The Mental Health Consequences of Sexual Violence, Rape, and Child Rape
In the Context of Child Rape in Fiji

In the case of The State v Peni Vukici in the High Court of Fiji at Suva

Report Produced by:
Human Rights in Trauma Mental Health Program
Department of Psychiatry and Behavioral Sciences
Stanford University School of Medicine

Introduction

This report was created by the Human Rights in Trauma Mental Health Program (HRTMHP), an interdisciplinary program based at Stanford University and comprising members of the Department of Psychiatry and Behavioral Sciences, the School of Law, the WSD Handa Center for Human Rights and International Justice, and the Palo Alto University Clinical Psychology graduate program. The program faculty and staff include clinical-academic psychiatrists, professors of medicine, private treating psychotherapists and social workers, human rights lawyers, law professors, and graduate and undergraduate students. The members of this program have amassed considerable expertise in trauma mental health from a range of disciplinary perspectives that render us qualified to submit this report.

This submission is based on our review of the evidence in the case of The State v Peni Vukici in the High Court of Fiji at Suva, along with a comprehensive and comparative literature review on the psycho-social impact of sexual violence and child rape and other forms of extreme trauma on individuals, their families, and their communities.

We reviewed statements from the victims as well as the professional literature in the field. This Report also relies upon our deep knowledge of empirical research that links trauma exposure with psychophysiological and neurobiological outcomes, thereby elucidating the mechanisms by which sexual violence and other forms of extreme trauma give rise to the psychosocial outcomes documented in the record. This Report is also informed by our long experience treating, representing, and working with victims of severe trauma in communities wracked by massive human rights violations. Similar conclusions can be reviewed in our expert testimony about the mental health outcomes of sexual violence presented in ICC vs Jean Pierre Bemba Gombo and ICC vs Ongwen. Attached to this report are the relevant curricula vitae (Exhibit A), including publications and relevant court activities.
Rape and other forms of sexual violence are among the gravest of crimes under local criminal law and international transitional justice laws. Child rape is among the most psychologically damaging forms of sexual violence. In this report we also highlight the difference between chronic, ongoing trauma as seen in this case compared to single instances of traumatic experience in terms of the mental health outcomes predicted. This report contains a statement of our considered opinion on the individual, familial, communal, and inter-generational impact sexual violence. On a more hopeful note, we also discuss the prospects for healing, notwithstanding these grave impacts.

**Methodology**

In addition to our members’ abundant clinical and professional experience with survivors’ psychology, the HRTMHP relied upon the vast scientific literature in psychology to reach the major conclusions of this Report. Other data specifically relevant to Fiji and to the case in question cited throughout the report and carries great weight. First, we performed a comprehensive search of peer-reviewed psychological and medical journals using keywords such as “sexual assault,” “rape,” “child sexual violence,” “posttraumatic stress disorder,” etc. The results included single studies, meta-analyses (wherein multiple studies are statistically combined to determine the effect of a particular subject matter), and review articles (wherein multiple studies are combined in narrative form to draw conclusions on a specific subject matter) that have all been reviewed by experts within their respected fields. The literature search also included a focus on published studies examining outcomes of sexual violence in Fiji in order to incorporate peer-reviewed qualitative and quantitative data sources and references in the Report where possible. Second, we consulted other reports from global health agencies and human rights organizations to glean specific information and nuances of the phenomena of sexual violence in order to focus the report on Pacific Islands and Fiji. Third, this Report utilized the expert opinion of Dr. Odille Chang, Assistant Professor in Psychiatry at Fiji School of Medicine and Head of School for Medical Sciences at the Fiji National University in order to integrate specific knowledge about child rape and sexual violence in the cultural context of Fiji and also get an overview on how psychiatric health care is provided in Fiji. This enabled the HRTMHP to better understand how studies published in peer-reviewed literature and global reports can be accurately applied to the specific situation of this case. Furthermore, we used the expert opinions of Dr. Daryn Reichert, M.D. and Dr. Ryan Matlow, PhD., to supplement the already substantial amount of data that exist in the psychological and psychiatric literature. Lastly, this report connects the vast empirical literature that exists with actual victim statements in this case. By making this direct connection, we have provided strong evidence of the mental impacts of sexual violence, rape and child rape on survivors. To readily identify exactly where information was obtained, we have cited all of our referenced sources throughout the entirety of this report.
**Situation History Review and the Impact of Sexual Violence and Childhood Rape in Fiji**

Sexual violence and childhood rape persist as legal and healthcare concern in the Republic of Fiji (Save the Children International, 2005; Amnesty International, 2010). The HRTMHP reviewed available sources that documented the current state of these abuses in the nation. Various forms of media communications and documentation converge to clearly showcase the extent to which acts of child sexual abuse (CSA) impact Fijian children and their subsequent development into adolescence and adulthood.

As recent as April 2018, news sources such as *Fiji Sun* report male perpetrators who are sentenced to prison for child rape charges in rural and urban areas (Talei, 2018). In this case, the rape victim was a Rakiraki man’s six-year-old niece, who consequently suffered both physically and psychologically from the childhood event -- tragically, she is only one of thousands of cases that have been filed in the past decade (FWRM, 2017; Cava, 2018; Talei, 2018). In 2016 alone, the Fiji Bureau of Statistics reported 649 cases of child sexual abuse brought to the courts. Another international media outlet, Radio New Zealand (RNZ), has released several articles consulting Dr. Reati Mataika, a pediatrician at the Ministry of Health’s Child Protection Division who is advocating for child psychologists to be integrated into Fiji’s health services for CSA survivors (Perrottet, 2016). Dr. Mataika brings attention to the notable lack of resources in psychological counselling and rehabilitation services for childhood victims specifically, and she also points to how these gaps debilitate children’s potential for healthy growth and development post-trauma (Perrottet, 2016). Simultaneously, it is important to note that although such “media articles and public forums indicate a rising awareness and growing intolerance to cases of sexual violence against women and children,” they are not necessarily reflective of community-level attitudes in Fiji (Ali, 2006). Often when female victims choose to pursue reparations through the legal justice system, family members defend the perpetrator or prefer to take no legal action at all, in order to preserve familial relations, avoid ostracism, and maintain reputation of the victim’s virginity (Ali, 2006; UNFPA, 2008; Newland, 2016). In rural communities of Fiji especially, historical attitudes and traditional practices towards children put girls at heightened risk for sexual abuse from male family members (Whitehead & Roffee, 2016). Such socio-environmental factors act synergistically to maintain a “culture of silence” around CSA, and thereby suggest that the true rates of childhood rape and sexual violence exceed present estimations (Ali, 2006; FWCC, 2013).

Currently, large, methodological research studies dedicated to child rape and sexual violence in Fiji are significantly limited in number (Whitehead & Roffee, 2016). However, between 2005 and 2014, there were 4,559 reported cases of CSA in Fiji (Fiji Bureau of Statistics 2015). Further, the existing scientific literature clearly demonstrates the severity and pervasiveness of
CSA throughout the country. Established in 1984, the Fiji Women’s Crisis Centre (FWCC, 2013) is a well-known organization that provides counselling, legal, and medical services for women and childhood survivors of violence committed by men. The FWCC conducts national research on women’s health and life experiences which has proven critical for international human rights documentation in Fiji. During the years 2010-2011, the Fiji Women’s Crisis Centre conducted a national survey which revealed the concerning pervasiveness of physical, emotional, and sexual abuse against Fijian women and children. The resulting report entitled “Somebody’s Life, Everybody’s Business!” provides key quantitative data to highlight the degree to which CSA remains widespread. In terms of child rape (defined here as a female victim under the age of fifteen), the research estimates that 16% of all Fijian women were sexually abused as children. The vast majority (95%) were abused by a single perpetrator -- 85% of whom were a male relative (father, grandfather, stepfather, uncle) or friend, and 15% of whom were strangers to the victims (FWCC, 2013). Additionally, there are some notable regional differences within Fiji which coincide with certain geographical distributions of i-Taukei and Indo-Fijian communities (FWCC, 2013). The prevalence of male-perpetrated sexual abuse of female children is estimated to be 22% in the Eastern Division, 16% in the Central Division, and 13% in the Western Division (FWCC, 2013). The incidence rates of CSA may also be related to early child marriage, as 10% of Fijian girls are married between the ages of fifteen and nineteen (World Economic Forum, 2013). Additionally, research has suggested that approximately 22% of students in Suva know at least one survivor of CSA (Whitehead & Roffee, 2015). Furthermore, one national survey found that 26% of Fijian children who had dropped out of school were sexually abused by male relatives while living with them (Save the Children, 2005). These data shed light on the realities of sexual violence and childhood rape in modern-day Fiji and provide an impetus for concern with regards to survivors’ mental health and psychological well-being.

Given the extent to which childhood rape and sexual violence impact Fijian girls and women, the contents of this report are of immediate importance to both the court case and larger national challenges plaguing the Fijian government and the international community (Whitehead & Roffee, 2016). The remainder of this report will detail how CSA can result in both acute and long-term effects on the mental health and development of victims, while also taking the specific socio-cultural context of Fiji into consideration.

**Impact of Rape on Child Psychology**

1. **Psychiatric Outcomes for Victims of Sexual Violence in Children**

Many of the harms associated with sexual violence are more acute and can cause greater chronic harm in child victims of rape than in adults. CSA is defined by the World Health Organization
(WHO) as the involvement of a child in sexual activity that he or she does not fully comprehend, that he or she is not developmentally prepared for and cannot provide informed consent to, or that violates the laws or social taboos of society (WHO, 1999; Amado, Arce, & Herráiz, 2015). In scientific literature, CSA encompasses a range of sexual violations against children and adolescents.

Significant research has been devoted to the relationship between CSA and mental health outcomes. Overwhelmingly, CSA has been linked to anxiety disorders, most frequently generalized anxiety disorder (GAD), social anxiety disorder (SAD), and specific phobia, depressive disorders including major depressive disorder (MDD), trauma-related disorders, including acute stress disorder (ASD) and posttraumatic stress disorder (PTSD), eating disorders such as anorexia nervosa and bulimia nervosa, and substance use disorders (Amado et al., 2015; Anderson, LaPorte, & Crawford, 2000; Estévez, Jauregui, Ozer, & Herrero-Fernández, 2017; Fergusson, McLeod, & Horwood, 2013; Hillberg, Hamilton-Giachritsis, & Dixon, 2011; Hyland et al., 2018; Koverola, Pound, Heger, & Lytle, 1993; Rohde et al., 2008; Steine et al., 2017; Tocker, Ben-Amitay, Horesh-Reinman, Lask, & Toren, 2017). Additionally, survivors of CSA are more likely to experience somatization of symptomatology than survivors of other forms of trauma, including sexual violence in adulthood (Bae et al., 2018; Maniglio, 2009; Steine et al., 2017). In addition to elevated rates of psychiatric disorders, CSA has been identified as a significant predictor of suicidal ideation and suicide attempts (Estévez et al., 2017; Fergusson et al., 2013; Hillberg et al., 2011; Hyland et al., 2018; Maniglio, 2009; Steine et al., 2017). Further, the literature has also found a significant relationship between CSA and self-injurious behaviors, which is the intentional damage to the body without suicidal intent (Hillberg et al., 2011; Fergusson et al., 2013; Maniglio, 2009; Steine et al., 2017). These conditions will be discussed in further detail later in the report.

Studies have also demonstrated that CSA has a negative effect on overall well-being, including on self-esteem, self-efficacy, and sense of self (Estévez et al., 2017; Fergusson et al., 2013; Krayer, Seddon, Robinson, & Gwilym, 2015; Hillberg et al., 2011; Maniglio, 2009; Tocker et al., 2017). The construction of the self is an ongoing process that begins in childhood and continues throughout the lifespan (Krayer et al., 2015). Research has found that sexual abuse that occurs in childhood significantly influences the development of the sense of self, and these altered perceptions persist through adulthood (Fergusson et al., 2013; Krayer et al., 2015; Tocker et al., 2017). Specifically, adult survivors of CSA frequently report feelings of worthlessness, helplessness, and powerlessness, contributing to low self-esteem and self-efficacy (Hillberg et al., 2011; Krayer et al., 2015; Maniglio, 2009; Tocker et al., 2017). Additionally, those who have experienced CSA also cite confusion and lack of understanding regarding their identity, leading to an overall fragmented sense of self (Maniglio, 2009; Krayer et al., 2015; Tocker et al., 2017). These issues can be more salient in cases where the perpetrator is the same sex as the survivor.
The impact on identity formation typically manifests as confusion about sexuality in which the survivor attempts to reconcile their victimization and sexual identity (Whitehead & Roffee, 2015). This can lead to socially unacceptable attitudes and behaviors when cognitive mechanisms are activated to separate the survivor from the abuser (Whitehead & Roffee, 2015).

The scientific literature has also examined the relationship between CSA and other areas of functioning and relating. Much of this has been captured by studies examining early maladaptive schemas (EMS), which are pervasive and persistent perceptions of oneself and one’s relationship with others (Estévez et al., 2017). This area of research has linked CSA to dysfunctional expectations that core needs for safety, stability, and respect will be met, impaired autonomy and perceived ability to survive and function independently, deficient personal boundaries, and excessive emphasis on regulating internal feelings and meeting rigid rules and expectations (Estévez et al., 2017). These findings have been largely attributed to the experience of sexual violations during a critical period in development (Estévez et al., 2017; Hillberg et al., 2011; Fergusson et al., 2013; Maniglio, 2009). This research also carries serious implications, as the aforementioned schemas have significant long-term effects on both individual and interpersonal functioning. Specifically, they interfere with the ability to safely connect with others and to maintain satisfying emotional relationships (Estévez et al., 2017; Krayer et al., 2015). Further, research with adult survivors of CSA has exhibited that they experience poorer interpersonal relatedness than adults who did not experience CSA (Estévez et al., 2017; Krayer et al., 2015; Maniglio, 2009; Steine et al., 2017; Tocker et al., 2017). For example, studies have demonstrated that CSA on its own is a significant predictor of having a smaller social network and lower levels of emotional support from friends and family (Steine et al., 2017). Further, survivors of CSA have been found to have lower levels of perceived social support, which in turn results in further feelings of isolation and contributes to worsened psychiatric outcomes (Maniglio, 2009; Steine et al., 2017; Ullman, 2007).

The literature has further established that the previously discussed psychological outcomes are also influenced by the age of occurrence of sexual violence and the proximity of the relationship between the perpetrator and survivor (Amado et al., 2015; Hillberg et al., 2011; Fergusson et al., 2013; Platt & Freyd, 2015; Ullman, 2007). While studies have found a significant relationship between experiences of sexual violence and a range of psychological issues, CSA has specifically been linked to worsened psychological outcomes (Amado et al., 2015; Fergusson et al., 2013; Rohde et al., 2008; Steine et al., 2017). Specifically, research has found a significant association between earlier age of sexual abuse occurrence and severity and chronicity of psychiatric symptomatology (Fergusson et al., 2013; Maniglio, 2009; Platt & Freyd, 2015; Steine et al., 2017; Ullman, 2007). Of these outcomes, dissociation appears to have the strongest relationship to the age of abuse occurrence (Platt & Freyd, 2015; Steiner, Carrion, Plattner, &
Koopman, 2003; Ullman, 2007). Additionally, the literature has established that earlier age of sexual abuse occurrence significantly alters psychosocial development. As previously referenced, CSA has the most significant influence on intrapersonal and interpersonal functioning because, by definition, CSA occurs during the period of when these characteristics and skills are developing (Amado et al., 2015; Estévez et al., 2017; Fergusson et al., 2013; Krayer et al., 2015; Maniglio, 2009; Steine et al., 2017; Ullman et al., 2007).

The discussed psychological outcomes are also impacted by the proximity of the relationship between the perpetrator and survivor (Hillberg et al., 2011; Maniglio, 2009; Platt & Freyd, 2015; Steine et al., 2017; Ullman, 2007). Specifically, closer relationships between perpetrators and survivors (such as parent-child and/or caregiving relationships) have been found to be associated with more severe and chronic psychological outcomes (Hillberg et al., 2011; Maniglio, 2009; Martin, Crome, DePrine, & Freyd, 2013; Platt & Freyd, 2015; Steine et al., 2017; Ullman, 2007). Further, the literature has established the most severe psychiatric symptomatology and pervasive interpersonal deficits have been linked to intrafamilial CSA, also referred to as incest (Martin et al., 2013; Maniglio, 2009; Platt & Freyd, 2015; Steine et al., 2017; Steiner et al., 2003). These findings can be explained largely through the context of betrayal trauma, which is a trauma perpetrated by someone with whom the victim has a close relationship and whom the victim depends on for support and, in some cases, survival (Freyd, 1996; Gobin & Freyd, 2014; Martin et al., 2013; Platt & Freyd, 2015; Ullman, 2007). Research in this area has established that CSA that can be characterized as betrayal trauma, which includes intrafamilial CSA, has been associated with delayed disclosure and poorer psychological outcomes (Freyd, 1996; Gobin & Freyd, 2014; Platt & Freyd, 2015; Ullman, 2007). This is largely attributed to the need for survivors of this type of CSA to activate self-protective survival mechanisms in the short-term which leads to worsened long-term outcomes (Freyd, 1996; Platt & Freyd, 2015). In terms of specific psychiatric symptoms and disorders, those who have experienced intrafamilial CSA most frequently have significantly more symptoms of anxiety, depression, and PTSD, and those symptoms are more severe, than those who have experienced extrafamilial CSA (Martin et al., 2013; Platt & Freyd; Ullman, 2007). Additionally, survivors of intrafamilial CSA report higher rates of sleep disturbances and dissociation experiences compared with survivors of extrafamilial CSA (Banyard & Williams, 1996; Gobin & Freyd, 2014; Maniglio, 2009; Platt & Freyd, 2015; Plattner et al., 2003; Ullman, 2007). Studies have also found that intrafamilial CSA has been linked to increased self-blame, shame, fear, distrust, and distress compared with extrafamilial CSA (Gobin & Freyd, 2014; Platt & Freyd, 2015; Ullman, 2007). Thus, overwhelmingly, the scientific literature has established that CSA committed by relatives or close others leads to significantly poorer outcomes than CSA committed by acquaintances or strangers (Banyard & Williams, 1996; Freyd, 1996; Gobin & Freyd, 2014; Maniglio, 2009; Martin et al., 2013; Platt & Freyd, 2015; Steine et al., 2017; Steiner et al., 2003; Ullman, 2007).
2. Impact of Repetitive and/or Chronic Sexual Violence Compared to Single Episode Sexual Violence

While single incident traumatic events produce distinct conditioned behavioral and biological responses as reminder of the trauma, chronic traumatization or complex trauma, can significantly interfere with development and contribute to the increased risk for psychiatric disorders (Kolk, 2005). Further, chronic stressors have been associated with elevated severity of psychological symptomatology compared with isolated stressors (Fergusson et al., 2013; Satyanarayana, Chandra, & Vaddiparti, 2015; Steine et al., 2017). Research has found that relative to individuals who have been exposed to a single traumatic stressor, survivors of multiple traumatic stressors have a higher likelihood of experiencing chronic psychological and physical health problems (Martin et al., 2013).

Similarly, studies have established that repeated exposure to childhood maltreatment has been linked to more severe and persistent trauma-related symptoms and disorders, including depression, anxiety, and PTSD (Fergusson et al., 2013; Hillberg et al., 2011; Maniglio, 2009; Martin et al., 2013; Steine et al., 2017). In cases of CSA, even when controlling for all other abuse characteristics, there has been a demonstrated cumulative effect of repeated sexual abuse compared with single incidents of sexual abuse (Martin et al., 2013; Steine et al., 2017). Specifically, recent systematic reviews of the scientific literature found that repeated CSA has been linked to greater psychiatric symptom complexity, severity, and chronicity compared with isolated CSA (Hillberg et al., 2011; Steine et al., 2017). Findings have also indicated that repeated CSA has a significant association with lower social support, which indicates that it further influences the previously discussed interpersonal functioning, including the developmental capacity to build and/or utilize supportive relationships (Steine et al., 2017).

3. Consideration of the Impact of Sexual Assault on Child Development

An important factor in understanding the impact of experiences of trauma, rape, and sexual assault is the developmental stage of the individual at the time of insult. Human development occurs iteratively, in stages, in which developing skills in cognition, regulation, coordination, language, and interpersonal functioning inform and interact with one another in an interdependent fashion (Groh et al., 2014). Developmental competencies are learned during specific “sensitive periods” in which the system is more sensitive to specific forms of input, based on increased neuroplasticity in specific brain regions (e.g., Hubel & Wiesel, 1962; Elbert et al., 1995; Siegler, et al., 2014). Although developmental processes and sensitive periods are in many ways ingrained in our genetic code, the expression of this code is shaped by environmental
influences (Bale, 2015). As a result, trauma and rape experienced during childhood or adolescence have been shown to have more pervasive and severe consequences than adult exposure due to the negative impact on the development of cognitive and intellectual capacities, executive functioning, emotion regulation, and interpersonal skills (National Scientific Council on the Developing Child, 2005; Shonkoff et al., 2012; Teicher & Samson, 2016).

In general, children’s developmental trajectories and skill attainment are determined by environmental factors including (1) the need for the skill, (2) the resources available to allocate to developing skills, and (3) environmental responses to use of the skill (Shonkoff, 2016). Experiences of trauma and adversity—including rape and sexual assault—alter each of these factors, thereby impacting the developmental trajectory (Lupien et al., 2009; National Scientific Council on the Developing Child, 2005; Shonkoff et al., 2012; Teicher & Samson, 2016). At the core, trauma alters child development by prioritizing tasks of survival and consequently interfering with other developmental tasks (by diverting resources away from learning and growth). A child exposed to abuse, violence, and threat will need survival (i.e., fight/flight) skills more than executive control and emotion regulation skills. A child living in chronic fight/flight mode will continue to allocate her resources to survival, rather than to developing skills in language, planning, or creative problem-solving. Or, the child may receive input that his/her efforts to regulate his/her emotions do not make the world a safer place and do not effectively remove the threat, so her brain will stop allocating resources to these skills, and may instead develop dissociative responses as the best means of self-preservation.

The dissociative reactions to experiences of rape or sexual assault then generalize to other contexts and become engrained across the course of development. Activation of the stress response system in response to severe or chronic trauma exposure during child development leads to long-term difficulties with emotional and behavioral regulation, with lasting difficulties that extend beyond the hyperarousal and re-experiencing symptoms that are typical of PTSD in adulthood. The dysregulating effect of the stress response results in a dis-integration of neurological, psychological, and physiological systems (Teicher, et al., 2002), further contributing to experiences of dissociation and dissociative disorders for individuals exposed to sexual assault in childhood (Putnam, 1985; van Ijzendoorn & Schuengel, 1996). The injuries to cognitive, emotional, and behavioral regulatory capacities lead to lasting impairment in self-care, as well as academic and vocational performance, among other areas of difficulty.

Difficulties stemming from exposure to trauma and sexual assault in childhood also correspond with lasting alterations in individuals’ sense of self, as well as relationships with others. Children begin to internalize their adaptations to trauma exposure (e.g., impulsivity, difficulties with regulation) as personal flaws, leading to poor self-worth and a sense of poor self-efficacy (for example, learned helplessness). In addition, when untreated or unaddressed, children often
assume that they are responsible for the traumas they experienced, leading to lasting feelings of guilt, self-blame, shame, or worthlessness. These self-attributions lead to difficult interactions with others; childhood exposure to abuse (including sexual abuse) has been linked with disrupted attachment, poor social skills, difficulties with trust and security in relationships, and poor interpersonal effectiveness (for review, see D’Andrea et al., 2012). As a result, trauma exposure in childhood is commonly associated with functional impairment including social isolation, impaired security and stability in relationships, and risk for further trauma or victimization (Finklehor et al., 2007). Of particular note, past studies have demonstrated significant increases in rates of adulthood victimization among women who were raped as a child as compared with women who were not (Roodman & Clum, 2001).

As trauma-related developmental difficulties and skill deficits become engrained over time, childhood trauma becomes a major risk factor for severe mental illnesses (beyond PTSD), including mood disorders, psychotic disorders, and personality disorders (Teicher et al., 2016). Exposure to repeated or multiple traumas specifically during childhood (but not adulthood) is related to increased symptom complexity, psychiatric comorbidity, and difficulty with emotional and interpersonal regulatory functioning in adulthood (Cloitre, et al., 2009; Copeland et al., 2007; D’Andrea, et al., 2012). Even those individuals exposed to childhood trauma that do not exhibit clinically significant psychopathology still demonstrate the alterations in neural structure and function that correspond with childhood trauma, indicating that they are affected, but may have other ways of compensating for the injuries imposed by trauma exposure (Teicher et al., 2016).

The Adverse Childhood Experiences (ACE) studies demonstrate how the neurological, physiological, and psychological impact of childhood trauma is linked with long-term functional impairment. These large-scale epidemiological investigations highlighted associations between childhood exposure to adversity and trauma and the long-term physical and mental health impairments linked to poor performance outcomes (including financial problems, alcohol and substance abuse, criminal behavior, and poor quality of life) and the leading causes of death in adults (e.g., heart disease, pulmonary disease, suicide; Felitti, et al. 1998; Dube et al., 2003). The ACE studies found significant risk for negative health and performance outcomes for individuals who had experienced 3 or more ACEs (with sexual abuse and assault being one of the defined contributing ACEs, along with experiences such as physical and emotional abuse, neglect, domestic or community violence exposure, and an impaired parenting environment). Of note, exposure to 6 or more ACEs was shown to be associated with a 20-year reduction in life expectancy (Brown et al., 2009), indicating that rape and sexual violence can contribute to a shortened lifespan for victims, particularly when such experiences occur within the context of additional life adversities.
Impact of Rape on Individual Victims

1. Psychological Consequences of Rape and other Sexual Violence

Sexual violence causes terror and destabilization by undermining feelings of individual and community safety and security (Lee Koo, 2002). The feeling of safety and security disappears while an individual victim is held captive and is rendered powerless to control what is happening to her/his own body. This effect may become a chronic state. A sense of safety and security is a basic human need that is essential for individuals to perform their daily functions and to engage in activities that promote growth and development (Maslow, 1943). When an individual does not perceive that she or he is safe, basic daily activities such as feeding, sleeping, and self-care are undermined and dysregulated. When this occurs, higher-level pursuits—such as taking care of others, gaining employment, and pursuing an education—are also threatened and rendered more challenging, if not impossible.

Feelings of danger, threat, and helplessness are not only experienced at the time of the rape itself and in its immediate aftermath, but also resurface well into the future, even when objective safety is re-established (DSM-IV; DSM-5). Family members and friends are helpless to assist and are therefore rendered incapable of re-establishing a sense of safety and security and thus of providing support to the survivor.

The psychiatric literature predicts very poor functional outcomes for such victims of sexual assault. The resulting myriad of individual consequences includes psychiatric disorders such as posttraumatic stress disorder, depression, and anxiety (Heim, Shugart, Craighead & Nemeroff, 2010; DSM-III; DSM-IV; DSM-5; Sadock, Kaplan & Sadock, 2007). Outside of these named mental health diagnoses, individuals suffer from abject feelings of hopelessness (Muhwezi et al., 2011); spiritual degradation (Messina-Dyser, 2012); and heightened suspiciousness, persistent confusion, and fear (Kilpatrick, Resick & Veronen; 1981). Victims of trauma see themselves as vulnerable, view the world as lacking meaning, and view themselves as lacking worth (Janoff-Bulman & Frieze, 1983). Negative psychological outcomes have been shown to be particularly long-lasting and pervasive for survivors of rape and sexual assault (Cohen and Roth, 1987). For example, a matched pairs study targeting the long-term effects of World War II demonstrated that wartime rape survivors reported greater severity of PTSD compared with women who experienced non-sexual war trauma (Kuwert et al., 2014). Specific expected outcomes and diagnoses is discussed below in greater detail:

A. Posttraumatic Stress Disorder
Posttraumatic stress disorder (PTSD) is one of the most common diagnoses associated with rape (Holmes & St. Lawrence, 1983). This fact has gained scientific attention since the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III), published in 1980 by the American Psychiatric Association. The National Comorbidity Study—a massive epidemiological study that surveyed 5,877 individuals in the United States—indicated that among women, rape is the most commonly associated index trauma with PTSD (not including an “other” category; Kessler et al., 1995).

If women had experienced rape as their only lifetime traumatic experience or they named rape as their most distressing trauma out of many, 45.9% developed PTSD at some point in their lifetime (Kessler, et al, 1995). In the literature, this is what is considered a lifetime prevalence rate among those who were raped. More broadly, a lifetime PTSD prevalence rate is an epidemiological statistic that indicates how many people in the community/society develop PTSD with or without any traumatic experience.

The literature also discusses what is called a point-prevalence rate, an epidemiological statistic that indicates how many individuals are currently suffering from a certain disease at that time point or within a certain time point. The DSM-5 cites Hinton and Fernandez (2011), stating that the 12-month prevalence rate for PTSD in Europe, Asia, Africa, and Latin America countries is 1% or less (APA, 2013). In an urban sample in the United States, sexual assault and rape were the top two index traumas among individuals diagnosed with PTSD (49% of individuals with PTSD were victims of sexual assault, and 23% were victims of rape) (Breslau, Davis, Andreski & Peterson, 1991). In other words, victims of sexual assault and rape comprised nearly ¾ of all individuals who were diagnosed with PTSD. Results from previous research demonstrate that prevalence rates of PTSD range from approximately 30-70% in sexual assault victims (Dunmore, Clark & Ehlers, 1999; Kilpatrick, Edmunds & Seymour, 1992) compared to a prevalence of 1%. The DSM-5, published in 2013, is unchanged in indicating that sexual assault greatly increases the chances of developing PTSD.

Posttraumatic stress disorder is a chronic and debilitating mental illness. The DSM-5 (APA, 2013) defines PTSD as a conglomerate of symptoms that results from experiencing, witnessing, or being exposed to traumatic events. These symptoms are divided into four different categories of symptomology: intrusive thoughts pertaining to the event, avoidance of stimuli related to the event, negative changes in thoughts and/or mood regarding the event, and hyper-arousal (APA, 2013). Intrusive thoughts may include memories, dreams, dissociation/flashbacks, and psychological or physiological distress when triggered by reminders of the event. Avoidance symptoms may include attempts to evade internal thoughts or emotions about the event or external people, places, and objects that are somehow related to the event. The negative change in mood and/or cognitions include an inability to remember events surrounding the trauma;
negative views about the self, others, and the world; self-blame; negative feelings such as shame, fear, or guilt; anhedonia (the inability to experience pleasure); a sense of detachment from people; and an inability to feel positive mood states. The hyper-arousal symptoms may include irritability and/or anger; self-destructive behavior; hypervigilance, or a sense of being on constant alert for external stimuli; an exaggerated startle response; decreased concentration; and sleep problems. In order to meet the diagnosis of PTSD, individuals must have one symptom each from the intrusive and avoidance category, and two symptoms each of negative changes in thoughts and/or mood and hyper-arousal (APA, 2013). Indeed, such symptoms have been observed and documented in female survivors of rape and CSA in Fiji, and have been noted to directly impact survivors’ functioning in academic and vocational domains.

PTSD symptoms usually have an impact that lasts longer than the one-month duration required by the diagnostic criteria. For example, Burgess & Hollstrom (1979) report that 63% of their subjects experienced long-term effects, while McCahill, Meyer & Fishman (1979) report 33%. Even individuals who did not directly experience the sexual assault may suffer from PTSD symptoms due to exposure via their loved ones. Included in the criteria for a PTSD diagnosis are situations in which the individual witnesses a traumatic event (e.g., exposure to serious violence or sexual violation) or learns that the traumatic event occurred to a close family member or friend (DSM-5).

The rates of PTSD prevalence in non-conflict parts of the world are low. However, PTSD lifetime prevalence rates increase dramatically among individuals who have been exposed to sexual assault and rape. Women exposed to sexual assault are 5.5 times more likely to develop PTSD as compared to victims of other types of trauma (Kilpatrick, Edmunds & Seymour, 1992). As comparison, in the Tabo Report filed in Prosecutor vs Jean Pierre Bemba Gombo, almost all of victims of sexual assault and rape in his Central African Republic (CAR) study likely met at least one, if not all, of the criteria for PTSD (Tabo, 2011).

Such insults are long-lasting: a study of the Bosnian population three years after resolution of conflict following the dissolution of Yugoslavia (in which crimes of mass rape and public assault were committed) found that 45% of the survivors presenting PTSD, depression, or both, continued to suffer from these disorders, and 16% of previously asymptomatic people had developed the disorders (Mollica et al., 2001). When the experience of sexual assault is coupled with exposure to conflict and/or additional trauma exposure, the risk for PTSD is increased (previous research indicates that PTSD rates can double following exposure to combat and conflict; Hoge et al., 2004). Multiple studies have found that an increase in the number of traumatic events is associated with increased psychiatric symptoms (Vrana & Lauterbach, 1994; Follette, Polusny, Bechtle & Naugle, 1996; McCauley et al., 1997; Nishith, Mechanic & Reside, 2000).
B. Anxiety Disorders

Previous versions of the DSM categorized PTSD as an anxiety disorder, and the current research indicates a significant overlap between anxiety symptoms and PTSD symptoms (e.g., Ellis, Atkeson, & Calhoun, 1981; Kilpatrick, Resick & Veronen, 1981). Rape victims experience a significantly greater number of anxiety symptoms and specific phobias than other victims (Kilpatrick, Resick & Veronen, 1981; Ellis, Atkeson, and Calhoun, 1981). Anxiety symptoms and disorders have numerous debilitating effects and consequences for the individual, often involving experiences of generalized worry and fear that extend beyond reactions to specific trauma incidents. The experience of fear, avoidance, panic, and uncontrollable arousal are common symptoms of anxiety disorders that can lead to significant functional impairment (DSM-5). These symptoms not only affect the individual but have repercussions for family and community. For example, children of mothers with panic disorder are 6.8 times more likely to develop the disorder, and children of mothers with phobic disorders are 3.1 times more likely to be diagnosed with the disorder at some point in their life (Merikangas & Pine, 2002).

C. Mood Disorders

Mood disorders are a common outcome for rape survivors (Steketee & Foa, 1987). Major depressive disorder or depressive symptomology is associated with a history of sexual abuse (Becker-Laussen, Sanders, & Chinsky, 1995; Beitchman, Zucker, Hood, DaCosta, Akman, & Cassiva, 1992; Gold, 1986; Kendall-Tackett, 2007; Morof et al., 2014; Trickett, Noll, & Putnam, 2011). According to the DSM-5, symptoms of depression include depressed mood, suicidal thinking, loss of appetite, weight loss or gain, loss of interest, and hopelessness. Irritability and somatic symptoms may also be present (APA, 2013). In a sample of 5,877 individuals, the National Comorbidity Study results indicate that 39.3% of women who were sexually abused as a child developed depression (Molnar, Buka, & Kessler, 2001). In a sample of 3,001 women (The National Comorbidity Study-Replication), 22% of women who were raped experienced a major depressive episode (Zinzow et al., 2012). Outcomes from sexual assault survivors evaluated at Bangui Hospital reported in the case of ICC Prosecutor vs Jean Pierre Bemba Gombo indicated that 36.9% of women suffered from reactive depression and 2.2% suffered from melancholia (characterized by extreme lethargy; Tabo, 2011a). Female survivors of rape are 5.46 times more likely to experience a major depressive episode compared to non-sexual assault victims (Zinzow et al., 2012). In addition, rape and sexual assault are associated with experiences of mood instability (including mania) that are linked with the presence of bipolar disorders.
Similar to anxiety disorders, the presence of depressive and mood disorders extends beyond the individual victim; research suggests that children of depressed mothers have a lifetime prevalence rate of depression between 20% and 41% (Goodman, 2007). Children of depressed mothers also experience mental and motor developmental issues, self-regulation problems, and increased negative affect (Goodman & Gotlib, 1999).

D. Dissociation

Dissociative symptoms are another common response to trauma, sexual assault, and rape that are not fully captured in PTSD diagnostic criteria (DSM-5; Freyd, 1996; van der Kolk, Pelcovitz, Roth, et al., 1996). Previous research indicates that approximately half of individuals who develop PTSD experience significant dissociative symptoms (Breire, Scott, & Weathers, 2005) compared to only 4.4% of adults with no diagnosis. Dissociative symptoms include an unawareness of one’s present state, flashbacks, out-of-body experiences (depersonalization), or feeling as if the world around one is surreal or artificial in some way (derealization). The DSM-5 also defines a dissociative amnesia wherein an individual is unable to remember events from the trauma. Dissociative responses during experiences of trauma can be viewed as evolutionarily adaptive as they create cognitive and emotional distance from the horror, terror, and pain of the trauma; however, the same dissociative experiences that are protective during the moment of trauma are maladaptive when they resurface in individuals’ subsequent daily lives and can cause significant impairment in functioning when they become pathological (Freyd, 1996). Carlson, Dalenberg & McDade-Montez (2012) concluded that dissociative symptoms are related to traumatic experiences and their severity, effects can be long lasting, and high dissociative symptoms increase the likelihood and severity levels of PTSD symptoms.

E. Other Comorbid Mental Health Disorders

Many other mental health diagnoses are related to trauma and are often seen as co-morbid (i.e., occurring simultaneously) with PTSD. In fact, the comorbidity of psychiatric disorders is thought to be the rule rather than the exception in cases of interpersonal trauma and abuse. For example, forty percent of children exposed to trauma are diagnosed with at least two psychiatric disorders (Copeland, Keeler, Angold & Costello, 2007). Major depression, dysthymia (chronic but less severe depression), bipolar disorder, generalized anxiety disorder, panic disorder, agoraphobia, social phobia, and obsessive-compulsive disorder have all been linked to PTSD (Creamer, Burgess & McFarlane, 2001). The 1995 National Comorbidity Study established a historical precedent for understanding PTSD and comorbid disorders: PTSD was found to be comorbid in 47.9% of individuals with a history of major depression, 21.4% with dysthymia, 16.8% with generalized anxiety disorder, 31.4% with specific phobia, and 27.6% with social
phobia (Kessler et al., 1995). Another common form of mental health comorbidity involves co-occurrence of substance-use disorders with PTSD (Kessler et al., 1995). Alcohol and drug use are a common form of coping with the significant distress and posttraumatic reactions that result from experiences of rape. Kessler et al. (1995) found that among individuals with PTSD, 51.9% were diagnosed with alcohol use/dependence, and 34.5% were diagnosed with drug abuse/dependence. Tabo (2011) reported that alcohol and/or substance use disorders were present in 18% of the victims after rape in his population within the CAR.

**F. Psychological Distress Without Formal Diagnosis**

Inevitably, there will be survivors of rape who will not receive one of the discrete diagnoses identified above. The absence of a formal mental health disorder after rape does not suggest total wellness for a victim, however. Almost all rape survivors manifest severe negative psychological consequences in the short-, medium-, or long-term. The psychiatric outcomes that fall outside formal psychiatric diagnoses are still considered marked and unwanted. Self-esteem and self-efficacy are severely affected by acts of sexual violence. In fact, a longitudinal study showed decreased self-esteem in rape victims when compared to non-rape victims a full 18 months after the event (Murphy et al., 1988). Evidence shows that human beings’ psychological defenses are significantly affected after traumatic experiences (Edmondson et al., 2011). Interpersonal issues, anger, suicidality, and a lack of self-identity are all associated with sexual assault (Neumann, Houskamp, Pollack, & Briere, 1996) that may or may not be a part of a formal diagnosis.

In particular, the development of guilt and fear amongst victims of rape and other sexual gender-based violence is a common phenomenon. This is often augmented and driven by feelings of shame and self-blame following “tonic immobility,” a physical freeze response related to dissociation, during the sexual assault event. It is estimated that 15-50% of rape victims experience tonic immobility during rape (Campbell, 2012). Although this temporary paralysis is thought to be a natural automatic response to extreme stress or trauma, many victims are unaware of this and, as a result, are likely to blame themselves for “letting it happen” or “not doing more to stop it.” Victims who undergo such self-deleterious experiences of shame in response to sexual mistreatment or violence are at greater risk of trauma-related symptoms and psychological distress, and children of these victims are also at increased risk to develop behavioral problems in their own lives (Babcock-Fenerci & DePrince, 2017).

**G. Prevalence of Psychiatric Illnesses in Fiji**

Although there is limited epidemiological research or data on psychiatric disorders in Fiji, the World Health Organization estimates that psychiatric disorders in Fiji contribute to
approximately 13.7% of the global burden of the diseases (WHO, 2008). Further, access to mental health care has increased with the passing of the new Mental Health Decree in 2010 and with increased mental health services, some data has begun to shed light on the rates of psychiatric illnesses and other outcomes. A recent study examined the rates of diagnoses of various illnesses in a mental health clinic (Sivakumaran, George, Naker, & Nadanachandran, 2015). Between 2011 and 214, approximately 29% of patients were diagnosed with an anxiety disorder, 25% were diagnosed with mood disorders, 20% presented with other psychological distress (Sivakumaran, 2015).

2. Consequences of Rape and Sexual Violence on Individual Functioning

The consequences of rape and other forms of sexual assault do not stop with the psychiatric and physical impact on survivors. Rather, there are broad and far-reaching psychosocial and functional consequences that impact individual survivors and their ability to carry out their lives and personal development within their families and communities.

A. Isolation

Women who have survived sexual assault may be considered indelibly defiled, especially in societies in which the perception of “sexual purity” is corrupted by the stigma of rape (Tabo, 2011; Porter, 2016). Because the avoidance of reminders of the trauma is a key component of PTSD (Zalihic-Kaurin, 1994), spouses, family members and entire communities may shun, abandon, or even exile the victim of sexual assault. This stigmatization is not merely a theoretical and abstract concept. It is real with severe consequences. Indeed, it is not unheard of for death at the hands of the community to be a victim’s punishment for being raped (Bastick et al., 2007). At a minimum, this physical or emotional exile may leave women economically vulnerable, left to find their own resources for themselves and their children.

By way of comparative example, many survivors of sexual assault during the Rwandan genocide were rejected by their communities and suffered isolation so severe that some have called it “social death” (Hynes, 2004). Researchers have documented the same severe psychological distress arising from stigmatization in survivors of sexual assault in the Democratic Republic of the Congo (Verelst, Schryver, Broekaert & Derluyn, 2014).

B. Risk of Re-traumatization & Re-victimization

Individuals who are the victims of sexual assault and rape not only experience distress related to these traumas, but are also at greater risk for future re-victimization (Breitenbecher, 2001; Classen, Palesh & Aggarwal, 2005; Littleton & Decker, 2017; Relyea & Ullman, 2017). A report
from a Dutch assault center shows that one-third of sexual violence victims had experienced prior abuse (Zijlstra et al., 2017). In a study of women who had been physically and/or sexually abused, the women who were abused were 1.99 times more likely than non-abused women to experience sexual re-victimization and were 1.96 times more likely to experience physical re-victimization (Barnes, Noll, Putnam, & Trickett, 2009). The inability to focus, function in activities of daily living, and care for oneself as seen in survivors with PTSD, depression, and other forms of extreme mental anguish is often exploited in the aftermath of the assault. These individual psychological factors are compounded by experiences of stigmatization and rejection, as well as economic and societal destabilization common in post-conflict settings, to increase risk of future re-victimization for sexual assault survivors. Heightened rates of re-victimization and sexual exploitation of survivors of trauma and sexual assault have been frequently observed in both non-Western and Western countries (Brownmiller, 1975; Hynes, 2004; Robson, 2002; Wirtz, et. al., 2014). Such findings are consistent with ecological models predicting predisposition for sexual re-victimization among abuse/violence survivors due to the interplay of personal, interpersonal, and socio-cultural factors (Grauerholz, 2000). Strong predictors for sexual re-victimization include social environment hostile to survivors, race, and childhood sexual abuse (Relyea & Ullman, 2017).

C. Increased Incidence of Suicidal Thoughts and Behaviors

In addition to inducing PTSD and other forms of psychological distress, sexual assault can lead to increased rates of suicide in affected individuals. This can be appreciated in populations after mass rape. As an historical example, in 1937, as Japanese forces arrived in the Chinese provisional capital city of Nanking, they committed brutal sexual violence against the civilian population (Brackman, 1987; Friedman, 1972); this sexual violence has been linked with increased suicide rates observed in 1937-1938 in part as massive numbers of Chinese women ended their lives by jumping into the Yangtze River (Heit, 2009; Chang, 1997). Similar dramatic increases in the incidence of suicide also occurred in Bangladesh after the 1971 war of liberation left over 400,000 women and children with psychological distress from sexual assault (Brownmiller, 1975). The widespread sexual assault and abuse suffered by Iraqi women in the aftermath of the 2003 invasion of Iraq has led to greatly increased rates of suicide (United Nations Assistance Mission for Iraq, 2008; Lee-Koo, 2011).

According to the FWCC Report, 8% women who are not experiencing domestic violence in Fiji have contemplated suicide and 2% have attempted suicide. This shows a disparity compared to Fijian women living with physical, sexual, and emotional domestic violence -- 32% of whom have contemplated suicide and 9% of whom have attempted suicide (FWCC).

D. Suicide Rates in Fiji
There again is limited available research and data on suicide rates in Fiji (Fiji Bureau of Statistics 2015). Between 2005 and 2014, there was estimated to be 834 suicides and 1,184 attempted suicides (Fiji Bureau of Statistics 2015). Of the suicides during this timeframe, approximately 70% were males and 30% were females and of attempted suicides, approximately 45% were males and 55% were females. There is a lack of data on the prevalence of suicidal thoughts or other indicators of psychological distress.

3. Neurobiological and Psychophysiological Responses to Trauma, Rape, and Sexual Assault

Experiences of extreme stress, trauma, and victimization—such as rape, sexual assault, and gender-based violence—essentially injure the stress response system, resulting in lasting neurobiological, physiological, and psychological consequences. That is, extreme stress and trauma impact the brain and central nervous system with an array of physical, psychological, social, and functional impairments that drive the psychiatric disorders described above. These neurobiological injuries to the stress response system are now known to be part of a universal biological response consistent across individuals, cultures, and mammalian species (Bale, 2015). The brain is a complex of interconnected regions working in concert, each performing specialized functions to keep an organism alive. Especially relevant to human functioning and the stress response, are the prefrontal cortex (PFC) and the limbic system. The PFC commands oversight, regulation, and executive control. It is our source of rational thought, logic, problem-solving, impulse control, self-regulation, and self-awareness. In contrast, the limbic system handles emotional responses and processing. Structures in the limbic system (i.e. the amygdala, hippocampus, and thalamus) participate in the experiences of emotions, reward, motivation, and memory formation. Known as the “fear circuit,” the limbic system detects threats and activates when potential environmental dangers are perceived, to enable safety and survival responses (such as ‘fight,’ ‘flight,’ or ‘freeze’).

The PFC and limbic system communicate constantly with one another via neural pathways that form a regulatory feedback loop in which cognitive processes (from the PFC) influence emotional responses (in the limbic system), and vice versa. Patterns of activation and communication between the PFC and limbic system are shaped by experience. Hebb’s rule, a primary neuroscientific principle, is commonly paraphrased as “neurons that fire together, wire together,” meaning that patterns of activation become mutually reinforced (Hebb, 1949). That is, the connective networks and pathways of two brain regions in regular communication or co-activation become strengthened in order to facilitate learning and adaptation. Through repetition (and by way of Hebb’s rule) our life experiences shape patterns of activity and
interaction among neural systems. Exposure to trauma and traumatic stress results in prioritization of emotional and instinctual responses from the limbic system, over the regulatory and intentional process stemming from the PFC.

With limited resources to achieve the goal of survival, any perceived environmental stressor requires a reallocation of resources in order to address the threat. The brain—which demands a constant supply of blood and oxygen—responds to perceived stress, threat, or trauma by “shutting down” the PFC (literally reducing activity in this region) and allocating resources to regions coordinating instinctual survival responses (i.e., the limbic system, in order to trigger the “fight or flight” response), as well as regions regulating basic functions of respiration, body temperature, and heart rate. Shutting down the PFC in times of danger preserves resources, but it also leaves lower order neural structures (such as the limbic system) unregulated and disorganized (Damasio, Grabowski, Bechara, et al., 2000). The limbic system essentially “hijacks” the brain as the alarm response is triggered and PFC shuts down. A useful analogy is a rider on a horse, where the rider (PFC) exerts control and regulates the system, and the horse (limbic system) responds emotionally and instinctively (van der Kolk, 2014). When the horse (limbic system) is triggered by a threat, the rider (PFC) gets temporarily thrown off, as does the capacity for oversight, regulation, and executive control. Thus, the limbic system becomes the primary determinant of behavior and function, consisting of “fight, flight, or freeze” survival reactions: automatic emotional, cognitive, and physiological responses that prepare an organism to respond to threats with aggression, self-defense, escape, or paralysis. Such responses to threat generally prove adaptive by eliminating the PFC’s slower and deliberative processes of evaluation. Even the ‘freeze’ response (also known as “tonic immobility,” as discussed above), common in experiences of rape and sexual assault, is an adaptive automatic response (seen across all mammals) circumventing increased risks of fight or flight (i.e. when escape is impossible, or when flight may incite chase; Fuse et al., 2007; Heidt et al., 2005). However, these patterns of neurological and physiological response (where a hyperactive limbic system subdues the PFC) can become maladaptive outside of genuine danger, and turn pervasive after extreme trauma.

The brain’s response to stress interacts with the body’s physiological functioning via the hypothalamic-pituitary-adrenal (HPA) axis (Southwick, Vythilingam, & Charney, 2005). Activation of the limbic alarm response releases stress hormones (adrenaline and cortisol) in the brain and body that prepare an organism for both short-term and long-term stress exposure. The release of stress hormones activates the sympathetic nervous system (SNS) and triggers the “fight or flight” response: increased heart rate, dilated blood vessels in skeletal muscles, dilated airways in the lungs, and other reactions ensuring an individual’s readiness to face imminent threats. The parasympathetic nervous system (PNS) performs opposing functions: decreasing heart rate, constricting lung airways, and constricting blood vessels. The parasympathetic (PNS)
response counteracts the sympathetic (SNS) response once danger subsides. Rhythmic, regular fluctuation in SNS and PNS activation helps maintain physiological allostasis (i.e., regulated physiological balance). Prolonged SNS activation in times of extreme stress (i.e. during and after experiences of rape, sexual assault, and chronic insecurity) disrupts this allostatic balance, leading to pathophysiological states and negative physical and mental health outcomes (McEwen, 1998; McEwen & Wingfield, 2003; Sapolsky et al., 2000; Boyce & Ellis, 2005; Herbert et al., 2006).

Our perceived loss of control during extreme stress becomes a critical factor leading to negative psychological, physical and functional outcomes. Principles of neuroscience (e.g., Hebb’s rule) illustrate how psychological, physiological, and behavioral responses become engrained through repeated exposure to threat or threat reminders. Our reactions to trauma have lasting impacts on neurobiological structure and function, exemplified through specific ‘injuries’ to the stress response system and the individual (Bale, 2015; Teicher & Samson, 2013; Van der Kolk, 2006).

A. Sensitization of the Alarm Response

A sensitized alarm response is a central example of long-term consequences to chronic trauma exposure. Activation of the alarm response during trauma exposure (e.g., violence or sexual assault) results in subsequent strengthening of neural pathways associated with responses to danger and insecurity, resulting in higher baseline levels of limbic activation (Yan et al., 2013) that indicate a chronic state of alert (hypervigilance). The threat detection system and HPA axis stress response become chronically active, primed to identify potential threats and trigger the alarm response. Chronic hypervigilance persistently drains neurological and physiological resources. In addition, the amygdala—a central emotion processing region in the limbic system—shows greater activation (exaggerated startle) in response to emotional and ambiguous information in individuals with trauma histories (Teicher & Samson, 2013; Teicher et al., 2016). These findings are paired with decreased structural volume (indicating under-development) and reduced activation of the PFC in individuals suffering from posttraumatic stress (Teicher & Samson, 2013).

As a result, individuals exposed to trauma and traumatic stress have a significantly lower threshold for triggering the alarm response (i.e., the limbic system more easily “hijacks” the higher order pre-frontal executive control systems, and the PFC is less adept at re-regulating and dampening the alarm response). This is due to the long-term neurological consequences of trauma exposure that result in strengthened bottom-up pathways from an overactive limbic system to the PFC, and weakened top-down pathways from the (underactive) PFC to the limbic system (Yan et al., 2013; Teicher et al., 2016). These structural changes affect the ability to regulate cognitive, emotional, and physiological reactions to perceived or potential threat.
Essentially, it becomes natural and automatic for the system to enter ‘fight, flight, or freeze’ survival mode, where executive control and rational decision-making are largely absent. An overactive alarm system may promote survival in a dangerous world, but proves maladaptive in other contexts, as the “fight, flight, or freeze” alarm response is frequently summoned by innocuous environmental stimuli, compromising the ability to re-regulate.

**B. Physiological Consequences**

As with the short-term stress response, trauma exposure’s long-term neurological consequences mirror long-term physiological consequences to the body’s systems. Long term traumatic stress on physiological systems alters both acute responses to stressors, as well as general function (see Teicher & Samson, 2013, for review). Ongoing perceptions of danger, helplessness, or loss of control result in chronic hyper-activation of the stress response, stimulating increased and prolonged release of stress hormones, which are toxic to psychological and physiological systems when released in excess (Bremner, 2006; Gunnar & Vasquez, 2001, 2006; McEwen, 2007; Sapolsky, 2005, 2012). For example, adrenaline release puts the organism in “fight, flight, or freeze” mode for survival but disrupts homeostasis as the system as it attempts to maintain a regulated balance.

Furthermore, the PNS, or our physiological “brake,” can either atrophy from underuse or deteriorate with overuse, in response to extreme trauma or chronic perceived threat. Individuals with trauma exposure have demonstrated dysregulated cortisol responses to acute stress, showing hypersensitive stress hormone responses in some cases, and dampened responses (Teicher & Samson, 2013) in others. In terms of general functioning, two-thirds of children and adults exposed to trauma show increased adrenal activity (DeBellis, Keshavan & Clark, 1999; DeBellis, Lefter & Trickett, 1994), but low levels of baseline cortisol (Gunnar & Vasquez, 2001; 2006; Meewise, 2007; Trickett, 2010; Walsh, 2013). This implies these individuals are hypersensitive to threat (more easily triggered into “fight or flight” reactions), but otherwise operating at low levels of general activation (i.e., the system operates in a chronically depressed state, often fatigued from compensating for multiple alarm reactions).

Trauma exposure has also been shown to relatively increase cortisol levels at bedtime (Carrion et al., 2010); individuals are prepared for danger even when the body should be settling down for rest, negatively impacting sleep quality. Such research is consistent with findings that stress and trauma exposure disrupts circadian rhythmicity (Lupien et al., 2009). This means that individuals with a history of traumatic exposure and stress often struggle with attention, memory, and emotion regulation.

**C. Impact on Memory**
The release of neurotransmitters and hormones involved in the stress response alters patterns of memory formation by strengthening neural connections, and by preserving and enhancing emotional memories and response patterns as a form of adaptation in case the threat returns (McGaugh & Hertz, 1972; Cahill & McGaugh, 1998). Memories formed during traumatic experiences are often more vivid and visceral (due to the impact of adrenaline secretion on memory formation), but are also products of disintegrated functioning and communication across neural systems (Southwick et al., 2005). The results are emotionally-laden memories from traumatic experiences that are disorganized and fragmented, affected by stress-impaired memory consolidation (Roozendaal et al., 2009). In addition, when reminders of a traumatic experience (images, sounds, sensations) activate the trace of the memory, the individual returns to the disorganized, dysregulated state that she or he experienced at the time of the trauma. This state again involves reduced prefrontal activation, unregulated limbic activity, and overstimulation of the stress response system. In this way, the experience of trauma is often “re-lived” or “re-experienced” repeatedly in the life of a victim, even when she or he has returned to a relatively safe and stable environment. So even when survivors of trauma such as rape or sexual assault are safe, their psychophysiological and neuroendocrine responses are conditioned to reminders of the traumatic experience.

The lasting and pervasive neurobiological responses to extreme stress and trauma described above set the foundation for numerous psychiatric, psychological, social, occupational, and health impairments for victims of rape, sexual assault, and gender-based violence.

4. Physical Consequences of Rape

The short and long-term physical consequences of rape and other forms of sexual assault are profound and well documented. While some of these effects are visible and treatable through appropriate medical care, others are less so. For example, rape and other forms of sexual assault can cause lasting and deleterious changes to the human nervous system that can lead to pervasive and persistent cognitive, emotional, and behavioral difficulties.

A. Immediate Physical Effects

The immediate physical effects of sexual assault are often the reason the victim seeks treatment initially. In a review of the literature on the physical trauma of rape, Sommers (2011) concluded that the posterior fourchette, labia minora, hymen, and navicularis are common areas where injuries are found in victims of sexual trauma. Heppenstall-Heger et al. (2003) examined ano-genital injuries in children due to sexual assault and other traumas. The authors found
evidence of bleeding, anal abrasions, anal and perianal tears, and tears of the posterior fourchette and hymen. Bowyer & Dalton (1997), in studying female rape victims between the ages of 16 and 48, found perineal, hymeneal, and posterior vaginal wall tears. They also found cuts, bruises, and grazes on victims’ labia majora, fourchette, vagina, and anus. Rape survivors also commonly report injuries (e.g. bruises, cuts, grazes) to other parts of the body as well (Bowyer & Dalton, 1997). In the case of Prosecutor vs Jean Pierre Bemba Gombo, Adeyinka M. Akinsulure-Smith testified that the immediate physical consequences of rape in the CAR included major physical damage to the reproductive and ano-rectal physiology, muscle and bone damage, as well as headaches, muscle tension, nausea, and stomach problems as possible additional consequences (Akinsulure-Smith, 2011).

B. Long-Term Physical Consequences of Rape

Long-term physical consequences of rape are well known within the medical community. Rapes result in gynecologic fistula—a complete disruptive rendering of the woman’s vagina and bladder and/or rectum (Bastick, Grimm, Kunz, 2007)—and chronic pelvic pain (Dossa, Zunzunegui, Hatem & Fraser, 2014; Mukanangana, Moyo, Zvoushe & Rusinga, 2014). This latter study also found that survivors of sexual violence in the Democratic Republic of Congo (DRC) are more likely to experience a loss of interest in sex and in having children. Women’s reproductive systems are often severely and permanently damaged as a result of rape (Golding, 1996). Because women who have fistulas are more likely to be rejected by their community (due to incontinence and infertility), this adds to the psychological burden borne by survivors of sexual violence (Roush, 2009). For women, experiences of rape and sexual assault are linked to excessive menstrual bleeding, genital burning, painful intercourse, menstrual irregularity, and lack of sexual pleasure (Bastick et al., 2007).

Victims of rape are at risk for contracting a wide range of sexually transmitted diseases, and for incurring medical complications associated with traumatic gynecologic injury. Sexually transmitted infections commonly associated with sexual violence include human immunodeficiency virus (HIV), Neisseria gonorrhoeae, Chlamydia trachomatis, Trichomonas vaginalis, Treponema pallidum (syphilis), herpes simplex virus (HSV), cytomegalovirus (CMV), and human papillomavirus (HPV), and chronic infection with these diseases may result in long-term sequelae including chronic pelvic pain, dysmenorrhea, and infertility (Ba-Bhopal 2017; Jenny et al., 1990; Glaser et al. 1989, 1991; Estreich 1990; Johnson et al 2010, 2008; Burgueno 2017). For example, in Northern Uganda, survivors of sexual violence in conflict are reported to suffer predominantly from HIV/AIDS, chronically treated STDs and gynaecological issues resulting in infertility, chronic pelvic and abdominal pain, vaginal discharge and bleeding, as well as injury including fistula and vaginal tears and prolapse (Liebling et al 2008; McKay 2004; Dossa 2014; Kinyanda et al 2010). During the Rwandan
genocide of 1994, it is estimated that of the 500,000 women who were raped; over 70% contracted HIV (Reid-Cunningham, 2008 & Amnesty International, 2004). It may take years for HIV to transform into AIDS, and thus the estimate of women killed due to sexual violence in Rwanda continues to grow with each passing year. In the DRC, researchers estimate that when a woman is raped, she has a 60% chance of contracting HIV (Brown, 2012). Because medical care and antivirals are often not available, the transmission of HIV is often a gradual death sentence in a post-conflict setting. Increased rates of cervical cancer from the Human Papillomavirus (HPV) acquired during a sexual assault have also been reported (Hynes, 2004). Treating these infections in people with limited resources is problematic and is done under the backdrop of social marginalization and ridicule.

Psychiatric conditions caused by rape are related to deleterious physical outcomes. In women, the risk of arthritis and breast cancer is correlated with a history of sexual assault (Stein & Barrett-Connor, 2000). These risks increase among victims of multiple acts of sexual abuse (Stein & Barrett-Connor, 2000). PTSD has been linked to heart disease (Boscarino, 2008), chronic pain (Moeller-Bertam, Keltner & Strigo 2012), coronary artery disease, and higher mortality rates (Boscarino, 2011). There also appears to be some level of immune impairment that occurs when someone is the victim of abuse, as women subjected to domestic violence are less able to resist the herpes simplex virus (Garcia-Linares, Sanchez-Lorente, Coe & Martinez, 2004).

C. Psychosocial Consequences of Diseases Contracted through Rape

Victims suffer not only physical morbidity, but also the psychosocial sequelae associated with these conditions that are described even among affected individuals in non-conflict settings. In areas where health infrastructure is insufficient, it is less likely that victims will receive prompt medical attention for sexually transmitted diseases, increasing the likelihood that they will experience more severe and chronic disease forms that are associated with an increased prevalence of concomitant psychosocial effects (Hagen 2010). In a sociocultural setting where motherhood forms a core aspect of the female identity, the psychosocial implications of infertility are profound, and women suffer seriously from stigmatization and mental illness (Liebling et al 2008); an inability to conceive can markedly diminish a woman’s perceived value as a potential partner (Bastick et al., 2007).

Studies in patient populations living with HIV/AIDS find robust evidence for significant psychological morbidity, in large part due to the stigma experienced by victims, which tends to be particularly severe in rural as compared to urban areas (Hernandez et al 2018; Darlington and Hutson 2017). The most salient psychosocial consequences of HIV include depression, dysthymic disorder, suicidal ideation, anxiety, and in certain settings, substance or alcohol abuse
disorders (Amirkhanian et al 2003; Catalan et al 1996; Hernandez et al 2018; Olley 2006; Turan, 2017; Watts, 2010). Among patients living with other sexually transmitted infections (STIs), concerns related to future reproductive health and rejection from their sexual partner are documented to cause depressive symptoms and anxiety. Patients may experience debilitating pain disorders such as chronic inflammatory pelvic disease secondary to chronic sexually transmitted infections contracted through rape such as gonorrhea or chlamydia, which have well established associations with depressive disorders and anxiety (Hynes 2004; Duncan et al 2001; Pirotta 2009; Rosenthal et al 2005).

In addition to sexually transmitted diseases, traumatic injury with profound implications for psychosocial health are associated with rape. Fistula, which has been referred to as a “social calamity,” is a particularly devastating form of injury sustained in violent rape. In contrast to obstetric fistula, which is incurred during delivery, traumatic fistula is a consequence of sexual violence (Onsrud et al 2008). The nature of the injury is such that a pathological communication is formed between the victim’s vaginal canal and anal canal or bladder. This creates urinary and fecal incontinence associated with a deeply unpleasant odor, which contributes to the profound stigmatization experienced by women living with fistula (Bangser 2006). Fistula is an extremely socially isolating condition. While relatively few studies have longitudinally followed the psychosocial impacts of living with fistula, studies based on short-term follow-up from surgical repair report a high incidence of depression and suicidality (Ahmed 2007; ENGENDER 2005; Semere 2008; Longombe 2008; Gharoro 2009). Similar to the impacts of infertility associated with chronically untreated STDs, in a sociocultural context in which so much of female identity centers around motherhood, the psychosocial implications may be particularly devastating: studies conducted in Nigeria and Kenya founds high rates of spontaneous abortion and miscarriage among women with unrepaired fistulas and even among women with repaired fistulas (Aimaku 1974; Emembolu, 1992; Longombe 2008).

**D. Unwanted Pregnancy from Rape**

Sexual assault can lead to unwanted pregnancies. Survivors who become pregnant are often left with the options of having a non-medical abortion or having a child who will serve as a constant reminder of the rape. During the pregnancy, women may experience greater incidents of backaches, constipation, pelvic girdle relaxation, heartburn, nausea and vomiting, edema, urine incontinence, urinary tract infections, leg cramps, and Braxton Hicks contractions (Lukasse, Henriksen, Vangen, & Schei, 2012). Among women who were sexually abused as a child, pregnancy exams can cause distress, and flashbacks during pregnancy are common (Wilson, 2011). Incidents of attempted or completed sexual assault are also linked to post-partum depressive symptomology (Ryan et al., 2014). Death is also a consequence as the World Health Organization (WHO; 2007) estimated that 35,900 women died from unsafe abortions in Africa.
alone. In middle Africa, an estimated 880 out of every 100,000 unsafe abortions resulted in death (WHO, 2007). The risk taken by these women may be a direct reflection of the stigma they may endure if they keep the child.

For example, Liebling and Slegh (2011) spoke with 76 DRC sexual assault survivors who became pregnant as a result of the assault, finding that 80% of the survivors were raped before the age of 18. Their families rejected the majority of them after the pregnancy was discovered, and nearly all of them were rejected by their communities. Some survivors even received death threats. The children born to survivors were nearly uniformly scorned and mocked, which led to depression within many of the children (Liebling, Slegh & Ruratotoye, 2012). In addition, mothers reported feeling ill-equipped to soothe children as they themselves may have been suffering from a particularly severe form of PTSD that is seen in women who become pregnant after rape (Bartels et al., 2010).

**Psychosocial Outcomes for Survivors of Sexual Violence**

1. Parenting and Child Development

Criminal law and transitional justice processes (as well as the bulk of scientific inquiry) have largely focused on the individual psychopathology associated with sexual violence, with less attention devoted to intergenerational and systemic effects thought to stem from rape and gender-based crimes. This is surprising given the common knowledge that internal working models of parenting are influenced by developmental experiences and are played out in interactions with one's own children. Findings indicate that sexual violence has long-term repercussions for mental health, parenting relationships, and child adjustment in the succeeding generation (Roberts et al., 2004).

The negative impact of sexual violence on later parenting has been shown both in terms of actual parenting behaviors and views of self as a parent. A central consequence of child sexual violence is the long-term disruption it can cause in relationships. The mother-child relationship is a primary example of a significant relationship that can be disrupted by this childhood trauma (Main, 1996). Women who suffer childhood sexual violence can experience “interpersonal difficulties relating to their children” (Noack & Baraitser, 2014, pp. 345). The literature demonstrates that the past trauma of sexual abuse creates risk factors that disrupt a mother's ability to comfort, nurture, care for, and protect her child (Schore, 2001).

In another study, Burkett (1991) used both interviews and observation of mothers and children and found that sexually abused mothers were more likely to rely on children for emotional
support and to be self-focused on their parenting compared to nonabused women. Reduced confidence in parenting, more negative views of oneself as a parent, greater use of physical punishment strategies, and less emotional control in parenting situations have also been found in survivors of child sexual abuse (Banyard, 1997; Cole et al., 1992). Roberts et al. (2004) found that mothers who experienced child sexual abuse reported less positive relations between their partner and child as well as greater negativity and less positivity in their own relationship with their child. A prospective 30-year follow-up study found that offspring of parents with histories of childhood abuse and neglect are more likely to report being sexually abused and neglected (Widom et al., 2015). Such findings provide examples of the ways in which the sexual violence that have occurred in Fiji could be destabilizing and disruptive to families and communities across generations.

On the basis of data available, the Committee on the Psychosocial Aspects of Child and Family Health and The Task Force on Terrorism of the American Academy of Pediatrics (AAP) concluded that “any effect of trauma on key or trusted adults can result in magnified psychological effects on the children they care for” (Hagan & the Committee on Psychosocial Aspects of Child and Family Health and the Task Force on Terrorism, 2005). In one study, hyperactivity, conduct problems, peer problems, and emotional problems were reported in the children of mothers with a history of child sexual abuse compared to the children of nonabused mothers; these child difficulties were attributed to the parent’s mental health and psychological problems stemming from their own experiences of abuse (Roberts et al., 2004).

Indeed, parenting practices are known to be strongly influenced by the psychiatric sequelae of rape and sexual violence, most notably PTSD and depression. Rape and sexual violence increase risk for PTSD and depression, which, in turn, have a negative impact on parenting and child-rearing. Parents who are depressed and suffering from PTSD have greater difficulty comforting their children, are more likely to ask children to take on an adult role, are less likely to bond well with their children, and are more likely to abuse and neglect their children (Field, 2011). There is strong evidence that the ability of children to heal from trauma and adversity is closely linked to the mental health of their mother (Smith, Perrin, Yule, Rabe-Hesketh, 2001).

On a theoretical level, Bowlby (1969) proposes that patterns of early interactions between the individual as a child and their caretaker contributes to individual adult psychopathology. For caregivers who are affectively disturbed by trauma, the provision of sensitive guidance, regulation, and fun during social encounters with their children may be a challenge (Kaitz, 2009). For some parents, pathological trauma reactions may be related to exaggerated responsiveness towards their children in the form of intrusiveness or overprotection (Lyons-Ruth & Block, 1996), reflecting a need to control surroundings, pervasive fears and apprehensions,
and a proneness to hyperarousal, which are usually key features of stress disorders, including PTSD (Barlow, 2002).

Trauma victims may alternatively take on a withdrawn stance with their children due to their own emotional and physical pain and to protect themselves from further arousal (Lyons-Ruth & Bock, 1996). Withdrawn mothers may avoid interactions with their children if they can; if they cannot, they are likely to have difficulties in focusing on, interpreting, and responding appropriately and consistently to their children’s signals (Kaitz, 2009). Over time, children with a history of dysregulated and inconsistent parent-child interactions can develop atypical behavioral patterns toward caregivers, core insecurities, disturbed emotional repertoires, deficient social communication and difficulties in regulating emotions and behavior (Eisenberg et al., 1998). Researchers have related these adverse effects to children’s learned helplessness, lack of control, chronic stress, deficits in self-regulation, and felt-insecurity (Weems & Silverman, 2006).

2. Impact on Relationships and Family Functioning

Exposure to rape and sexual violence is known to disrupt general family functioning, both when the survivor of rape is a parent/caregiver and when the survivor is a child within the family. The dysregulating impact of rape, sexual assault, and the resulting psychiatric symptoms impact the quality and nature of family relationships, as well as general family stability and security. Given that humans are social creatures who define ourselves through our interactions with others and through our positions within our communities (Bowlby, 1969), rape and sexual assault can have a devastating impact on individual, family, and community functioning due to violations of trust and security within interpersonal relationships.

Available evidence points to increased hostility and aggression in adolescents and adult relationships of child sexual abuse survivors (Wekerle et al., 2001). In a study of over 1200 women, more severe childhood experiences of unwanted sexual intercourse and being severely beaten on more than one occasion were associated with both sexual and physical abuse in adulthood (Coid & Feder, 2001). Childhood sexual abuse has been associated with a propensity to perceive partners as uncaring and over-controlling as well as a poor quality, instability, and difficulties in intimate relationships (Mullen et al., 1994; Hill et al., 2001). In a study of 8292 families with a history of prior sexual assault, those reporting child sexual abuse reported less satisfaction and poorer communication in their current relationship. It has also been associated with teenage pregnancy and nontraditional family type (e.g., single mother and step-father) (Roberts et al., 2004).
For those children who witnessed abuse, a well-controlled study of the association between childhood witnessing of abuse and adult IPV among 1443 women seeking medical care showed a four-fold increase in risk of partner physical and sexual abuse (Coker et al., 2000). Increased rates of mental health pathology in individuals creates impairment in community functioning due to the impact on individual relationships (Reicherter & Aylward, 2011). Traumatized populations tend to have increased rates of domestic violence compared to pre-conflict rates. For example, 75% of Khmer women experienced domestic violence in the post-conflict years—an exponential increase compared to pre-war rates (Rehn & Johnson Sirleaf, 2002).

The rape of a child can has also been shown to adversely affect parents and caregivers in significant ways. Manion et al. (1996) reported on the consequences of such assaults on children and, not surprisingly, found that psychological well-being, satisfaction of being a mother, and family functioning among mothers who had a child who was raped was less when compared to mothers who did not have a child suffer from sexual abuse. Fathers experienced similar injury to their psychological well-being. The sexual assault on a child can thus serve to terrorize the parents.

3. Intergenerational Transmission of Trauma

Clinicians and physicians have long noted the presence of heightened levels of distress and psychopathology in the children of victims of trauma, even when the children themselves were not exposed to traumatic stress. Research has confirmed that parental trauma exposure corresponds with increased risk for PTSD, mood disorders, and anxiety disorders in children (Yehuda, Halligan, & Bierer, 2001; Yehuda et al., 2015) . These observations led scientists to investigate the mechanisms by which traumatic distress is transmitted intergenerationally from a traumatized (or trauma-exposed) individual to their children. Intergenerational (or trans-generational) trauma is a trauma that has been directly or indirectly passed down from one generation to another generation (Dass-Brilaford, 2007).

The concept of intergenerational trauma originally developed from the study of the Jewish Holocaust survivors and their families, resulting in a testable and verified model of the mechanisms by which the traumas experienced by Holocaust survivors' impacted the functioning and well-being of future generations of offspring (Danieli, Norris & Engdahl, 2016). Research has shown that intergenerational trauma transmission not only presents in the second generation (Grunberg & Markert, 2012) but also the third generation (Winship & Knowles, 1996). Besides the study of Holocaust survivors and their family, the study of intergenerational trauma has expanded to the experiences of other groups, such as Asian-Pacific Islanders who experienced
cultural trauma (Maren Ulriksen De Vinar, 2012) and survivors of South American Political Violence (Bith-Melander et al., 2017), among others.

In addition to the impact of trauma on parenting and family relationships (discussed above), intergenerational transmission of trauma is now also attributed to the trauma-related neurobiological and psychophysiological alterations that are passed from one generation to the next. The neurobiological alterations associated with PTSD and traumatic distress experienced by individual survivors of trauma have also been observed in their children, a finding which has been attributed to the impact of trauma exposure on the expression of an individual’s genetic code (i.e., epigenetics; Yehuda et al., 2015). Past research has demonstrated that environmental influences such as stress exposure can “reprogram” the genetic blueprint for the development of neural and biological systems in rats and mice; these changes in the blueprint are subsequently passed on to the offspring (Bale et al., 2010; Bale, 2015). These findings have more recently been translated to humans, as parental trauma exposure has been found to alter how the genes that code for the psychophysiological stress response (e.g., release of glucocorticoids) are regulated both in the trauma-exposed individuals and in their children. These findings reveal how exposure to trauma such as sexual assault and rape can alter the biology both of the individual victim and their children, providing a biological explanation for the intergenerational transmission of trauma and traumatic stress

4. The Destruction of the Survivor’s Role in the Community

One of the core symptoms of PTSD is avoidance of places where the trauma occurred or other reminders of the trauma (DSM-5). The perpetrators of rape may induce within a victim and her/his family and community a chronic psychological phenomenon so marked that they are incapable of returning to their prior home without experiencing severe mental anguish. This can lead to the disintegration of the community as survivors flee the area where they were assaulted (Bastick et al., 2007). Therefore, the territory in which the victims once lived is taken from them psychologically as well as physically (UN Security Council Resolution 1820). This, in turn, can lead to a loss of resources as a campaign of terror prevents people from gathering their possessions and basic items before they leave. This is a direct insult to the individual’s sense of safety and comfort. In Bosnia-Herzegovina, for example, where mass rape and assault in public areas led to mass relocation following the disintegration of the former Yugoslavia (Boose, 2002; Reid-Cunningham, 2008), there was an observed reluctance after the conflict ended to return to the geographic locations where the insults occurred, even though such locations were once considered home (Zalihic-Kaurin, 1994).

In addition, a survivor’s role in her community is undermined by societal responses to her status as a rape victim. For example, in some cultures, a woman’s perceived value in society can be
influenced by her virginity or “purity.” Survivors of rape can be considered to bring dishonor or humiliation to their families and communities. Research in refugee camps show that rape victims are at high risk for being ostracized by their society after they survived sexual violence; tragically, some of them consider or commit suicide for the unbearable shame and psychological pain (Friedman, 1992; Kizilhan & Noll-Hussong, 2017). Frederick names this extra psychological suffering as secondary or gratuitous psychic trauma which is survivor's response to “perceived harsh stimuli during a vulnerable period” (Frederick, 1987, pp.72). Such outcomes have a pervasive functional impact. For example, Annan et al. (2008) found that women in Uganda who were abducted (and presumably exposed to increased rates of sexual violence) demonstrate lower rates of employment than non-abductee women. Additional studies with formerly abducted women in Northern Uganda have shown that observed impairments in general functioning and performance of daily activities are related to experiences of stigmatization and poor relationships within home communities (Amone-P’Olak et al., 2016). This observed functional impact is also due to physical and psychological impairment (including pain, injury, PTSD, and depression) that affects an individual’s ability to perform basic academic or vocational functions (e.g., due to intrusive overwhelming thoughts, feelings, or memories in PTSD; or to low energy, lack of motivation, and hopelessness associated with depression).

5. Consequences of Forced Pregnancy

Women who become pregnant following incidents of rape may face the scorn of their community (Thomas, 2007; Akinsulure-Smith, 2014). The child can become a reminder of the trauma suffered by the entire community, and some have postulated that traumatized societies will reject the sexually-assaulted woman and any child she conceives because they serve as constant reminders of the harm caused to the community (Reid-Cunningham, 2008). This phenomenon was particularly prominent in Bosnia-Herzegovina. Rape camps were established where women were repeatedly raped until they became pregnant (Boose, 2002). After reaching the late stages of pregnancy, the surviving women were bussed back to their communities with the announcement that a Serbian baby would soon be born (Seifert, 1994). This led to some women being shunned, further humiliated, and in some cases killed. When the women elected to have an abortion, the majority of these abortions were preceded by suicidal thoughts (Loncar, Medved, Jovanovic, Hotujac, 2006). Likewise, at least 25,000 women were estimated to have become pregnant after being raped during the Bangladesh war of liberation. The rates of infanticide, suicide, and self-administered abortions were so dramatically increased in Bangladesh that both International Planned Parenthood and the Bangladesh Central Organization for Women’s Rehabilitation opened clinics to try to stem the time of suicide and medical complications from self-directed abortions.
Interview with Fiji’s Psychiatry Expert

Dr Odille Chang, is an Assistant Professor in Psychiatry at Fiji School of Medicine and Head of School for Medical Sciences at the Fiji National University. She was interviewed by the HRTMHP on 10th October, 2018.

She reported that the American Psychiatric Association’s DSM IV-TR is the accepted tool for assessment and mental disease categorization in Fiji. The Republic of Fiji uses DSM IV as the standard for diagnosis and assessment in clinical practice. DSM IV is the text that is used in medical school education and the education of other mental health professionals.

She reported that sexual violence causes PTSD at the same frequency in Fiji as compared with global samples. She has seen many cases of sexual violence resulting in PTSD. In these cases there is “nothing dissimilar from a standard DSM presentation.” Rape survivors in Fiji have PTSD at the same expected high rates as other (Western) samples.

She reports that sexual violence is underreported in Fiji because of stigma and shame. Often a presentation of pelvic pain in a medical setting will ultimately come to be known as PTSD from rape. There is a strong tendency for families and communities to ostracize rape victims, to the extent the survivor will most often not report. “The rape survivor may feel obliged not to create stress for the Mata Qali” (extended community) and, therefore not report the rape or the symptoms of trauma mental health.

She also reported that the symptoms of mental health disorders are often related to “curses” on the family. Fijians with trauma mental health symptoms would likely seek out a “witch doctor” (traditional healer) before they would seek psychiatric/psychological or medical treatment.

Dr. Odille Chang creates the curriculum for healthcare education in Fiji. She teaches the DSM IV as her standard for medical education. She reports that trauma mental health is similar (“the same”) in Fiji as compared with Western samples. She uses DSM for child and adult psychiatry. She reports that the “same rules apply for Fiji as for the global community that uses DSM.” Cultural nuances are not relevant in the conceptualization and practice of trauma mental health for Fijian mental health and healthcare professionals.

Victim Impact in the case of The State v Peni Vukici in the High Court of Fiji at Suva

Both victims in the case of The State v Peni Vukici in the High Court of Fiji at Suva were assessed by an expert in trauma psychiatry and interviewed by attorneys about the impact of the
crimes on their psychology and on their functional capacity. Both victims showed extensive psychological harm and functional damage. The harm was in keeping with the well understood, predicted outcomes based on the science of trauma psychiatry.

Both victims had a diagnosis of PTSD. They had suffered with PTSD throughout their childhood, adolescence and into their current adult lives. Their current PTSD Checklist Scores soaring. Both victims scores were in the 70’s where over 50 indicates PTSD and 85 is the maximum score attainable. They both demonstrated core symptoms of PTSD and were positive in each of the criteria categories. This was clear from the psychiatric evaluations and suggested by comments from their victim impact statements. Two examples from the victim impact statements follow:

“I also suffer from terrible nightmares where I would wake up yelling in the middle of the night. ” (from Esita Muailasekula Victim Impact Statement)

“I would jump at the slightest noise and would find myself feeling very fearful of anything and can get really aggressive at times. ” (from Esita Muailasekula Victim Impact Statement)

They both demonstrated severe anxiety symptoms. Example:

“I knew that if I didn’t find help I would die of worry, misery and anxiety.”
(from Vaseva Liku Nute Victim Impact Statement)

They have dissociative states. Two examples from the victim impact statements follow:

“It seemed that I was in another world lost and my whole body would feel numb at times and I was unable to complete simple tasks…” (from Esita Muailasekula Victim Impact Statement)

“Later on in life I realized I had been having continuous flashbacks where I would literally could still feel the pain of my sexual encounter with my father, which memories would flooding back and each time it happens, I would see pictures of it all clearly in my mind. ”
(from Esita Muailasekula Victim Impact Statement)

Both victims met full criteria for Major Depressive Disorder. This is a commonly associated, comorbid diagnosis described above.

The victims had chronic suicidal thoughts and behaviors. Two examples from the victim impact statements follow:
“I was constantly planning to kill myself so that I could get away from him and his sexual desires.” (from Vaseva Liku Nute Victim Impact Statement)

“I was very concerned about my safety at all times and I became suicidal and would often visualize my own self hanging from a tree using a rope. Or there were times that I had thought about jumping in front of a moving vehicle just so that I can end all the pain and misery.” (from Esita Muailasekula Victim Impact Statement)

Both victims had physical (gynecological) damage from the rapes. One of the victims had an unwanted pregnancy.

Both victims sustained their traumatic events in childhood, exploiting the vulnerabilities described in this report and predicting for worse outcomes. Example:

“I struggled with the memories of my childhood until today and I know it will forever remain with me all throughout my lifetime.” (from Esita Muailasekula Victim Impact Statement)

Functional deficits have been and continue to be present for both victims in multiple spheres of daily life. Both victims were denied education. Both victims are unable to maintain employment. Both victims have unstable personal relationships with others. Two examples from the victim impact statements follow:

“I grew up fearful, embarrassed and confused and realized too that because I had been bottling up all of these, I found it so difficult to enjoy my sexual relationship with my husband. Each time I had sex with my husband, I would always see my father’s face instead of my husband. It was something I would have to struggle with in a big part of my marriage life.” (from Esita Muailasekula Victim Impact Statement)

“Life could never be the same again and I had flashbacks every now and again. My marriage suffered a lot because when my husband would ask me to tell him who my father was, all memories would come flooding back.” (from Vaseva Liku Nute Victim Impact Statement)

The psychiatric damage and psychosocial dysfunction resulting from the crimes in the case of The State v Peni Vukici in the High Court of Fiji at Suva have left the victims to suffer chronically and severely since their childhood and ongoing. Their experience is reflective of the science and knowledge of the trauma psychiatry of rape and child rape detailed in this report.

**Prospects for Healing**
The opportunity to facilitate healing can be done both as a state response and as a community response. Too often, state-sanctioned responses to child sexual abuse can cause re-victimization through the eye-witness testimony of the victim (Whitehead & Roffee, 2016). Within the community response, the implementation of restorative justice practices can marginalize the rehabilitation of child sexual abuse survivors to restore order to the community (Whitehead & Roffee, 2016). The adoption of trauma-informed approaches within each sequence of the criminal justice system can facilitate CSA survivor safety, trustworthiness, and transparency. This promotes overall healing and restoration for the individual and the community. According to the United States Substance Abuse and Mental Health Services Administration (SAMSHA, 2013), addressing the consequences of trauma begins when there is realization of the widespread impact of trauma while understanding the potential approaches to recovery. When the justice system can recognize the signs and symptoms of trauma in those victimized by child sexual abuse, they can appropriately respond by integrating such knowledge into their policies, procedures, and practices. These processes can promote the resistance of re-traumatization. Under a trauma-informed approach, specific interventions will be able to recognize the CSA survivor’s need to be respected, informed, connected, and hopeful about their recovery (SAMSHA, 2013). The trauma-informed approach will also facilitate collaboration between key players of the justice system and CSA survivors in a manner that is empowering.

Trauma, including CSA, can affect a child’s developing brain, causing deficiencies and maladaptive behavior in multiple domains. Some of these domains include emotion regulation, concentration difficulties, identity formation, behavioral difficulties including impulse control and aggression, dissociation, and disruption of physical health. Under the umbrella of the trauma-informed approach, evidence-based, trauma-specific interventions are necessary to ameliorate the traumatic impact of child sexual abuse. One such evidenced-based intervention is called trauma-focused cognitive behavioral therapy (TF-CBT). TF-CBT was originally developed for children who have specifically experienced sexual abuse and has been found to be superior in improving symptoms of post-traumatic stress disorder, depression, social competence, behavioral problems, fears, and dissociation in children ages 3-17 (Mannarino, Cohen, & Deblinger, 2014). The components of TF-CBT utilize psychoeducation, parenting skills, relaxation skills, affective modulation skills, cognitive coping skills, trauma narrative and processing, in vivo mastery of trauma reminders, and also enhances safety and planning for the future (Mannarino et al., 2014).

Other effective individual psychosocial interventions for CSA child survivors include play therapy. Play therapy is used specifically within child survivors of CSA as a means of enhancing communication of the traumatic event and can be employed and adapted to other cognitive-behavioral approaches (Cohen, Berliner, & Mannarino, 2003). Psychodynamic and
psychoanalytic techniques can be used to resolve dysfunctional defense mechanisms, decrease resistance, and restore impaired object relations (Cohen et al., 2003). Group therapy is another trauma-informed, evidence-based intervention. Within group therapy, individual survivors of sexual abuse with similar presenting problems can create a collaborative environment that fosters empowerment and psychological well-being (Sinanan, 2015). Under the therapeutic strength of commonality, cognitive distortions are confronted and reframed with self-acceptance. The group approach compliments individual therapy, and include skills training, psychotherapeutic interventions, and psychoeducation about sexual health knowledge. Some of the treatment goals of group therapy include decreasing stigma and isolation (Cohen et al., 2003).

Other evidence-based, trauma-specific interventions consider the survivor of CSA within their family environment, which strives for community reintegration of the survivor without marginalizing their recovery and healing process. The problem of community reintegration has been found within rural iTaukei communities of Fiji (Whitehead & Roffee, 2016). Family-systems-based interventions include parent-child interaction therapy (PCIT), child and family traumatic stress intervention (CFTSI), and child parent psychotherapy (CPP). These interventions generally focus on enhancing family member cooperation, facilitate understanding of coercive behaviors, teach positive communication skills, and improve problem-solving abilities among all family members (Cohen et al., 2003).

Psychopharmacological interventions are also an appropriate treatment for CSA survivors who have developed specific symptoms that meet DSM-5 criteria of PTSD, major depressive disorder, panic disorder, as well as anxiety and behavioral disorders (Cohen et al., 2003). Medications such as selective serotonin reuptake inhibitors (SSRIs), alpha- and beta-adrenergic blocking agents, tricyclic antidepressants, anxiolytics, anticonvulsants, and antipsychotics have been found to assist survivors of CSA with clinically significant symptoms. Psychopharmacological interventions combined with trauma-specific psychological interventions have been found to be most effective in delivering treatment services.

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SUICIDE AND ATTEMPTED SUICIDE VICTIMS BY GENDER


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