I will expand upon that process orientation to illuminate the processes of trauma and killing, and highlight the relationship between the two. In my final chapter, I will combine this understanding with FIT to address my original questions: how does killing cause trauma and how can we treat that trauma?

Defining Trauma

FIT proposes that the self contains four interdependent processes: a telos motivation, regulation style, image-derived needs, and free will orientation. While all of the processes affect and support each other, the image-derived needs represent the most direct interaction between the self and the world, i.e. any external event or influence. They provide a useful entry point for seeing how the external environment affects the self's ecosystem, and in our specific case, how trauma from the world affects the self.

Some trauma researchers and clinicians have begun to talk in terms of "Big T" and "small t" traumas. This phrasing recognizes that the severity and impact of "trauma" can range on a wide spectrum (Schwarz, 2002; Shapiro, 1998). Traditionally, people might group events described in the PTSD diagnostic criteria into "Big T" traumas, e.g., assaults, near-death experiences, natural disasters, while non-life threatening events might be considered "small t" traumas, e.g., toxic work environments, divorce, job loss. While the severity of trauma differs, this view argues that there is something related in how we are affected by both the life-threatening and non-life-threatening difficulties in life. This spectrum provides a helpful starting assumption within FIT: while the severity of traumatic events and traumatic effects ranges, there are some common factors throughout these "traumatic" experiences.

Based on this assumption, it makes sense to pivot away from an event-dependent definition of trauma to a process-dependent definition. As stated previously, the event in the external world affects the self-processes most directly through the avenue of image-derived needs. Therefore, a trauma can be conceptualized as any world event or series of world events that antagonizes an image-derived need.

It is helpful to remember that the antagonization of an image-derived need does not simply mean the need was not met, i.e. unsatisfied. The *antagonization* of a need is an active attack on that need, and by extension, an attack on the self's essential processes. This represents the metaphorical salting of the earth to kill the need and frustrate its ability to flourish in the future. This is the difference, for example, between simply feeling lonely and being mocked or attacked for trying to connect with others. While both dissatisfaction and attack on the need hurt wellbeing, the latter has a more pervasive and long-lasting impact (Vansteenkiste & Ryan, 2013). Through this attack lens, we can see that even events that are not physically violent can still be experienced as violence towards the self.

Defining trauma as the world's attack on image-derived needs provides a model for understanding the common factor between "Big T" and "small t" traumas. Traumas can vary in the intensity of their attack on the image-derived need as well as how many image-derived needs are attacked. Additionally, since image-derived needs exist as part of the self's larger ecosystem, the effects of the trauma on the other self-processes can differ. The same traumatic event may result in minimal or maximum impact on the other three self-processes of an individual, resulting in a range of severity and length of impact on the self overall. Essentially, trauma can be described in terms of which image-derived needs were attacked and to what extent that need antagonization affected the other self-processes of telos motivation, regulation style, and free will orientation. They can also be described in terms of their intensity, duration, and frequency.

Let's return to the image of the self as a braided rope. Before I proposed a model of wellbeing based on the strength of the rope, which is based on the strength of the four different strands of self-process braided together. The strand that represents image-derived needs could be

thick (fulfilled needs) or thin (dissatisfied needs). In the case of trauma, imagine that strand burned, cut, abraded, or otherwise attacked. Now imagine that damage spreading to all of the strands. That is trauma.

This definition of trauma can apply to "Big T" events traditionally associated with PTSD, "small t" events, and PITS. Sexual assault is widely recognized as a "Big T" trauma that is frequently associated with PTSD. How does the sexual assault attack victims' image-derived needs? In terms of competence, the victims often experiences a loss of control over the situation, as well as their own bodies, thoughts, and emotions. The part of them that needs a sense of mastery and effective management over the environment is attacked. In terms of autonomy, their consent is ignored and their own desires and values are completely invalidated. This can be especially painful when their own body reacts against their desires or they receive messages from their attacker or society that they "wanted it." The assault can also undercut their usual methods for meaning-making, such as the just-world belief that "good things happen to good people" (Resick & Schnicke, 1993). The part of them that needs for their actions to be in accordance with their values and meaning-making is attacked. In terms of relatedness, survivors often describe feeling like they were treated as an object rather than a person, a violation of true intimacy and relationship. The part of them that needs to feel connected and truly known is attacked.

In the example of sexual assault, every single image-derived need is attacked. Many survivors describe the assault as something that changes them, to the degree that they often report "out of control" emotions, lost motivation, shattered sense of self, and a pervasively negative outlook towards themselves and the world (Herman, 1997, Resick & Schnicke, 1993). This speaks to the effect of the need antagonization caused by the assault on the other self-

processes. Not surprisingly, sexual assault is strongly correlated with developing PTSD (Herman, 1997; Masho & Ahmed, 2007; Tiihonen Möller, Bäckström, Söndergaard, & Helström, 2014).

Trauma as an attack on image-derived needs can also explain the experience of "small t" traumas. For example, the experience of growing up with highly critical parent has been described as a "small t" trauma; even though the experience is not life-threatening, it can lead to some posttraumatic-like symptoms, such as hyper-vigilance in future relationships (Siegel & Solomon, 2003; Vansteenkiste & Ryan, 2013). In that case, the constant criticism attacked the need for competence, the part of the person that needs to feel like an effective manager who can successfully overcome challenges. This attack could spill over into other self-processes, such as a level of hyper vigilance towards criticism, causing those assaulted to develop an impersonal free-will orientation, automatically highlighting the information in their environment that emphasizes their lack of control or ability to manage. Research indicates that the antagonization of image-derived needs in childhood may have more severe and systemic effects on the other self-processes (Deci & Ryan, 2000; Vansteenkiste & Ryan, 2013). As a result, an equally critical relationship that begins in adulthood may not be so traumatic as one experienced in childhood. Again, the trauma is not defined by the event itself, but by the processes involved: (a) which image-derived needs are attacked, and (b) how that attack impacts other self-processes. These in turn are affected by other individual processes, including age, level of development, history of prior traumas, current health status and so on.

This definition of trauma accounts for the posttraumatic stress symptoms experienced as result of killing in combat. Killing in combat satisfies none of the image-derived needs, and

potentially attacks all three in ways that damage the other three self-processes. Furthermore, killing in combat can lead to a destructive cycle of seeking to fulfill substitute needs that can be met by engaging in violence, which further perpetuates the need-antagonization long after the original event and presents barriers that make treatment difficult.

The Process of Killing

Before examining how killing in combat frustrates our image-derived needs, it will be helpful to examine the dynamics involved in the process of killing. U.S. Army lieutenant colonel and psychologist Dave Grossman has studied the psychology of combat and killing extensively, with a focus on the U.S. military. He begins his analysis of combat psychology with the assertion that "one of the roots of our misunderstanding of the psychology of the battlefield lies in the misapplication of the fight-or-flight model to the stresses of combat" (2009, p. 5). The fight-or-flight model is appropriate for other forms of danger, but does not apply when the violence comes from another human. Instead, he proposes that inter-species conflict is better understood within a four-response model: fight, flight, posture, or submit. He asserts that the posture response, largely neglected in the discussion of combat stress, is often a species' most common reaction to inter-species conflict. In the posture response, a person goes through a series of threatening but non-assaultive actions. In a social setting, a person might raise their voice, strand tall and stiff, and make verbal threats. The posturing threatens violence, but no physical violence has been committed at this point. In the military setting, posturing could involve warning shots, shouting, or maneuvering troops in a way that implies threat.

A review of military history reveals the long-standing role of posturing in combat. Many Native American tribes engaged in the practice of "counting coup" during war, which involved

undertaking an act which revealed the weakness of the enemy and highlighted the bravery and skill of the warrior. For example, touching an enemy with a coup stick or hand and escaping unharmed counted as coup. The tribe would retell the stories after a battle and record the coup through different methods, like adding an eagle feather to their coup stick or carving a mark. This tradition eclipsed killing the enemy as the goal of war (Calloway, 2015). In some other indigenous tribes, warriors hunted with fletched arrows but removed the feathers during war, causing the accuracy of arrows to decrease significantly and result in fewer kills (Grossman, 2009). In other conflicts, posturing took on the form of firing guns into the air—not to kill, but to intimidate. During the Napoleonic wars, one general described his troops becoming "drunk on rifle fire" (Grossman, 2009, p. 10). Their shooting was aimed up into the air, rather than at the enemy, resulting in no casualties. A British officer in World War I reported that the only way he could force his soldiers to shoot at the enemy, rather than empty air, was to walk up and down the line and beat men with his sword, ordering them to adjust their aim lower (Grossman, 2009). There are numerous accounts of individuals and entire groups who engaged in specific strategies to avoid hitting an enemy when they fired, even when pressured by leaders to engage lethally. Grossman provides numerous historical accounts, including a family story from a relative who learned exactly how far off he should aim his weapon to appear like he complied with orders, while knowing he would never actually hit a person.

The submit response has also played an important historical response in combat. Rather than fire into empty air, many have refused to fire at all. Research into World War II revealed that only 15-20% of U.S. soldiers fired upon enemy combatants. Reviews of World War I and the Civil War found comparable firing rates. Anecdotal evidence supports similar trends

throughout humanity's history in the form of complaints by military leaders about their soldiers' performance and lower-than-expected fatality rates (see Grossman, 2009).

This historical evidence suggests that humanity has some inborn resistance to killing another human, even in the context of war. Prior to the age of modern warfare (1950-present), people primarily resorted to posturing and submitting responses in combat. There were two significant exceptions: first, the majority of casualties in conflicts occurred after one side tried to flee; second, artillery weapons (e.g., cannons) generally accounted for at least 50% of battle casualties. These exceptions represented the powerful effect of distance on humanity's no-kill instincts. The likelihood someone will attack another human in war increases with the amount of distance between them and their target. While this distance can be physical, it may connect more strongly to our distance from someone's face, as looking at someone's face increases our empathetic response towards that person. In this way, attacking someone's fleeing back may offer as much emotional distance as attacking from 100 meters away: the individual's face cannot be seen. This divide between close and far range killing rates led Grossman (2009) to conclude that "their weapons were technologically able to kill, and they were physically able to kill, but at the decisive moment each soldier found that, in his heart, he could not bring himself to kill the man standing before him" (p. 28).

Grossman describes this resistance to killing as the "universal human phobia." The most common phobia among humanity is a phobic reaction to snakes; 15% of humans, when exposed to snakes, will have a phobic-scale reaction. In contrast, 98% of humans will have a phobic-scale reaction to witnessing interpersonal human aggression (Grossman & Christensen, 2008); the remaining 2% primarily fall into the sociopathic category. True to a phobia, this aversive

reaction is not mild, but can lead to significant, seemingly irrational physical, mental, emotional, and behavioral changes (Grossman, 2009). While this universal phobia appears innate to humans, it presents a serious operational concern for the military.

In a dramatic shift from humans' natural state, the modern military "cured" this universal phobia of human aggression through intentional modifications to technology and training. The 20th century introduced previously unimaginable methods of remote killing, including combat air support, bombing, grenades, expanded artillery arsenals, and drone strikes. The military, after the misdirected- and non-firing problems in World War II, also developed new training strategies to encourage higher engagement rates. Their training succeeded: by the Korean War, firing rates increased to 50-55% and by the Vietnam War they increased further to nearly 90-95% of soldiers discharging their weapons (Grossman, 2009). The gains in engagement held steady into OEF and OIF: surveys of combat veterans found that 77-87% reported firing on an enemy combatant, 48-56% reported killing an enemy combatant, and 14-28% reported killing a noncombatant (Maguen, Lucenko et al., 2010; Maguen, Metzler, et al., 2009; Maguen, Vogt, et al., 2011). As soldiers have a tendency to engage in denial and disavow evidence that supports the idea they actually killed someone, the numbers from the OEF/OIF survey may under-represent the actual firing and killing rates in these conflicts (Grossman, 2009).

Learning to kill. The training methods which moved U.S. military firing rates from 15-20% to 80-90% reveal that killing requires fundamental shifts in self-processes. The new training methods were tested between World War II and the Korean War, and then honed even further between the Korean and the Vietnam War as the military strived to increase the firing rate. Throughout the adaption of the training, the military collected data, tested new methods, and

measured the results. Through this intentional, scientific method they discovered three key elements in training soldiers to kill: desensitization, conditioning, and denial defense mechanisms (Grossman, 2009).

The development of desensitization training began in earnest during the Vietnam War. Graduates of Marines Corp training have described learning to march while chanting "kill, kill, kill, kill" every time their left foot hit the ground, along with ongoing descriptions of killing and the need to kill from drill instructors (Dyer, 2005). Graduates, even decades apart, describe similar effects from the desensitization training:

> The idea of killing a person when I first came down here...it was unheard of, you didn't do that...But once you came here and they motivated you and just kept you every day constantly thinking about it, and by the time you left here—it's something . . . you've got it in your mind that you want to do it so bad that you actually go out and do it when you have to . . . *Parris Island graduate, 1968*...Sometimes the drill instructors make you feel like you're going to like it. Like the war—goin' out and killing people. They psych your mind out for you...*Parris Island graduate, 1982.* (Dyer, 2005, p. 61)

While humans have often viewed the opposing side as "other" or inhuman, the active desensitization process which began prior to the Vietnam War and continues today represents a shift in military training. Historians traced the elevation of killing in boot camp training throughout the 20th century and found that it first began before the Korean War, and by Vietnam, had become an integral aspect of training. This represented a fundamental shift in how killing was treated at boot camp:

> It does help to desensitize [recruits] to the suffering of an "enemy", and at the same time they are being indoctrinated in the most explicit fashion (as previous generations were not) with the notion that their purpose is not just to be brave or fight well; it is to kill people. (Dyer 2005, p. 59)

Grossman describes this shift as the "deification of killing" and as Dyer hints, it represents a shift from the soldier as warrior to the soldier as killer.

The desensitization training process only increased after Vietnam due to the use of improved technology and specifically, video games. The military developed and employed war-based first person shooters, designed specifically to capture the experience of actual combat, to recruit and train soldiers all across the country (Mead, 2013). These three-dimensional games proved effective enough to induce the same physiological reactions as combat itself. The U.S. Army released the first program in 2002, and due to its widespread results, the military expanded its efforts since then into multiple video games and across every major gaming platform (Mead, 2013). The age of drone warfare offers another new horizon for using video games to desensitize soldiers to the act of killing. Some sources report that the military consults with video game developers for help designing the user interface, so it is accessible and comfortable to those accustomed to video game design (Pearson, 2015).

Modern military training also introduced the powerful technique of conditioning. The military adopted the power of classical conditioning to create a "quick shoot" reflex in its soldiers. The military altered training so that it mimics the actual experience of combat more closely. Soldiers train in environments tailored to match those they will deploy to, with targets designed to appear more human, including the instant feedback of dropping to the ground when

shot, as a real body would. A trainer for the Israeli Defense Force describe the care he took to craft the training experience to represent real combat:

> I changed the standard firing targets to full-size, anatomically correct figures because no Syrians run around with a big white square on his chest with numbers on it. I put clothes on these targets and polyurethane heads. I cut up a cabbage and poured catsup into it and put it back together. I said, "When you look through that scope, I want you to see a head blowing up." (Grossman, 2009, p. 257)

The military also introduced quick-fire training: a target pops up suddenly and soldiers learn to shoot instantly, based on reflex (Grossman, 2009). In this modern era:

> Every aspect of killing on the battlefield is rehearsed, visualized, and conditioned. On special occasions, even more realistic and complex targets are used. Balloon-filled uniforms moving across the kill zone (pop the balloon and the target drops to the ground), red-paint-filled milk jugs, and many other ingenious devices are used. These make the training more interesting, the conditioned stimuli more realistic, and the conditioned response more assured under a variety of circumstances. (Grossman, 2009, p. 256).

Training also employs a reward and punishment structure for conditioning. In one basic example, soldiers earn a ribbon once they pass a marksmanship test, and ribbons differ based on how well they perform. Soldiers wear this ribbon on their uniform where it is seen by everyone and responded to accordingly, drawing our praise when someone earned an expert rating and dismissal and criticism for lower qualification levels or even worse, the absence of a ribbon at all. Performance on these tests affects job assignments, evaluations, and career progression.

Short-term, immediate rewards for good performance are also offered in the form of leave days, i.e. extra time off from work.

The effects of desensitization and conditioning are further enhanced through targeted training in denial defense mechanisms. The resistance to kill is fundamentally tied to a specific resistance to kill another human being, reflected in the way close combat and seeing another's face increases this resistance. The military and other enforcement groups now train soldiers to deny the humanity of their opponents. While this tendency to see outsiders as "others" and less than human has been present throughout time, modern training represents a focused, repetitive effort to ingrain this denial into its soldiers. The effect is amplified by the added effects of desensitization and conditioning, as reflected in one trainer's advice to new recruits:

> [There is] a natural disinclination to pull the trigger...when your weapon is pointed at a human. Even though their own life was at stake, most officers report having this trouble in their first fight. To aid in overcoming the resistance it is helpful if you can will yourself to think of your opponent as a mere target and not as a human being. In this connection you should go further and pick a spot on the target. This will allow better concentration and further remove the human element from your thinking. If this works for you, try to continue this thought in allowing yourself no remorse. (Grossman, 2009, p. 258)

That same trainer described a further process called "manufactured contempt", by which recruits are trained to list off reasons why the target deserves to die. Recruits are ordered to engage in this process of dehumanization and manufactured contempt before every shot at a target during training. In this way, the denial defense becomes as reflexive as pulling the trigger.

Desensitization, conditioning, and denial defense training all target multiple self-processes in important ways. First, the sensory experience of combat can be confusing and overwhelming. Desensitization helps to numb that overwhelming rush, while conditioning increases their skill and confidence in their combat performance. Both can invoke a sense of competence during training and decrease elements that frustrate competence in actual combat. Second, undergoing desensitization in the bootcamp and video game environments—both team based endeavors—creates a bond between killing and relating to a close knit team, appealing to our need for relatedness. In this way, the training attempts to associate combat and killing with situations that fulfill important—and reinforcing—needs. In contrast, the denial defense training eliminates the feeling of relatedness between soldiers and their "targets", decreasing the innate urge we have to protect our relations, i.e. eliminating that target from the class of persons that can meet our image-derived need for relatedness. Third, video games are especially designed to to be entertaining and fun. Especially in the recruitment venue, this taps into the force of intrinsic motivation and tries to shape killing as intrinsically enjoyable. Finally, the repeated exposure of desensitization, conditioning, and denial defense can powerfully hijack our natural integrative, internalizing process. Through this mechanism, our regulation style can be altered so that killing and violence are more internally regulated, and therefore more likely to persist even when the external reinforcers disappear.

The full effects of these training methods are revealed most clearly when we look at combat engagement between those trained this way (U.S. soldiers) against those who did not receive this same training (Iraqi and Syrian fighters). As discussed previously, historical evidence suggests that prior to this three-pronged training approach of desensitization,

conditioning, and denial defense, large forces at war could engage for extended periods of time, but casualty rates would be far below expectations and most kills would occur after the main battle when the losing side fled, or due to artillery fire. In contrast:

> During the invasion phase of the Iraq War . . . [a U.S. Army officer] found himself and his 80 men surrounded by 300 Iraqi and Syrian fighters. Unable to obtain air or artillery support, Captain Hornbuckle and his unit—who were never before in combat—fought for eight hours. When the smoke cleared, 200 of the enemy were dead...not a single American was killed. (Grossman & Christensen, 2008, p. 211)

This group of U.S. soldiers overcame the resistance to kill without the usual strategies of distance or artillery, and in contrast, their opponent likely suffered from the historical pattern of non-firing and posturing due to that innate resistance. Perhaps most striking, this shift represents the effect of training, not experience, as none of the Army soldiers had been in combat before this engagement. The training cannot be considered unique to American culture, either, as similar processes have increased killing rates in other nationalities as well. Dyer, a historian of war, concludes:

> One of the main reasons for the continuing superiority of Western armies...is not the technological gap in their weaponry...but the fact that most Western armies now explicitly train their soldiers to be killers and most other armies still do not...[resulting in] kill ratios of between thirty-five and fifty to one. (Dyer, 2005, p. 62)

The experience of combat. The ways combat affects the human body and mind provide important insight into how it affects our image-derived needs. The effect of killing can be

summarized into three primary categories: physiological reactions during combat, perceptual distortions during combat, and post-combat reactions.

Physiological reactions. As touched upon briefly before, the human resistance to killing can be conceptualized as a phobia of human aggression. Like any other phobia, exposure to the feared object causes dramatic physiological shifts. Many of these physiological responses are downplayed or deleted from discussions of combat due to the shame associated with loss of control. For example, people often lose control of their bowel and bladder functions during a violent engagement, but rarely discuss it after the fact. One survey found that a quarter of all U.S. troops in World War II loss control of their bowels; it is predicted that at least 50% of those actually involved in combat lost control of their bladders and another 25% defecated on themselves (Grossman & Christensen, 2008). Narrative accounts by survivors of the 9-11 attacks describe the vast majority of people losing control of their bodily functions while fleeing from the attack (including highly trained rescue workers), and unofficial conversations with military soldiers suggest that the World War II survey likely vastly under-reported the true rates (Grossman & Christensen, 2008). This one example illustrates a general truism about combat: it can create a dramatic sense of losing control.

On the larger physiological scale, the sympathetic and parasympathetic responses to violence create a loss of control. The sympathetic system activates the body to respond beyond conscious control. One soldier described how the effects continued even after combat:

> Two hours later I was in the mess hall, still so wired that I had trouble picking up food with my fork. When I did spear something, my hand shook so hard the food would flip

> off. I finally gave up and ate with my hands, like an animal. (Grossman & Christensen, 2008, p. 16)

Eventually the parasympathetic system activates, but that experience can be just as out-of-control. Soldiers throughout history have described a crash into exhaustion after a battle, when they are often most vulnerable to attack. Everyone from the Spartans to Napoleon's troops to U.S. soldiers in modern wars have demonstrated a tendency to fall from over-activation to complete mental and physical shut down, against their will, once their parasympathetic response activates. In one example, even when danger remained, numerous U.S. soldiers in Vietnam began falling asleep despite the orders of their superiors (Grossman & Christensen, 2008). However, sometimes this parasympathetic response does not activate properly and is replaced with a different loss of control: insomnia. This can be especially damaging, as sleep dysfunction is a pre-disposing factor for PTSD (Grossman & Christensen, 2008)—and likely other problems as well.

Perceptual distortions. Combat also leads to an altered state of consciousness. This significant shift in perception makes it difficult to describe outside of experience:

> A friend asked me an impossible task: Describe...combat in words . . . it is all encompassing, six dimensional, from the front, left, the right, ricochets from the back, exploding shells from above and shaking ground from below. One actually "feels combat" in the body...All at one time. No media can ever duplicate it. No mere words can convey it. (Grossman & Christensen, 2008, p. 51)

A former Army intelligence officer reported that during her first combat experience, she suddenly had "360 degree vision, I could see everything around me at the same time...I've never

felt anything else like it" (L. Stapleton, personal communication, December 20, 2014). She shared the experience with the special forces unit escorting her, who responded that it was a common reaction to being under fire.

One survey interviewed police officers who had been involved in "dangerous engagements," which involved a significant threat of harm. This survey revealed a number of common perceptual shifts listed below, listed in order of reported occurrence (percentages represent those who endorsed these symptoms):

85% diminished sound

80% tunnel vision

74% automatic pilot

72% heightened visual clarity

65% slow motion time

51% memory loss for parts of the event

47% memory loss for some of your actions

40% dissociation

26% intrusive distracting thoughts

22% memory distortions

16% intensified sound

16% fast motion time

7% temporary paralysis (summarized from Artwohl & Christensen, 1997, p. 49)

Similar responses have been reported by soldiers and other law enforcement officers; one study summarized that 88% of participants involved in a gunfight experienced at least one distortion,

70% reported at least two, and 37% reported three or more perceptual distortions (Klinger, 2006).

While some experience an enhancement in perception, many of the perceptual shifts represent a decrease in information. These distortions most often affect a person's vision, hearing, and sense of time. One police officer's description of his own visual impairment, in comparison to other officers' stories, reveals just how dramatic the shift can be: "Most people talk about tunnel vision saying that it is like looking through a toilet paper tube. For me it was like a soda straw" (Grossman & Christensen, 2008, p. 71). One response to an elevated heart rate, common in the sympathetic response to combat, is a loss of depth perception which distorts a person's ability to measure distance accurately. When interviewed, those who were being fired upon either significantly over-estimated or significantly under-estimated the distance between themselves and their assailants (Klinger, 2006). In terms of hearing, people frequently experience sound exclusion. For example, combatants often under-report how often they discharged their firearm and some even question if their firearm worked because they never heard the gunshots (Klinger, 2006). More than half of combatants experience a slowing down of time, which may seem like an advantage initially because it allows more time to plan a response, but it is accompanied by "an extremely elevated heart rate and loss of fine and complex motor control," (Grossman & Christensen, p. 97). These perceptual distortions cause confusion during and after a violent event to such an extent that police officers are drilled to announce their presence and give orders to suspects before they enter the targets' field of vision; once a firearm enters their line-of-sight, the chance of making a perceptual mistake—sometimes with deadly consequences—increases exponentially.

Combat frequently causes a mental shift into "auto-pilot" mode. Some research indicates that auto-pilot can occur in as many as three-quarters of people engaged in a firefight (Artwohl & Christensen, 1997; p. 49). Numerous soldiers and law enforcement officers have told stories of reacting without conscious thought and being surprised to hear from onlookers what actions they took; reflex overwhelmed their consciousness to such a degree they did not even form memories of the events. This auto-pilot switches a person into a default state, so that "whatever we are trained to do is going to come out the other end" (Grossman & Christensen, 2008, p. 87).

Combat impairs memory in multiple other ways: people forget what happened, what they did, or become convinced of events that are false. The human mind may be especially vulnerable to losing memories that implicate its responsibility in aggression and killing others (Grossman & Christensen, 2008). This forgetting is so prevalent researchers have termed it "critical incident amnesia" and investigators are schooled to re-interview witnesses of events multiple times because they are expected to remember only 30% of an event in the first 24 hours, while they frequently remember 72-100% of the event after three days (Grossman & Christensen, 2008). Perhaps most disorienting, combatants frequently "believed they remembered every detail" even when they "blanked" on significant aspects of a violent encounter (Grossman & Christensen, 2008, p. 109). When persons experience a sense of guilt about events, they may repeatedly forget the actions they took, even when presented with contrary evidence over and over (Artwohl & Christensen, 1997).

A police officer's narrative below captures the combined experience of multiple distortions:

> [You] experience a strange sense of detachment, as if the event were a dream, or you were looking at yourself from outside your body. You may go from that "oh-shit" moment with an intense awareness of fear, to feeling almost nothing as you focus on staying alive. Afterward, when you snap back to reality, it will seem as if the event took place in the Twilight Zone. Even hours later you may have difficulty accepting that it happened, as if some part of you is still in denial that it could really happen to you. (Artwohl & Christensen, 1997, p. 42)

In addition to the common symptoms described above, some combatants also report a loss of control over their speech and intrusive thoughts (Grossman & Christensen, 2008). While it may take different forms, some form of losing control during a violent incident seems nearly guaranteed.

Post-combat reactions. People often experience similar reactions after a violent engagement. Some manifest immediately, while others tend to take longer to develop after the event. Artwohl and Christensen (1997) researched the after-effects of a shooting on police officers and found that it usually took about three to four full days for the body to resume normal functioning after such a strong surge of adrenaline. In the meantime, it was common for officers to experience similar physical, emotional, and mental reactions. Physically, they advised officers they might experience "trembling, sweating, chills, nausea, diarrhea, hyperventilation, dizziness, urge to urinate, jumpiness, hyperactivity, and thirst" (p. 178). Emotionally, officers frequently experienced "heightened emotions" which included periods of intense crying, "fierce joy to be alive", anger, irritation, grief, anxiety, and loneliness, intermixed with periods of numbness or emptiness (p. 179). Mentally, many of the effects in combat persisted in varying ways, causing

disorientation, confusion, memory loss, and a sense of being dazed. All of these symptoms could potentially contribute to an ongoing sense of being out of control or feeling "crazy", even after the initial violent event ended.

These immediate reactions also frequently chain together in a way that leads to a sense of shame. Directly after a violent incident, the mind and body react with an intense sense of relief. The first thought most have when they see the injured or dead is, "Thank God it wasn't me" (Grossman & Christensen, 2008). This response is as reflexive as any other physiological or mental reaction during the rest of combat, and represents in some ways the mental equivalent of the parasympathetic system kicking into gear to bring people down from the hyper-aroused state of combat. While the thought exists outside of conscious control, many people feel responsible for it, and experience intense emotions of shame and guilt as a result. Grossman described a debriefing with some teachers after a school shooting, which illustrates how strongly the shame and guilt can manifest:

> I explained that they should not feel guilty about any initial concern they had for themselves during the tragedy, because it was perfectly normal...I told them that it is similar to when the stewardess on an airline tells them that if there is a loss of cabin pressure...they should put on [their oxygen mask] before they help small children...After I explained this to those teachers, several of them laid their heads down on the table and began to sob with relief. (Grossman & Christensen, 2008, p. 265)

Shortly after a violent incident ends, people also frequently experience the strong conviction that they are responsible for what happened. This has proven true from soldiers and law enforcement officers, who blame themselves for not protecting a battle buddy or bystander,

all the way to young children who blame themselves for not being nicer to the perpetrator of a school shooting (Grossman & Christensen, 2008). This heightened sense of responsibility can further intensify the feelings of guilt and shame.

While most of the aftermath fades after the initial three to four days, one symptom can prolong it much further: intense preoccupation with the event, which leads a person to "playing it over and over in [their] mind" (Artwohl & Christensen, 1997, p. 178). This preoccupation is a common reaction, but it may extend the cycle of symptoms because it can "reset" the recovery clock. Such thoughts can recreate the initial adrenaline rush of the incident, pushing out the recovery period another three to four days. One police officer described this cycle after being involved in a shooting:

> The first day everything was so pumped up that I couldn't get to sleep. I'd been up well over twenty-four hours when I finally got back home. I wanted to go to sleep, but I was just so pumped up that I couldn't. I was zombied into the TV, just clicking channels, not even thinking about it. The next few days were like that, too. I'd try to go to sleep, but then I start to think about the shooting, and boy, there went my adrenaline right back up...Then when I finally did fall asleep, I'd way up after about four hours, think about the shooting, and get charged up again, which made it hard to sleep. I was having some dreams too. (Klinger, 2006, p. 210)

As demonstrated by the officer's narrative, the preoccupation can occur during waking hours or also take the form of dreams. Some report reliving the event as it occurred in their dreams, while many describe reliving the event in a "worst case scenario" way, e.g., their weapon doesn't work or they fumble it (Klinger, 2006).

The realities of a war zone can complicate post-combat reactions. While police officers are usually given 72 hours off after a shooting incident, soldiers rarely receive a similar break. Instead:

> For a warrior in combat, this toxic event can happen at any time. This can seem like an insane roller coaster: riding up to the brink of death and destruction, and then back, up and back, over and over, knowing with absolute certainty that at any time you can go over the edge to personal death and destruction. (Grossman & Christensen, 2008, p. 273)

Due to this uncertainty and repeated engagements in a combat zone, soldiers frequently spend weeks, months, or even years in acute aftermath period, experiencing the dramatic swing between heightened emotions and numbness, physiological arousal and collapse, distorted perceptions and impaired consciousness, and finally, the intense relief and shame of being alive.

Chapter 6 Summary

In this chapter, I applied Fundamental Image Theory (FIT) to re-conceptualize trauma and review the processes involved in killing. Here are the key elements:

- Trauma is a world event that antagonizes a person's image-derived needs and significantly impacts the other self-processes
- This conceptualization of trauma focuses on the common process of trauma rather than describing specific events as traumatic
- The review of harmdoing throughout human history describes four natural responses to intraspecies conflict: fight, flight, posture, or submit, with fight being the least common natural response

- Intraspecies violence is the “universal human phobia” and contrary to human nature; training soldiers to kill has required unique and focused re-learning to change the core self-processes
- Combat frequently involves out-of-control reactions on the physiological, perceptual, and post-event levels that contribute to the antagonization of image-derived needs, which will be explored more in depth in the next chapter

Chapter 7

Killing as Trauma

The previous chapter proposed that trauma can be thought of as any world event that (a) attacks an image-derived need, and (b) also impacts the other self-processes. After reviewing the dynamics of interspecies aggression, it is clear that the act of killing another human does not fulfill any of the image-derived needs. Rather, killing another human appears to frustrate or attack these essential needs. These dynamics become even more clear when we focus on understanding image-derived needs within the context of the *imago dei*, as extensions of God's image in our functional, structural, and relational capacities.

How Does Killing Cause Trauma?

Killing causes trauma through a combination of processes. These include: an attack on competence, an attack on relatedness, and an attack on autonomy. Together, these alter self-processes.

Attack on competence. The functional aspects of the image speak to the role of humans as effective managers, which is partially expressed in our need for competence. We fulfill this need when we effectively manage appropriate challenges in life. Importantly, "effective management" is not synonymous with power or domination over the world. The need for competence must be understood within its essential context as an extension of God's functional image in humans. As such, the need cannot conflict with God's nature. Throughout the Bible, God appeared to honor human free choice over control, even when it resulted in harm to the

humans in question (see Augustine, 2011; Migiliore, 2004; Yancey, 1997). Furthermore, scripture asserts that God is love, and describes love as "[love] does not insist on its own way...it bears all things" (Cor 13:4). In truth, power and domination are substitute needs, which we may turn to when our need for competence is not met (Deci, 2000; Vansteenkiste & Ryan, 2013).

Not only does killing another human leave our need for competence unfulfilled, but it actually attacks that image-derived need. The environment of battle is usually chaotic, defined by overwhelming uncertainty and life-threatening danger. In his book *What It's Like to Go to War*, Marlantes (2011) described battle as beginning and ending with a sense of terror, with a sense of detachment in between. Research shows that people react to violent engagement with intense physiological changes and distortions in perceptual abilities that contribute to a sense of losing control of oneself. This loss of control is epitomized in soldiers' loss of control over their bladder functions, garbled speech, dependence on "auto-pilot", and rumination over the violent incident event even after it has ended, sometimes causing them to become trapped in an extended state of hyper-arousal even days later. It is important to note that all of these symptoms are "expected" and "normal," and are not representative of maladjustment or pathology. Rather than represent an "appropriate challenge," interspecies aggression is "humanity's universal phobia." The natural urge of humanity, when faced with this phobia, is to posture or submit, as reflected in the behavior of warriors throughout history. This natural tendency is further supported by scripture: Genesis makes it clear that the world became violent as a consequence of sin, and states plainly that one of God's first instructions to humanity, after choosing to spare our existence, is that we should not kill each other (see Gen 6, 9).

While killing attacks the competence need, it can fulfill the powerful substitute need for power and domination. Marlantes captured this dynamic when he wrote about soldiers taking on "the role of God" at war (2011. p. 1). He observed that people's recovery often depended on how well they could define the boundary between being God at war and returning to the role of a citizen when they came home. When police officers were interviewed after a shooting, many described a sense of power from the rush of adrenaline, and some described a sense of increased contentment and confidence as a result of this power. In one example, when interviewed by a psychologist about any negative symptoms after the event, the police officer expressed anger at the questions and repeatedly described his sense of satisfaction at the power he felt (Klinger, 2006).

Killing's attack on the competence need is reflected in PITS symptoms. On the personal level, if the competence need is met we expect an increase in positive affect, decrease in negative affect, and increased completion of tasks. In PITS we see emotional numbing, anger, sadness, guilt, shame, worthlessness, and avoidance of activities and people. On the interpersonal level, we often see an increase in intimate partner violence and resorting to anger in interactions, both of which are associated with a desire for power and control. Finally, on a group level we see an inability for the in-group to engage in self-corrective evaluation that might prompt more healthy coping and actions (Leidner et al., 2015). All of these symptoms reflect a lack of fulfilled competence and frequently, the maladaptive pursuit of control in its place.

Attack on relatedness. The relational aspects of the *imago dei* speak to humanity's need for relatedness, to feel connected and truly known. People fulfill this need when they engage in intimate relationships. Killing attacks the self's need for relatedness on multiple levels. At the

most basic level, killing may represent the most fundamental type of relational disconnection: a soldier cannot be known by someone who is dead. S/he must also devalue the person at some fundamental level that allows violation of the killing taboo. The training required to kill presents an ongoing attack on the relatedness need. Soldiers are trained to see people as "targets." They are taught not to look at a person, but to find one point to focus upon, while simultaneously repeating reasons this target deserves to die. The training explicitly focuses on dehumanization and manufacturing contempt. During combat, soldiers frequently experience a sense of disconnection from themselves and everything going on around them. This disconnection can take the form of decreased audio and visual perception, auto-pilot, and memory loss. Soldiers cannot relate to others and be known when they are disconnected to the point they cannot know their own experience. In the aftermath of combat, people often experience strong feelings of isolation and a sense that no one can understand what they went through. Even in the military environment where unity is emphasized, there are certain aspects of combat which many consider too shameful to discuss (e.g., relief at living, loss of bladder control), contributing to this isolation. Notably, all of these experiences and reactions fall within the realm of "normal" experience after combat, highlighting the fundamental nature of killing's attack on our need for relatedness.

While killing attacks the relatedness need, it can strongly appeal to the substitute need of reverse intimacy. Dr. Tick observed this dynamic as he spent years working with Vietnam veterans:

> Doing violence to another can be a profoundly intimate act. Larry, a captain in Vietnam, said his life's most intimate encounter had been staring into the eyes of a North

> Vietnamese officer as they grappled, their hands lock around each other's throats. Many veterans who have survived hand-to-hand combat talk about the erotic nature of the death struggle. (Tick, 2005, p. 20)

While killing engages an emotional response similar to true intimacy, this represents "a kind of reverse intimacy. In the aftermath of violence, vets sometimes find they have lost their ability to be loving in a positive, loving way" (Tick, 2005, p. 20). Dr. Tick conceptualizes this reverse intimacy as a sort of death energy, and he notes that many veterans engage in activities aimed at balancing out that energy with a rush of life. Some engage in risk taking behavior, while many engage in sex:

> Ray, a medic, said, “I touched more dead bodies in one year than live ones in my entire lifetime.” Though married before leaving for war, Ray returned to spend decades seducing every woman he could...Ray could say only that he was so deeply imprinted with death that he needed sex to feel the touch of life again. (Tick, 20005, p. 123).

The reverse intimacy sought by veterans through frequent and intense sexual encounters does not fulfill the relatedness need. The veterans frequently described a sense of disconnect during the encounters, and their partners reported feelings of shame and debasement; one woman stated she felt reduced to a "receptacle" in their sexual relationship (Tick, p. 123). Like any substitute needs, the pursuit of reverse intimacy resulted in ongoing frustration of the relatedness need, as reflected in frequent divorces and a sense of alienation for everyone involved (Tick, 2005).

Killing's attack on the relatedness need is reflected in PITS symptoms. On the personal level, if the relatedness need is met we expect an increase in positive affect. In PITS, people

frequently report a lack of positive feelings, such as numbness, emptiness, and depression. On the interpersonal level, if the relatedness need is met we expect primarily pro-social behaviors towards other individuals and a protectiveness towards maintaining those relationships, as evidenced by altruism, maintaining the peace, encouraging others, interpersonal helping, and interpersonal harmony (Harper, 2015). With PITS, people frequently report social avoidance, disruptive anger or irritability towards others, increased rates of adultery or serial relationships, a sense of distrust or even paranoia that disrupts cooperation, and higher rates of intimate partner violence. Finally, on the group level, if the relatedness need is met we expect primarily pro-social behaviors towards the larger organization or group, such as conscientiousness, civic virtue, sportsmanship, group allegiance, endorsement and commitment to the group's objectives, job dedication, leadership, and promoting the group's image (Harper, 2015). In PITS, people may report a sense of hostility or betrayal towards the military or government, decreased engagement in work, avoidance of leadership, and an increase in destructive habits like substance abuse (MacNair, 2002; MacNair, 2015; Shay, 1995; Tick, 2005). In aggregate, these symptoms indicate a lack of fulfillment for the relatedness need and in many cases, the destructive consequences of pursuing a substitute need for inverse intimacy.

Attack on autonomy. The structural aspects of the *imago dei* speak to the human need for autonomy. This need is met when people can make meaning of events and choose to respond to the world in a way that aligns with their values. Some theologians have conceptualized this need as the ability to accurately discern the truth or righteousness, and freely choose to act in a way that aligns with that truth (Feser, 2009). Killing can attack this autonomy need by challenging meaning-making and interfering with volition. In many ways the process of training

for combat involves an intentional and persistent assault on personal values such as “thou shalt not kill” and intentional subjugation of the individual soldier’s phobia/volition to refrain from killing to those of their commanders, who foster and may eventually command contrary volitional acts.

The reality of combat frequently challenges previously held beliefs. Many people in Western culture ascribe to the "just world belief", which states that good things happen to good people and bad things happen to bad people (Resick & Schnicke, 1993). This belief implies both a sense of control and responsibility for events. Modern military training indoctrinates soldiers in another belief: their job is to kill. Training often presents killing as a positive act, something they will enjoy and find fun. To be a good soldier means to be a good, happy killer (Dyer, 2005).

These beliefs build upon each other into a larger system of meaning-making: soldiers are in control and responsible, and if they are a good soldier, they will kill effectively. While any form of combat easily challenges the first two assumptions, killing challenges the third in unexpected ways. Many soldiers report difficulty killing others that can manifest in a sense of revulsion, nausea, sadness, and shame after the event (Dyer, 2005). The aversive physical response directly conflicts with their expectation that good soldiers kill and have good things happen as a result. This modern training leaves soldiers with few good options, as failing to kill also leads to a sense of shame and self-disgust; many Vietnam veterans reported that failing to fire on an enemy combatant standing in front them was their most shameful memory from the war (Grossman, 2009).

In many cases, even the desensitization and denial techniques of military training cannot completely erase the universal human phobia towards interspecies aggression. Marlantes (2011)

described successfully killing an enemy combatant as a rush similar to scoring the winning touchdown in a football game. Others have described the rush of victory as the most pleasurable sensation in their life (Grossman, 2009; Tick, 2005). While these reactions support the conditioned beliefs that killing can be fun, as time passed, those same soldiers frequently developed a negative view of themselves for killing and their shame was amplified by the positive feelings they experienced at the time of the killing. One American Indian warrior described this transforming view on killing, which remains accurate today:

> I am sick and tired of war. Its glory is all moonshine. It is only those who have neither fired a shot nor heard the shrieks and groans of the wounded who cry aloud for blood, for vengeance, for desolation. War is hell. (Grossman, 2009, p. 73)

The moral anguish is intensified if the soldiers believe they killed unjustly or dishonored the remains, but "GIs can feel guilt even if they believed the killing was justified...[some soldiers] were afraid they might die in battle before they could make confession and be purged of the killings they had done" (Tick, 2005, p. 139).

Testimony by violence perpetrators at the *South African Truth and Reconciliation Commission* demonstrated the full manifestation of this dichotomy between ideology and natural resistance to killing. Several people who perpetrated torture and killing described their actions as strongly motivated by their values and beliefs, and described a sense of accomplishment at their work that fueled them to escalate the violence further. At the same time, many spoke about themselves in a divided fashion: a civilian self whom they referred to by their birth name, and a militarized self whom they referred to by title. The civilian-self saw their actions as hurtful, even

unbearable, which resulted in frequent alcohol abuse to help maintain a sense of disconnection between the two selves (Kraft, 2015).

When soldiers experience an aversive reaction to killing, whether in the immediate aftermath or after returning home from the war, the aversion is amplified by their sense of responsibility. Grossman (2009) noted in his research that "horrifying memories [of combat] seem to have a much more profound effect on the combatant—the participant in battle—than the noncombatant, the correspondent, the civilian, POW, or other passive observed of the battlefield" (p. 74). This responsibility distorted the combatant's ability to effectively make meaning of the events:

> It is as though every enemy dead is a human being he has killed, and every friendly dead is a comrade for whom he was responsible. With every effort to reconcile these two responsibilities, more guilt is added to the horror that surrounds the soldier. (Grossman, 2009, p. 74)

The very nature of combat challenges traditional ethics. One survey found that 27% of soldiers reported facing ethical situations in which they did not know how to respond (Litz et al., 2009). One of the most common challenges in OEF/OIF has been distinguishing enemy combatants from noncombatants, leading to 20-24% of soldiers admitting they killed a noncombatant (Hoge et al., 2004; Maguen et al., 2010). In other cases, children were the carriers of explosives, leading soldiers to kill children. Frequently the soldiers knew the children and had interacted with them prior to the violent incident. All of these situations attack a person's need to make meaning of events.

Killing can also attack a person's sense of volition. Combat frequently triggers an auto-pilot state. One Marine described this truism as the idea that "you do not rise to the occasion, you sink to the level of your training" (Grossman & Christensen, 2008, p. 75). A guide for police officers states "you will usually give little or no conscious thought to your actions. Your body has been programmed by Mother Nature to go into autopilot mode, and you respond automatically" (Artwohl & Christensen, 1997, p. 15). While the autopilot mode provides obvious benefits for responding quickly in a deadly situation, it can undercut a person's sense of control, especially when this auto-pilot mode is prolonged in a combat environment, where soldiers often remain in the acute alert state for extended periods of time.

The need for autonomy may be further attacked when someone kills due to the dynamics of group membership or pressure of authority. One of the most potent forces in overcoming humanity's inborn resistance to kill, other than training, comes in the form of group membership. This dynamic has been exploited in war strategy throughout the ages: weapons that are manned by two or more people result in a much higher firing rate. This explained the high success of military technology ranging from chariot teams to cannons to modern artillery. War scholar Arduant du Picq described this dynamic as "mutual surveillance" and "considered it to be the predominant psychological factor on the battlefield" (Grossman, 2009, p.150).

Research also supports the effect of authority on people's behavior. Milgram's famous study found that the majority of people will inflict harm on a stranger when pressured by an authority figure. Du Picq described this dynamic in the context of war: "The mass needs, and we give it, leaders who have the firmness and decision of command" (Picq, 2012, p. 95). Modern soldiers readily acknowledge this dynamic. When noncombatants were asked what would be the

strongest motivator to firing in combat, the majority responded "being fired upon"; when soldiers were asked the same question, the majority responded "being told to fire" (Grossman, 2009, p. 143). While group cooperation and obedience to authority certainly have advantages, their overwhelming power in motivating someone to kill can contribute to attacking a person's need for autonomy, especially when it causes persons to act against their own values; these tensions contribute to the trauma.

Similar to the other image-derived needs, killing can fulfill substitute needs. In this case, killing may feed the substitute need of ideology or self-justification, which can be taken to an extreme of dogmatism, legalism, or fanaticism. Violent perpetrators interviewed by the *South African Truth and Reconciliation Commission* frequently described the way their actions gave them a sense of purpose and meaning, because their actions were supported by their political ideology (Kraft, 2015). A guide for police officers invokes this reliance on ideology to prepare recruits for firing their weapons:

> Early in your career, it becomes clear in your mind that there are good guys and bad guys... While it may not always be immediately apparent who is who in a situation, facts quickly designate the roles. In your mind, bad guys break the law...in your mind that you are a good guy and it's your job to go out and catch the bad guys. Oversimplistic? Perhaps. But if you are like most officers, you will come to think this way because it's the world in which you work. (Artwohl & Christensen, 1997, p. 5).

The military relies on a similar appeal to ideology and justification, as reflected in the constant recital of oaths, creeds, codes of conduct, and service songs at bootcamp. Soldiers are taught to recite this ideology until it is fixed in their memory to such a degree it can be recited regardless

of current stressors. It also comes to gradually control automatic responses in combat situations, though this may not be apparent to the individual soldier.

Killing's attack on the autonomy need is reflected in PITS symptoms. On the personal level, if the autonomy need is met we expect a high sense of vitality and engagement. Instead, with PITS soldiers frequently a sense of "being dead," as if they died along with their enemies or friends (Grossman, 2009; Tick, 2005). Alternatively, they report a sense of disconnection as "they pass through life without feeling, like wooden puppets on strings" (Tick, 2005, p. 19). Many engage in avoidance, which some attribute to this lack of vitality:

> We are not youth any longer. We don't want to take the world by storm…We fly from ourselves. From our life. We are eighteen and we had begun to love life and the world; and we had to shoot it to pieces. (Tick, 2005, p. 97)

This lack of engagement also affects interpersonal relationships, as many former soldiers appear disengaged or avoidant (see Duax, Bohnert, Rauch, & Defever, 2014; Goff, Crow, Reisbig, & Hamilton, 2007; Hendrix, Erdmann, & Briggs, 1998; Riggs et al., 1998). On the group level, the lack of vitality creates a barrier for groups to examine their guilt and engage in corrective behavior; it is easier to blame the Other, which perpetuates the destructive cycle (Leidner et al., 2015).

Cumulative effect on self-processes. Killing in combat clearly attacks all three image-derived needs and frequently causes the self to turn to need substitutes even after the event, resulting in a self-perpetuating cycle of need deficit. That persistent damage can spread to the other self-processes. The motivational process of the individual no longer focuses on intrinsic motivators and innate desire to become more fully human. Instead, PITS includes symptoms of

avoidance and decreased interest in activities. The avoidance frequently focuses on concerns with external events, such as threats to safety or the negative reactions of others. Additionally, the avoidance may support an aspiration for power or control, a substitute need attempting to address the deficit of competence. In some cases, the diminished interest can reach depressive levels that manifest as passivity (MacNair, 2002). The self has moved away from a telos motivation and focuses more on extrinsic or impersonal motivation.

The regulation process of the self is similarly disrupted. The beliefs and regulation of persons with PITS frequently resembles a rigid response pattern, indicative of maladaptive regulation. If the regulation style is primarily externally-determined, their actions may be influenced by persistent negative beliefs and rigid rules, frequently phrased as "should" or "always," either towards themselves or others. This regulation style often manifests in intense feelings of anger or shame, both emotions which respond to a sense of violation (Linehan, 2014). If the regulation style is affected even more strongly, the person can engage in dysregulation, as evidenced by risk-taking, substance abuse, disordered eating, or emotional and behavioral outbursts. This loss of anger regulation may exemplify PITS; as Dr. Shay (1995) writes, "rage is uncomfortably familiar to all who work with combat veterans" (p. 22).

The self's free will orientation can also be damaged. External information and social feedback may be neglected, as those with PITS demonstrate a negative bias towards information, focusing on the extrinsic, or even more commonly, impersonal aspects of an event (MacNair, 2002). This is seen most dramatically in the intrusive and re-experiencing symptoms of PITS, which overpower current events and orient the self to distressing events in the past. These symptoms can create a sense of powerlessness, amplified by the fact that people cannot change

the outcomes of these memories, as the events happened in the past. Additionally, PITS is defined by symptoms of "persistent (and often distorted) negative beliefs and expectations...persistent distorted blame...persistent negative trauma-related emotions"(*DSM 5*, 2013, p. 271), all of which demonstrate impairment to a person's free will orientation. The symptoms of PITS essentially describe the effects of pervasive and persistent disturbance to the self-processes, as a result of killing's attack on image-derived needs.

How Can We Treat PITS?

This model for understanding PITS leads to several important considerations for treatment, especially for case conceptualization and therapeutic relationship. Specific clinical interventions are not the focus of this section for two reasons. First, chapter five covers three intervention skills specific to the proposed integrated trauma model, including the skills of reconciliation, service, and encouragement. Those skills are inherent to the model and apply equally to treating PITS. Second, the integrated trauma model relies on a process-orientation rather than an event orientation. Many intervention strategies proposed by other clinical models would be useful when working from the integrated model if they are incorporated into the process appropriately. Due to this process focus, establishing a case conceptualization and therapeutic relationship within the model are essential.

Case conceptualization. The integrated trauma model offers a specific approach to case conceptualization. While the act of killing attacks all three image-derived needs, the intensity and extent of that attack likely varies by individual experience. It can be helpful to conceptualize how an individual's image-derived needs were attacked within the person’s specific context. For example, a sniper who killed with a sense of calm may not have experienced as much damage to

his competence need as infantry members who barely survived a chaotic firefight during which they made several crucial errors. Similarly, a person's autonomy need may have been attacked less when the person killed for the purposes of self-defense than when the person killed a noncombatant child.

It is important to focus on process rather than event by listening to the language used to describe what happened and how it impacted the client. It may be helpful to notice how much a person de-values an image-derived need or the impact of an obvious attack on the need, as devaluation can indicate the deficit's severity. It can also be helpful to listen to the client's aspirations and goals for treatment through the lens of substitute needs, as those also can indicate a deficit in a related image-derived need.

It is equally important to assess how the trauma impacted the ongoing self-processes. Chapter five provided a diagram summarizing all four self-processes on a series of spectrums ranging from least healthy to greatest wellbeing. This diagram can provide an estimate of how the individual functions currently. By gathering an idea of how the client functioned before the trauma and after the trauma, it will be more clear how the trauma affected these processes.

Since a trauma is defined by its frustration of image-derived needs, we would expect the client to engage in some pursuit of substitute needs. As described by Vansteenkiste & Ryan (2013) and Deci (2000), the pursuit of substitute needs creates a self-perpetuating, destructive cycle as a person experiences a need deficit, pursues a substitute need with resulting increases in the need deficit, pursues the need substitutes more intensely, etc. It can be helpful to elicit information about how persons pursue a sense of power and control (competence substitute), inverse intimacy (relatedness substitute), or rigid ideology or independence/oppositional stance

(autonomy substitutes). This cycle likely impacts their current motivational processes, regulation style, and free will orientation, and will give important insight into ways the trauma continues to damage their life.

Finally, this model uses the stages of integration to describe the process of change: non-determined/impersonal, extrinsically determined, introjected, identified, and integrated. It will be helpful to attend to the clients' current stages so they can be supported in moving to the next stage. The regulation processes and integration stages frequently mirror each other, so it may be helpful to focus on how clients regulate their behavior. For example, did they come to session because "they had no choice", because they wanted to make a spouse happy, because they think they "should be over it/better/different", or because they identified some value or even intrinsic benefit? If the client experienced several significant traumas, s/he may demonstrate different stages of integration related to these different events.

This case conceptualization is summarized in Figure 9.

Therapeutic relationship. The role of need-antagonization in trauma has important implications for the therapeutic relationship. The literature widely recognizes the way working with trauma can affect a provider, from secondary traumatization to compassion fatigue (see Evces, 2015; Lipsky & Burke, 2009; Naturale, 2015; Nelson, 2016; Rothschild & Rand, 2006). Working with combat trauma is specifically recognized for its burnout risk, due both to the intensity of subject matter and behavior of some clients, such as expressions of rage (Tick, 2005). This model provides some insight into this dynamic as well as related suggestions for preserving provider health.

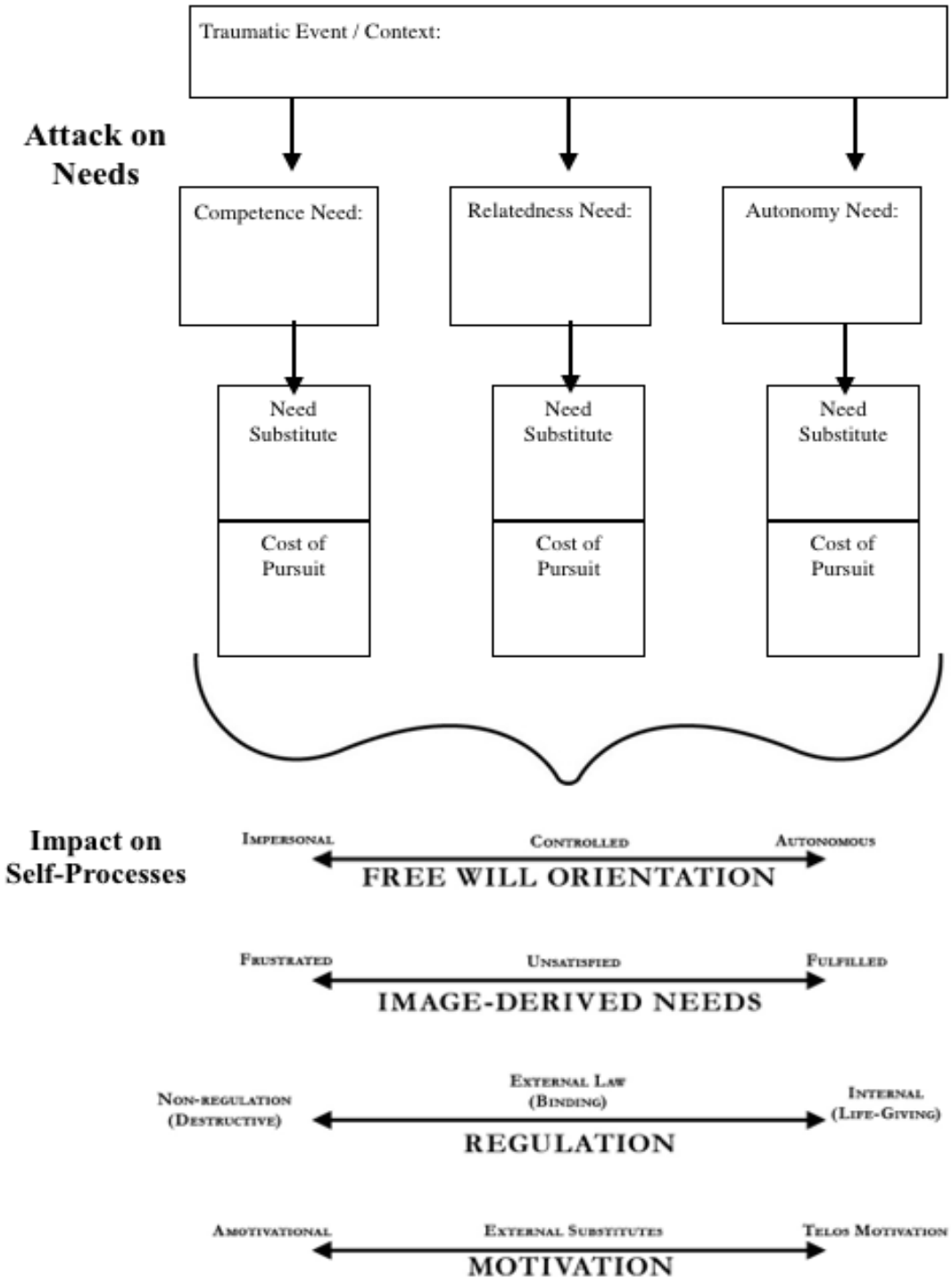


Figure 9. Case conceptualization.

Killing fundamentally attacks the relatedness need, perhaps more than any other need, with significant implications for therapy. When people's need for relatedness is fulfilled, they value and protect relationships more intentionally. This is manifested in pro-social behaviors on the individual and group/organizational level in the form of increased empathy, altruism, cheerleading, commitment, leadership, etc. Through these behaviors, people meet the image-derived needs of those around them (e.g., cheerleading supports competence; empathy supports autonomy). One might say that the meeting of all image-derived needs rely on this foundation of relatedness.

If clients experience attacks on their relatedness needs, e.g., through killing and military training that enables killing, the resulting need-deficit likely impaired their ability to engage in these pro-social behaviors. This means they are less likely to fulfill the image-derived needs of others—including the therapist. While this dynamic likely manifests with other types of clients, few events attack the relatedness need as strongly as killing and the training necessary to kill, meaning few other clients may come to therapy with such significant relatedness need deficits. Additionally, research shows that intense and prolonged need deficits can lead to the devaluation of the related need. Clients who spent extended time in a combat zone may be more vulnerable to this devaluation of the relatedness need, meaning they are less likely to act in ways that would get that need met, i.e. prioritize relationships. Finally, the pursuit of need substitutes frequently interferes with and even damages image-derived needs. This means clients may engage in destructive cycles which actively interfere with relating to the therapist. All of these dynamics together can lead to a therapist feeling diminished, disregarded, or attacked in the therapeutic

work, which can discourage therapist commitment and even prompt a therapist to react in unhealthy or damaging ways (Linehan, 1993).

Understanding these dynamics can allow a therapist to adjust appropriately. First, it would be important for the therapist to recognize how their own image-derived needs are unmet or even attacked so they can take proactive steps to get those needs met in other relationships. Dialectical Behavior Therapy's model for consultation group provides a formal example of addressing therapist needs, but other forms of consultation and peer support could be beneficial as well. While this is good practice for all therapeutic work, clinicians who work with combat trauma frequently report an even stronger sense of being drained by their work (Jordan, 2010; Tyson, 2007). In session, Christian therapists may find it helpful to take a moment for their own prayer and to orient towards their relationship with God, which can also be a source for satisfying their image-derived needs.

Second, the client's devaluation of relationship may encourage a therapist to minimize the importance of relationship. Clients may present as highly critical of the therapist, angry, or insist the therapist "could never understand" their experience (Tyson, 2007). These dynamics may encourage a therapist to focus on problem solving, worksheets, or other interventions which build less relational connection. In the face of intense devaluation, a therapist may devalue their own skills or capacity to connect and shift toward an instrumental rather than relational focus. Other therapists may experience the dynamic as an attack, and feel the urge to defend themselves or respond aggressively in return (see Hayes, 2007; Lipsky & Burke, 2007; Tick, 2005). Both these reactions reduce the prospect for successfully meeting the thwarted relational needs. Regardless of the urge, it would be important for the therapist to focus away from the content of

the dynamic to the process. It can be helpful for the therapist to name the process for themselves as the client acting out of a need deficit. It can be easier to maintain empathy, compassion, and engagement when the actions are seen as a result of a frustrated need rather than manipulative, aggressive, or "difficult" behavior. After all, we normally respond differently to someone who is hurt than someone who is attacking us. (Importantly, this does not mean a therapist should disregard real threats to their safety.)

Third, therapists are as human as their clients and just as prone to seek out need substitutes when their image-derived needs are unsatisfied or antagonized. It would be important for therapists to develop awareness of their own patterns, so when their needs are attacked by a client, they can recognize their own urges to respond out of deficit, and adjust accordingly. For example, one person may seek popularity when their relatedness need is unmet. That therapist might notice the urge to adopt a more people-pleasing approach in working with the client, which may not be beneficial for the therapeutic work and could further frustrate the therapist's needs for autonomy and competence.

Working with combat trauma can challenge a therapist's sense of empathy, especially when a client describes actions which seem morally reprehensible (Maxwell & Sturm, 1994). It is valuable for therapists to recognize their own emotional reactions, because emotions provide important information about our own values and need for autonomy; they may also shed light on the experiences of the client. Disgust or horror in response to some behaviors is an adaptive and healthy response; acting in a way that attacks the client’s need for competence, relatedness, or autonomy is not. Similarly, a therapist should not feel compelled to highlight a positive aspect of the trauma or even the client's actions during the traumatic event if it feels disingenuous. It

would be more helpful to focus on aspects of the client's response that were healthy, i.e. normative. This could include their physiological response, distorted perceptual experiences, or post-combat reactions. If that seems impossible, a therapist could focus on aspects of the client's current state that are healthy, e.g., courage in sharing the story, shaking while sharing the story, attempt to create distance through passive language, etc. Many of the responses to killing and re-telling the experience may seem upsetting or bad, such as distancing language, but it is important to remember that those are part of a natural, normative response designed to either keep the client alive or distance the client from the killing because humans have such an innate resistance to the act.

Some therapists may find it difficult, or even damaging, to empathize with clients as they describe these actions. Some struggle with the idea that understanding an action is the same as condoning it (Miller et al., 1999). This model encourages therapists to focus more on the process of how these actions affected their clients' image-derived needs than attempting to feel or imagine the clients' experiences. Noticing the damage to a client's image-derived needs allows therapists to empathize with the pain and trauma caused by the actions without needing to fully enter into the client's experience in a way that might cause vicarious trauma by exposing their own physiological-mental-emotional system to the trauma.

Finally, the way the integrated model encourages therapists to engage at the process level may contribute to a sense of confusion or imbalance. In a matter of moments a therapist may recognize his client is viewing a recent event from an impersonal orientation, engage in that viewpoint himself to understand the client's perspective, then expand his own focus to notice extrinsic and autonomous information in the event. Adopting a position of proximal

development, the therapist might highlight extrinsic factors in the situation for the client. When the client responds with a pessimistic statement, the therapist might identify some process strength in the response and encourage the client by validating that aspect of the response. When working with PITS, empathizing and engaging with these processes would likely occur in an atmosphere of hyper-arousal with intense emotions, physiological responses, or distorted perceptions—or all three.

While the model's process focus allows a therapist to respond dynamically, it can leave a therapist feeling exhausted and disoriented. Striving for empathy during the session can add to this aftermath, as the client's distorted processes can become contagious. It is important for therapists to develop grounding methods for themselves to use during and after session. Christian therapists may benefit from developing skills in contemplative practices and other spiritual disciplines which support their ability to maintain a grounded and mindful posture (see Foster, 1998; Merton & Hahn, 2009; Merton & Kidd, 2007; Nouwen, 2009).

Chapter 7 Summary

In this chapter, I reviewed the ways in which killing in combat antagonizes image-derived needs and the specific implications for clinical treatment. Here are the key elements:

- Killing in combat: attacks the need for competence and encourages the compensatory need for power and control; attacks the need for relatedness and encourages the compensatory need of inverse intimacy; and attacks the need for autonomy and encourages the compensatory need for ideology and self-justification

- As Tick (2005) wrote after decades of working with veterans, the damage of killing reaches to very core of the self and personality, and fundamentally distorts the self-processes of telos motivation, regulation, image-derived needs, and free will orientation
- This comprehensive antagonization of image-derived needs may explain why killing in combat—even when someone believes the killing is morally supported—is consistently one of the strongest predictors for developing PTSD
- Treatment for PITS from this model relies on process-focused case conceptualization, sensitivity to specific challenges in the therapeutic rapport, and process-focused interventions

Summary and Conclusion

In many ways, the dialectic of killing echoes the traumatic dialectic described by Herman (1997). Just as the trauma survivor in Herman's work swings between experiences of intrusion and constriction, killing is simultaneously a rush of adrenaline, power, and triumph—and a deadly attack that "invades, wounds, and transforms our spirit" (Tick, 2005, p. 1). The process of killing offers powerful need substitutes in the form of power, inverse intimacy, and ideological purpose, and destructive costs in the form of an attack on our essential needs and self-processes, which can develop into Perpetration-Induced Traumatic Stress (PITS).

The cost of war fundamentally changed when Western armies discovered humanity's universal phobia of interspecies aggression and developed training methods to overcome that phobia. As recently as World War II, only 12-20% of combat troops exposed themselves to the trauma of killing; in our recent wars, that exposure has climbed to 77-87%. This change is

reflected in the clinical presentations at the Veterans Affairs facilities: nearly half of veterans seeking PTSD treatment report killing another as their index trauma (Maguen et al., 2010).

Despite the literature's consistent finding that killing in combat is one of the strongest predictors for developing PTSD, and often more severe cases of PTSD, traditional models of psychology offer little explanation for this finding and even fewer guidelines for treatment. There is some recent work around the concept of moral injury, but such work misses two key aspects of PITS: even those who feel morally justified in their actions may develop posttraumatic stress symptoms, and limiting the focus to "acts that transgress deeply held moral beliefs and expectations" misses the self-harm inherent in the act of killing in combat (Litz et al., 2009).

There are likely many contributing forces to our limited understanding of PITS, but perhaps MacNair's (2015) explanation poses the most trouble:

> Suggesting that soldiers are traumatized by what their country is asking them to do calls into question what their own country is doing to them…Hence, they are regarded as heroes, and if the process traumatizes them, then they are all the more due admiration and sympathy and practical help. (p. 314)

This tendency to view violence in all bad or all good terms has been echoed throughout history's treatment of the mentally ill, criminals, or other available "scapegoats." Grossman, after a career studying the psychology of combat and killing, warns us:

> The root of our failure to deal with violence lies in our refusal to face up to it. We deny our fascination with the "dark beauty of violence," and we condemn aggression and repress it rather than look at it squarely and try to understand and control it…Only on the basis of understanding this ultimate, destructive aspect of human behavior can we hope to

> influence it in such a way as to ensure the survival of our civilization. (Grossman, 2009, p, xxxv-xxxvi)

As Grossman indicated, to cast the act of killing in an entirely negative or entirely positive light impairs our ability to effectively understand it, and in clinical work, positions us to alienate our clients.

In the preceding chapters I proposed a new, integrative model called Fundamental Image Theory (FIT) to address this gap in the literature. Traditional clinical psychology focuses primarily on the individual client and individual pathology, which may explain its limited ability to account for the trauma of killing. As war and killing is fundamentally a societal event, I turned to the social psychology of Self-Determination Theory. Due to my own position on the value of Christian wisdom—and the moral and spiritual components inherent in killing—I turned to the Integrative Psychotherapy Model. In order to incorporate the process orientation and Christocentric elements of the two different theories, I relied on a foundation of Biblical narrative and scripture to act as a guide.

In this process I proposed through FIT that the self can be conceptualized as a set of four interdependent processes: telos motivation, regulation style, image-derived needs, and free will orientation. I explored the implications for this model on clinical considerations of therapeutic stance, conceptualization, and clinical interventions that support the change process from ill-health to well-being. With FIT, I re-examined the definition of trauma, and proposed a new view: events are traumatic when they attack our image-derived needs and impact our self-processes as a result. In many ways, this definition of trauma mirrors the event of the Fall or the first trauma: humanity became dead inside, and then turned to distorted, destructive practices.

This new definition of trauma provided a clear understanding of how killing causes trauma: the environment of combat and inherent reactions to killing attack all of our image-derived needs. Due to the interdependent nature of self-processes, the severity of this attack often spreads to the rest of the self. In this way, FIT captures a common phenomenological definition of trauma: it "shatters the construction of the self" (Herman, 1997, p. 51). As a result, FIT provided guidance for conceptualizing clients with PITS in a way that is driven by the etiology of the symptoms.

Finally, FIT provided helpful guidance for managing the specific challenges of PITS to the therapeutic relationship. Researchers and clinicians recognize both the risk for vicarious trauma and difficult counter-transference dynamics working with combat veterans. This model accounts for the interdependence between therapists and client, and how their respective processes might interact. Specifically, it encourages increased awareness of why the relationship may feel especially challenging—even hostile—working with these clients, and encourages an orientation towards the client's needs that will sustain therapist empathy and efficacy.

Overall, this document represents an initial move towards better understanding the process of trauma, the effects of killing on well-being, and the best ways to support the recovery of our soldiers.

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Appendix A

Curriculum Vitae

Cassandra Sieg

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Work Experience

U. S. Navy **JUL 2015 — Present**
Staff Psychologist

Yamhill County Mental Health **MAR 2013 — MAY 2015**
Behavioral Health Consultant

Franklin Police Department **SEP 2009 — AUG 2010**
Victim Advocate

Education

Doctorate of Psychology **AUG 2011 — Present**
George Fox University

Masters of Clinical Psychology **SEP 2011 — APR 2013**
George Fox University

B. A. Native American Studies, Sociology **SEP 2006 — JUN 2011**
Dartmouth College

Clinical Experience

2015-2016 Naval Medical Center Portsmouth, psychology intern

2014-2015 Oregon State Hospital, psychology trainee

2013-2015 Yamhill County Mental Health, behavioral health consultant

2013-2014 Cedar Hills Hospital, psychology trainee

2012-2013 Oregon State University, psychology trainee

2011-2012 George Fox Behavioral Health Clinic, psychology trainee

Professional Associations

American Indian and Alaskan Native Society for Indian Psychologists

American Psychological Association

Association for Contextual and Behavioral Science

Christian Association for Psychologists

Society for the Psychology of Women

Professional Publications and Presentations

Schloemer, J., Sieg, C., Galindo, D., Van Meter, A., & Flores, M. (May 2014). Review of local psychologists'ethical concerns as reported to the Oregon Psychological Association's Ethics Committee. Poster presented to the Annual meeting of the Oregon Psychological Association, Portland, Oregon.

Kruszewski, M., McConnell, C., Webb, B., Sieg, C., Weiss, C., Swartz, J., & Gathercoal, K. (July, 2013). Fees paid and therapeutic satisfaction in community mental health. Poster presented to the Annual meeting of the American Psychological Association, Honolulu, Hawaii.

Teaching Experience

Training Seminars

Sieg, C. (2016, September). *Promoting healthy motivation in military populations.* Training presented at Naval Medical Center Portsmouth, Portsmouth, Virginia.

Sieg, C. (2016, June). *Introduction to psychological assessment: objective measures.* Training presented at Naval Medical Center Portsmouth, Portsmouth, Virginia.

Sieg, C. (2016, August). *Liberation psychology and working with Native American clients.* Training presented at Naval Medical Center Portsmouth, Portsmouth, Virginia.

Sieg, C. (2016, August). *Inpatient group therapy: Yalom's interpersonal process model.* Training presented at Naval Medical Center Portsmouth, Portsmouth, Virginia.

Sieg, C. (2015, March). *Outcome measures with borderline personality disorder.* Training presented atNaval Medical Center Portsmouth, Portsmouth, Virginia.

Sieg, C., & Meloscia, C. (2015, November). *Introduction to psychological diagnosis and evaluation.* Training presented at Naval Medical Center Portsmouth.

Guest Lecturer

Clinical Foundations: “Professional Writing”

Family Therapy: “Cultural Awareness with Couples and Family Therapy: Focus on power and privilege”

Cognitive Behavioral Therapy: “Acceptance and Commitment Therapy”

Cognitive Behavioral Therapy: “Micro-skills Training: Socratic questioning and downwards arrow techniques”

Multicultural Therapy: “Role and Effects of Gender in Therapy”

Multicultural Therapy: “Domestic Violence, Power, and Privilege”

Teaching Assistant

Clinical Foundations

Cognitive Assessment

Family Therapy

Multicultural Therapy

References

References available upon request.