

**Play as a Tool for Humanitarian Workers in Countries Experiencing Chronic Crisis**

Oliver "Sim" Similton

Spring 2023

Honors Program, State University of New York at New Paltz

## **Abstract**

Most humanitarian aid work focuses on the short-term needs of communities in crisis. Though extremely useful, this immediate care does little for communities after humanitarian workers leave the affected community. A major area of this is seen in is the psychological well-being of community members. People in countries of crisis - and chronic crisis especially - are often left completely traumatized by the events they experience. This trauma especially in young children results in dysregulation of the nervous system and are often left with “compromised social engagement, proximity seeking, and either underdeveloped or hyperdeveloped behaviors relating to their attempts to remain safe in dangerous circumstances” (Lohrsbe & Ogden, 2017). However, co-regulation of the nervous system has been reported to help this dysregulation. Co-regulation refers to the ability of our brain, as a social organ, to understand the needs of an individual based on actions seen in others

### **Play as a Tool for Humanitarian Workers in Countries Experiencing Chronic Crisis**

The current paper intends to provide an argument for the use of play as a means of regulating the nervous systems of children in countries of crisis as well as adults to help develop long-term psychological wellness in affected communities. This paper will focus on society-threatening crises, specifically ones that become humanitarian crises. These include natural disasters, man-made emergencies, and complex emergencies, that impact the affected society to an extent beyond the control of the affected people (Nitza, 2021). In writing the current paper, I found myself wondering how I could apply my interest in psychological research to the idea. I then developed a skeleton of a study—one too far-reaching to pursue during

undergrad—and that research proposal is provided at the end of the current paper. Though not crucial to the navigation of the topic at hand, said proposal offers a means of putting to use the ideas I propose in the current paper.

To outline the points made within this paper, I'll begin with the different types of communities that exist and what crisis means in terms of those definitions; the main difference in that case being the community response. I'll then move into how play is already used in communities facing crisis, followed by how that experience of crisis becomes traumatic. The current paper then tackles the role of post-traumatic play and what that looks like as opposed to play as the crisis occurs. I will then discuss how trauma is experienced within the nervous system, followed by how play is experienced by the nervous system, concluded by a proposal for a study in which these points would in theory be supported.

The Humanitarian Coalition defines a humanitarian crisis as an event or multiple events to the health or wellbeing of a large group of people, usually over a wide area. Situations become humanitarian when said event overwhelms that group's ability to withstand the negative consequences alone (Mj.proulx, 2015). To simplify, a humanitarian crisis is an event that severely impacts a group of people to an extent that said group of people cannot control the emergency at hand without outside help. These emergencies and crises happen most often within vulnerable communities. Humanitarian crises can fit into three distinct categories, defined as: natural disasters, man-made emergencies, and complex emergencies, which include extensive violence and/or loss, displacement, societal and economic damage, and a lack of much needed aid (Mj.porolux, 2015).

Crisis can happen to any group of people. However, the aforementioned crises are most

commonly seen in what The Humanitarian Coalition refers to as “vulnerable” populations.

Vulnerability in communities such as those at “a reduced capacity... to resist and recover from life-threatening hazards... is most often connected to poverty” (Mj.proulx, 2015). Because of this increased risk in vulnerable communities, oftentimes they experience multiple crises at once, or endure a number of crises over extended periods of time. This concept is known as “chronic crisis”

Communities experiencing crisis face a number of struggles after the crisis begins. Short term effects include death due to the impacts of the crisis, displacement, lack of resources, public unrest, short-term mental health concerns, abrupt societal role changes, and illness. Long-term effects of a crisis include cultural shifts related to generational trauma, generational poverty, role shifts, and feelings of rejection from outside communities. Individuals in the wake of crisis may experience vulnerability, suicidal ideation, feelings of grief, forms of post-traumatic stress disorder (PTSD) or other trauma disorders, poverty, loss of loved ones, and inherent mistrust of others (Grillet, 2019; Thurman, 2008; Macrow, 2006).

Individuals and communities experiencing crisis both, however, live in a near-constant state of unrest and “unsettled contexts” (Holzer, 2014). Many psychologists refer to this state as living in survival mode because of its impact on the nervous system. A community facing crisis may feel a communal lack of safety. In extreme cases, this results in a catastrophic shift in the balance between the amygdala and the medial prefrontal cortex (which act similarly to a trauma smoke detector and watchtower respectively) leading to an inability to control emotions and impulses (Van der Kolk, 2015). The chaos of crisis infiltrates even the most

mundane activities of life resulting in them triggering the nervous system, even after the foreseen danger has been handled and the eventual dysregulation of the nervous system.

## **Community Values and Crisis**

### **Individualistic vs Collectivistic Communities**

In terms of the differences of values, one can group society into two types of communities: Individualistic and Collectivistic. Individualistic communities such as the United States, place relatively little importance on community response in the case of community affecting trauma. Self-reliance is highly valued in individualistic communities (Greif,2021) However, in collectivistic communities, the focus is placed on the larger group before individuals. For example, the response of women in the Democratic Republic of the Congo in a particular time of need. The Congo would be considered a country facing chronic crisis due to the frequency of crises they face and the nature of those crises. Crises of health, nutrition, water, sanitation, and hygiene are compounded by the rippling impacts of historical events ultimately resulting in the country needing help from outside sources due to insufficient resources to solve the issue internally-- defining features of chronic crisis in need of humanitarian response. The community has responded to these crises internally in a manner that showcases the collectivist mindset of the culture. During an epidemic of sexual assault in 2007, victims of assault were being provided food and resources by humanitarian groups. To combat the lack of money and resources at their disposal, many women claimed to have been assaulted to provide for their community. What makes this a very clear case of a collectivist

community is the culture's extremely negative response to sexual assault victims. Those who claimed to be victims put their lives and standings at risk to provide for the community. In the more individualistic United States, the response to collective need would more likely be met with the enforcement of providing for oneself.

In thinking about how these differences in societies can be formed, we must look at history. One can find these two distinct types of communities as far back as the Genoese and Maghribi between the 8<sup>th</sup> and 11<sup>th</sup> centuries (Greif, 202). The Maghribs utilized a collectivist equilibrium in trading and the Genoese, an individualistic equilibrium. Why is this the case? Greif explains that this was because of the values taught to the individual communities. He writes, "[the Maghribs followed the] idea that 'All Israel is responsible for every member'" (Greif, 2021). He follows this with an explanation of the migration practices of the Maghribi, which allowed them to "transmit the information required to support a collectivist equilibrium." This differs from the Genoese people greatly because of the time in which the community existed. The Maghribs existed before Christianity whereas the Genoese existed while Christianity was taking off.

Therefore, they followed a "new society based not on the family but on the individual, whose salvation...was personal and private" (Grief, 2021). This further solidifies the difference between individualist and collectivist communities and by doing so, explains why these differences exist. However, the reasoning behind this difference is cultural. The traumatic events faced by non-western countries are viewed as affecting the larger community whereas in western cultures, traumatic events are seen as something one must endure alone. Having the root difference of culture in mind to differentiate between collectivist and individualist

communities, one can look at how communities then respond to traumatic events. According to a study led by Craig D. Park and Ahn D. Vu, when asked to participate in a game together, members of more collectivist communities were much more cooperative than those who were a part of individualist communities. This can be translated to responses to crisis and traumatic events.

### **Community Response to Crisis**

It is not uncommon for both individualist and collectivist communities to respond to crisis and trauma with religion and spirituality. This response, though seemingly unrelated to play, must be fully understood to understand the mores and values of a community. These community values are then exhibited in play as children attempt to make sense of the world around them. For example, according to Jean-Charles in a lecture to students in a humanitarian psychology course (2019), many Haitians turn to spirituality, faith, and religion. This is not an uncommon response to trauma; Lord et al. (2003) write specifically about the use of Hinduism, Buddhism, Christianity, Judaism, and Islam:

Spiritual reactions to natural disasters, such as earthquakes, tornadoes, and hurricanes, often referred to as 'acts of God,' differ from reactions to human-made trauma. When death, injury, and, destruction, are intentional, as in the Holocaust, Pearl Harbor, the Oklahoma City bombing, and the 9/11 tragedy, the sense of security of a large group of people is shattered (Clinebell, 2002), Survivors ponder the existence of God, Injustice, and evil. his terrifying awareness of human vulnerability triggers widespread anxiety, depression, and post-traumatic stress (Lord et. al., 2003).

The authors then continue to discuss the role of religion and spirituality after these public tragedies. In describing the difference among these five religions, it becomes increasingly clear that western and eastern religions discuss grief and loss quite differently. Individual and collective tendencies formed partially due to the religions in existence when the communities in question formed (Greif, 2021). However, we can also look at how religions are shaped in response to crisis. For example, eastern religions such as Buddhism place a large emphasis on pain and suffering being a necessary and unavoidable part of life. It is believed that individuals are reincarnated until they “acquire wisdom, practice compassion, do good acts, achieve control over mind and body, and purify their negative karma” (Lord et. al, 2003). A similar belief exists in Hinduism, where individuals are reincarnated until they eventually reach enlightenment. Both religions believe in karma, a way in which the universe punishes people for their misdeeds. Most importantly, both religions welcome grief and suffering. Many of the cultures that participate in these religions are communities that have been greatly impacted by chronic crises. Because of this, it would make sense for these communities to focus on accepting suffering and traumatic events. In fact, Dialectical Behavior Therapy is rooted in Buddhist practices. This form of therapy is well known for its “two things can be true at once” mentality and similar coping techniques that are very valuable in the treatment of traumatized clients (Brown et al, 2007).

For these reasons, it has also been found that children and adults who practice Hinduism and Buddhism cope with trauma better than those who practice other more western religions such as Christianity. Christianity is rooted in the exact opposite. They explain that humans fall short of the demands of one ultimate god and if they repent for these



shortcomings, that god will take away their suffering. Instead of emphasizing accepting negative events and working through them, the focus falls on an outer being handling trauma for an individual but it is on the individual to repent and give reason for this suffering to be relieved (Lord et. al, 2003). This is similar to Judaism's focus on the work of the individual however, they believe that their ultimate god is indifferent to suffering, meaning in that regard, their beliefs fall closer to that of Hinduism and Buddhism. In Islam, it is explained that followers must live each day as though they will live forever while also living each day as though it is their last (Lord et. al, 2003). They are also expected to develop a society that is just. Specifically, the Qur'an exploitation of marginalized groups and denounces economic abuse (Lord et. al, 2003). Despite not being explained as having a focus on acceptance of suffering, it is explained as a religion with a focus on creating community and alleviating the suffering of the community you are a part of, as well as not adding to the suffering of those around you (Lord et. al, 2003).

From these descriptions, we can see that a large difference in these religions is their ideas surrounding suffering. It is also clear from where these religions are practiced that their beliefs, specifically those surrounding suffering, are rooted in the histories of the regions in question. In the eastern world we see large amounts of long term suffering and conflict. Asia's history of division, war, and instability resulted in large amounts of suffering, thus giving reason to emphasize the necessity of suffering in life. Africa's forced division, internal warfare, lack of resources, and infantilization from the western world gives clear reason for a religion based on not worsening the suffering of others while still hoping for its eventual alleviation. Inner conflict, antisemitism, and historical trauma would explain the idea of an apathetic god and acceptance of suffering in Judaism as well. The western world's focus on individual triumph and

history of ignoring the needs of the many in order to grant the wishes of the few gives possible reasoning for religion based on ignoring and moving past suffering as well as individualized salvation.

Communities affected by crisis on a constant basis are said to be enduring chronic crisis- multiple crises compounded by one another over an extended period of time. This ongoing crisis can be so consistent that it can result in trauma responses, lead to effects seen across generations, and can change the culture of the community affected. Many individuals show signs of slight to extreme trauma despite not being a part of the impacted generation, after the crisis in question. This is especially true in the case of chronic crisis that spans across multiple generations, resulting in complex trauma and stress throughout the population. Cultural changes can be seen most clearly in the core beliefs of the society affected, such as religion and community values. This then results in a culture based around the shared experience of chronic crisis. One can see these trans-generational effects in the behavior of children and younger generations.

### **Play's Current Use in Countries of Crisis**

Play is thought to have a number of effects on social and emotional development and historically permeates even the most dire situations.- Games as simple as baseball teach children that the “equality of play is not the equality of sameness, but the equality that comes from granting equal validity to the unique needs and wishes of every player”, “rules are modifiable”, “conflicts are settled by argument, negotiation, and compromise”, “there’s no real difference between teams”, and that “playing well is more important than winning” (Gray,

2013). Sociodramatic play allows children to see and experience models of the society they exist in.

Not only do children still manage to play despite their circumstances, they adapt the play based on the situations they find themselves in. In order to further solidify the use of play in crises, we can look at countries facing crisis on a regular basis and the use of play by those involved. From a historical perspective, we can look to play's use during the holocaust. As an example, many Jewish children played games in which they defeated Nazi soldiers, games in which they practiced lying to protect themselves, and more. In present day Ukraine, we see children's games focus on hiding and seeking cover (Lavender, 2022). In South America, we see countries such as Chile and Venezuela facing poverty, uprooted political systems, extreme hunger, and high child mortality rates. Play in South American countries is known to be largely community based in which all of the children are sent outside to play together (Gosso, Resende, & Carvalho, 2019). This teaches reliance on community members for aid as well as a complex understanding of the surrounding area from a young age. Play also allows children to maintain the normalcy associated with social interaction, which has been noted to have a positive impact on the nervous system.

### **Post-Traumatic Play and the Effect of Play on Child Development**

Research on posttraumatic play previously suggested that traumatized children will engage in less play than their neurotypical peers. However, a study in 2010 (E. Cohen et al) showed that this was not at all the case, and points me towards my thesis, play could potentially be useful for traumatized children. <sup>(OBJ)</sup>The research goes to the extent of saying "The evidence from this

study, demonstrating the ability of young victims of terror to process traumatic events, using their on powers of imagination, narrative creation, and soothing, is an important contribution to acknowledging children's natural resilience and the curative function of spontaneous play" as well as noting the "creative ways used by the children to soothe and regulate affect while processing traumatic materials" (E. Cohen et al., 2010).

### **From Crisis to Trauma**

On an individual level, when crisis of any form occurs trauma is quick to follow. This can take the form acute trauma, chronic trauma, secondary or vicarious trauma, adverse childhood experiences, or complex trauma. Psychology Today describes acute trauma as intense distress in the immediate aftermath of a traumatic event; chronic trauma as trauma from harmful repeated events; secondary or vicarious trauma as trauma that arises from exposure to the trauma of others; adverse childhood experiences as "a wide range of difficult situations that children either directly face or witness while growing up"; and complex trauma as that which "arise[s] from experiencing repeated or multiple traumatic events from which there is no possibility of escape" (Sussex Publishers).

In *Trauma and Recovery*, Judith Herman talks about trauma and post-traumatic stress from sexual assault in women and children as well as in veterans (Herman, 1992). She explains that regardless of the exact traumatic experiences, the symptoms experienced by traumatized individuals remain the same. She writes that these symptoms fall into three categories, "'hyperarousal,' 'intrusion,' and 'constriction.'" Hyperarousal reflects the persistent expectation of danger; intrusion reflects the indelible imprint of the traumatic moment;

constriction reflects the numbing response of surrender” (Herman, 1992). Hyperarousal acts as a constant alarm system going off in the brain of a traumatized individual. Intrusion is the symptom that is responsible for flashbacks and nightmares. Constriction is responsible for what is known as the “freeze” response, or a complete shut-down of the brains defense system (Herman, 1992).

When crisis and more specifically chronic crisis occurs, communities can be-- and usually are-- bombarded by loss of loved ones, faith, ability, housing, sense of safety, control, and more. Herman explains that “witnessing the death of a family member is one of the events most likely to leave the survivor with an intractable, long-lasting traumatic syndrome” (Herman, 1992). The witnessing of death and experience of loss is extremely common in crisis, and as explained by Herman, this can result in “long-lasting traumatic syndrome.” This intense and possibly repeated loss can result in what John Wilson, Borris Droždek, and Silvana Turkovic cover in their “Post Traumatic Stress and Guilt.” This combination of trauma surrounding the event and surrounding survival of said event, as well as the trauma of loss can result in the development of Post Traumatic Stress Disorder (PTSD) as well. Wilson, Droždek, and Turkovic explain,

“Posttraumatic shame and guilt have consequences for proneness to PTSD, suicidality, ego defensiveness, psychopathology, and other aspects of psychosocial functioning.

Posttraumatic shame and guilt exist whether or not there are degrees of pre traumatic ego vulnerability including self-pathologies and narcissistic shame” (Morrison, 1990).

Posttraumatic shame and guilt can be coupled with a broad range of affects (including pre existing shame and guilt) to form complex states of intrapsychic tension as part of PTSD,

depression, generalized anxiety disorder, psychosis, and substance use disorders. In some cases, states of posttraumatic shame and guilt form the pathological nucleus of simple and complex PTSD (Wilson, 2004)" (Wilson et al. 2006).

To combat the possible development of PTSD or other negative long-term effects of traumatic events, psychologists and traumatologists have narrowed our needs post-trauma to five main ones: the reinstatement of calm, efficacy, connectedness, safety, and help. However, in the case of chronic crisis there is not always time to attend to these needs, sometimes resulting in a higher possibility of trauma response: the response to the overwhelming of "the ordinary systems of care that give people a sense of control, connection, and meaning" (Herman, 1992).

The concept of complex PTSD (C-PTSD, as mentioned by Wilson, Drozdek and Turkovic) is a relatively new concept and diagnosis suggested by Judith Herman in 1988 as a description of the effects of long-term trauma (Jack, 2021). According to Clarie Jack, C-PTSD "can be caused by any ongoing-trauma-- such as domestic abuse or living in a war zone-- it is most often associated with trauma which has occurred in childhood. The obvious childhood traumas are physical and sexual abuse and emotional neglect" (Jack, 2021). In the case of chronic crisis, the crises occurring take place over multiple generations resulting in a large number of the population being exposed to traumatic events, whether that be from being exposed to the crisis itself or second-hand exposure. The criteria for complex PTSD demands that the individual in question be exposed to multiple traumatic events consecutively over an extended period of time, a definition that is similar to that of chronic crisis. Because of this connection, children and adolescents that grow up in communities facing chronic crisis are

more likely to not only develop trauma disorders in general but are also more likely to develop complex post-traumatic stress disorder.

### **Trauma in Communities**

When a community collectively faces a chronic crisis, the community can suffer from the effects the trauma causes. Judith Herman explains this quite clearly in stating, “Studies of war and natural disasters have documented a ‘dose-response curves,’ whereby the greater the exposure to traumatic events, the greater the percentage of population with symptoms of post-traumatic stress disorder” (Herman, 1992). For example, in countries such as Haiti, it is very clear that the community is being bombarded with crisis after crisis. According to Wismick Jean-Charles explains the pre-disaster of history in Haiti, “...During the Duvalier dynasty (1957-1986), severe human rights abuses were documented. When, in 1986, [he] was forced to leave the country, political instability continued...To this day, death threats, murders, armed robberies, home break-ins, car-jackings, and kidnappings are not uncommon” (Jean-Charles, 2021). He also explains that natural disasters such as hurricanes in 1954, 1963, 1966, 1980, 1988, 1994, 1998, 2004, and 2010 ravaged the country as well as cyclones, floods, and earthquakes yet still have “no clear disaster preparedness programs, or local first responders who have specialized training and proper equipment” (Jean-Charles, 2021). This is a very clear-cut case of chronic crisis in a community that can result in collective trauma. This point is further explained by Herman, who writes, “studies of war and natural disasters have documented a ‘dose response curve,’ whereby the greater the exposure to traumatic events, the greater the percentage of the population with symptoms of post-traumatic stress disorder”

(Herman, 1992). However, different communities have different values and thus, respond to traumatic experiences quite differently.

### **Impact of Trauma on the Nervous System**

The autonomic nervous system is divided into the sympathetic and parasympathetic systems. These systems work together to regulate our bodily responses to the world around us, in the case of trauma, they regulate our response to traumatic experiences and triggers. When the nervous system is thrust into a situation of constant fight-or-flight response, it moves from a stable and regulated state to one of dysregulation. Dysregulation can lead to “Imbalances in cardiac, enteric, motor and respiratory systems resulting in an autonomic crisis” (Singh & Santosh, 2018). These effects are beyond the scope of humanitarian aid workers.

Unfortunately, not only do most aid organizations lack the funds to focus on long term psychological care but too much interaction and enforcement from aid workers can be even more detrimental to those affected.

A form of western therapy designed specifically to aid in the re-regulation of the nervous system, somatic experiencing therapy, may provide a useful framework to begin solving the aforementioned issue. Van der Kolk (2015) explains that when the nervous system is threatened over long periods of time, the response of the nervous system leads to bodily systems functioning as though in a constant state fight-or-flight. In cases of chronic crises, many people are left with these long-term bodily effects. Somatic counseling looks to move the nervous system towards a more regulated state which will allow the client more control of their bodily functions, i.e., stress, trauma responses, etc..



Somatic therapy also incorporates co-regulation. According to Ariel Schwartz, “the concept of co-regulation, also called mutual regulation or social affect regulation, can be defined as the way in which one person’s autonomic nervous system sensitively interacts with another person’s autonomic nervous system in a way that facilitates greater emotional balance and physical health” (Schwartz, 2018). It is my theory, that this co-regulation can and often does exist in the realm of play.

### **Social Interaction in the Nervous System**

In children specifically, when enduring recurring fear, neglect, maltreatment, or violation in their place of living, they endure “prolonged periods of dysregulation, often without support or assistance” (Lohrasbe & Ogden, 2017). These periods of long-term dysregulation have been found to lead to failure to develop adequate arousal and affect regulatory mechanisms, which leaves them with compromised social engagement, proximity seeking, and either underdeveloped or hyperdeveloped behaviors” surrounding their attempts to create safety in dangerous situations” (Lohrasbe & Ogden, 2017). Neurologically speaking, this exposure can lead to the shrinking of the hippocampus (responsible for the formation and storage of memories) and prefrontal cortex (responsible for attention and impulse control), as well as negative effects on speech development. Inconsistencies in parent behavior, often due to their own traumatic childhood experiences, also become sources of distress for their children.

In studies of displaced children, researchers find that social interactions with peers can promote resilience (Schwartz et. al, 2021). Resilience is defined as a person’s ability to be unaffected by traumatic experiences. The Community Resilience Model explains that resilience

can be seen within communities based on psychological measures and bodily responses (Community Resiliency Model, 2022).

Interactions between peers and reciprocated friendships are known to create space for “warmth, intimate communication, sharing and concern” (Schwartz et. al, 2010). Humanitarian crises including economic/political turmoil, climate crises, war, and natural disasters have led to a drastic increase in levels of forced migration and a decrease in time devoted to typical developmental processes such as the development of friendships. These difficulties have been known to lead to “enduring dysregulation” that can continue into adulthood. However, research suggests that if these same children are given more opportunities to play with peers and experience that acceptance, they experience greater psychological resilience.

According to the Modulation model, when emotionally dysregulated children are exposed to healthy social interactions in a state between hyperarousal and hyperarousal, known as the Window of Tolerance, they can experience a healthily broad range of emotions and coregulation of the nervous system via mirror neurons and the vagal and ventral vagal parasympathetic nervous system. This idea of coregulation is used in what is known as sensorimotor psychotherapy. The same basic structure can be seen in social interactions between children and forms of play.

### **Conclusion**

From our understanding of the impact of social interactions impact on the nervous system and play’s existence as social interaction, it is my belief that play can be used to regulate the nervous system. Future research may look to ask about how play can be used in crisis to

help regulate adult nervous systems, since many countries that experience humanitarian crises experience them on a chronic basis, thus having a more transgenerational impact. This research could start with the use of play in children after crisis being studied and documented. If useful, the play should continue to be engrained in the society as pivotal to mental well being during crisis/chronic crisis. More regulated nervous systems in children should lead to more regulated nervous system adults.

### **Large Scale Effects of Trauma**

With all the different responses of trauma in mind, how do they interact when chronic crisis occurs? How do communities react? Wilson, Droždek, and Turkovic briefly mention the concept of “complex PTSD,” a new concept and diagnosis suggested by Judith Herman in 1988 as a description of the effects of long term trauma (Jack, 2021). Jack (2021) explains that C-PTSD “can be caused by any ongoing-trauma—such as domestic abuse or living in a war zone—it is most often associated with trauma which has occurred in childhood” (Jack, 2021).

In the case of chronic crisis, the crises occurring take place over multiple generations resulting in a large number of children being exposed to trauma. Whether this trauma be acute, complex, intergenerational, historical, or otherwise, these children then grow into the adults of the next generation of the affected community. This generally results in each subsequent generation being traumatized, especially considering the lack of mental health aid in vulnerable communities often affected by chronic crisis. For example, when explaining this concept in

reference to the trauma faced by Native Americans, Sheffield notes that historical traumas such as the loss of land and sovereignty, coupled with various governmental practices and long-term genocide “systematically [attack] the core of identity—language and the family” (61). This conjunction of colonial-historical trauma can be the most damaging in that it works to dissociate individuals from the very things that could help them confront such traumas: memory and the community. Being separated from a strong indigenous foundation for the construction of identity, these individuals often have nowhere to turn except to the very settler society that seeks to reconstruct them as problematic tropes like the “savage” or “dying breed” (Sheffield 2011). In the case of Native Americans, we see another clear case of chronic crisis. One of the largest portions of this chronic crisis is historical and intergenerational trauma. These forms of trauma trickle down throughout a community for years after the initial traumatic event. In Sheffield’s work, she explains the extent to which this historical trauma affects the community. This occurs in any community affected by historical trauma: the Jewish community, the queer community, the Black community, etc.. This results in intergenerational trauma, trauma that spans across generations.

These traumatized adults have permanently altered brains due to their trauma and according to Bessel Van Der Kolk’s *The Body Keeps the Score*, the workings of their body as a whole can be permanently altered. For example, Van Der Kolk references a drawing by Licia Sky that shows the effects of trauma on the nervous system, explaining that “[a]fter trauma the survivor’s energy now becomes focused on suppressing inner chaos... These attempts to maintain control over unbearable physiological reactions can result in a full range of physical symptoms, including fibromyalgia, chronic fatigue, and other autoimmune diseases” (Van Der

Kolk, 2014). According to the referenced drawing, trauma can affect facial muscles, the thyroid, the respiratory system's inner workings, the digestive system's inner workings, and the endocrine system. This idea of bodily effects of trauma is later shown in Van Der Kolk's work when he references the differences in heart rate variability between a well-regulated client and one with PTSD (Van Der Kolk, 2014). It is very clear that trauma affects the body as a whole. In fact, further evidence has shown that trauma may alter genetics and can be passed through generations. Michael Ungar writes,

Deprived monkeys (traumatized) may show differences in brain structure and function, and even pass these differences along to their offspring through nongenetic mechanisms, but it remains the quality of the environment after the trauma of separation that determines how well individual animals cope. This pattern, mirrored in human studies, suggests that more of the variance in coping across a population can be predicted by assessment of the environment than the individual (Ungar, 2013).

Thus, the community never truly escapes the trauma it has endured, resulting in cultural changes due to said trauma. These changes include religion, education, gender roles, economics, and many more. This idea in epigenetics, though new, could have large impacts in future conversations about how trauma affects individuals and communities. It also further supports the idea that traumatic events such as chronic crises in communities can have long lasting effects that lead to shifts in culture.

### **A Possible Future Study**

Considering my goals after college include pursuing a career in research, no thesis would be complete without at least a section on possible research directions. In writing the current paper I found myself developing the skeleton of a study that would in theory provide support for what I've written thus far.

The intended study looks to support the idea of pretend play (also known as imaginary play in which the players assign themselves alternative roles, personalities, traits, and personas and work together towards a common task or goal) as a method of reregulating the nervous system of adolescents living in countries facing chronic crisis. Participants will play through an 11-meeting campaign of Dungeons and Dragons. The adolescents will spend the first session creating their characters. There will be four parties, groups of players, in order to look for possible trends. Expected results include lower average heart rate, an increased sense of agency, and the development of a play community. These three outcomes will provide a groundwork for feelings of safety and regulation of the nervous system. Thus, providing opportunity for adolescents to receive care but also for a generation of adults with knowledge of how to use play as a means of regulation. A humanitarian worker will be playing the role of Dungeon Master and will guide the players through a set story. However, it may be more useful to have a trained community member act as the Dungeon Master. A secondary study will ask parents of the players about the use of play in their childhoods and about its possible use in the life of a child living through chronic crises- hear how adults who have likely also grown up experiencing chronic crises perceive the use of play as a means of support.

Why not just therapy?

It is my belief that western psychology cannot and should not be used as a means of supporting individuals who are not a part of western culture. Our practices are modeled on a client in western society, which cannot be assumed to be the case of all people. Secondly, there is a stigma that follows the word therapy especially in non-western cultures. Therapy is often seen as something only meant for “crazy” people or can be seen as a selfish act altogether. For these reasons, play may be an indirect method of care. A third reason for not focusing on implementing therapy is the fact it is not always sustainable in the cases of countries facing crisis. According to the American Psychology Association, approximately 33% of countries are listed as not having any licensed psychologists. Since so few psychologists are available, implementing long term therapy would be very difficult and would result in the therapy likely coming from individuals who lack the cultural understanding necessary to establish rapport with clients and provide accurate care.

### Why Dungeons and Dragons?

In addition to its roots in fantasy and otherworld building, Dungeons and Dragons would provide the structure for imagination to flourish. Dungeons and Dragons features a complex set of rules for the way the game is played, how a character is created, how enemies are defined, game mechanics, and even pre-developed characters and worlds to play within. Dungeons and Dragons also allows characters to create entire worlds and plotlines to envelope whatever kind of “campaign” the players decide to play in.

One of many tabletop role-playing games (TRPG's), Dungeons and Dragons allows players the combination of rigidity and flexibility to make whatever story they'd like to play within a reality.

This combination provides makes the game entertaining but not too difficult for a child between the ages of 10 and 15, adolescents who have less resilience than their younger peers and less coping strategies than their older counterparts. Dungeons and Dragons includes a “Dungeon Master” (DM) who creates, manages, and enforces the rules of the game. A DM does not need to be a trained professional or therapist, it can be anyone who is willing to take on the role. In the case of the current study, the DM will be responsible for keeping the group of players on track.

Dungeons and Dragons includes combat, character growth, and strategy. This game takes advantage of the perks of fantasy play and allows the players agency that other games may lack. Players decide how they proceed when met with obstacles, foes, and allies; all decisions children in countries facing chronic crisis often get to make. Another strength of Dungeons and Dragons is the freedom for players to work through low stake versions of real conflict. Food rationing, destruction, death, illness, and corruption are often features of a campaign and often circumstances children in countries facing chronic crisis have experienced. In conjunction, Dungeons and Dragons is a game that can be played over and over with new Dm’s and new players. Because of this, it can be passed on as children grow.

#### Intended method

There will be a minimum of four parties, each with four players. The parties will participate in an 11-meeting campaign of Dungeons and Dragons (D&D). Pulse rates will be measured before, in the middle, and at the end of each session as a method of operationalizing the impacts of trauma (heightened arousal).



## Exclusions

Participants will be tested to ensure they have a typical heart rate. It could be potentially useful to have participants speak with a psychiatrist at the beginning and end of each play session as well as at the beginning and ending of the study. Cortisol level tests could potentially produce interesting findings as well.

## Limitations

The current study utilizes a small sample size which could result in the data not being generalizable. Secondly, the intended procedure will not account for differences in the day to day lives of participants. Confounding variables such as time, other socioemotional relationships, and other individual differences could potentially result in type I error.

## Conclusion

Chronic crisis in communities can lead to trauma both in individuals and in the community as a whole. This trauma can become intergenerational or even genetic and can cause long lasting cultural shifts in the affected community. However, this idea leads to a number of new questions. How can humanitarian aids, psychosocial supports, psychologists, and researchers use what we know about chronic crisis and complex trauma to help afflicted communities? How can we heal from trauma that changes the way entire communities view the world? And most importantly, should support be focused on healing, acceptance, or moving forward.



## References

Religions - The World Factbook (cia.gov) Aldrich, D. P., Kolade, O., McMahon, K., & Smith, R. (2021).

Barry, S. A., Rabkin, A. N., Olezeski, C. L., Rivers, A. J., & Gordis, E. B. (2015). Relation between aggression exposure in adolescence and adult posttraumatic stress symptoms: Moderating role of the parasympathetic nervous system. *Physiology & Behavior*, *141*, 97–102. <https://doi.org/10.1016/j.physbeh.2015.01.006>

Chazan, S., & Cohen, E. (2010). Adaptive and defensive strategies in post-traumatic play of young children exposed to violent attacks. *Journal of Child Psychotherapy*, *36*(2), 133–151. <https://doi.org/10.1080/0075417X.2010.495024>

*Children's social and emotional development starts with co-regulation*. NICHQ. (2019, April 24). Retrieved May 12, 2022, from <https://www.nichq.org/insight/childrens-social-and-emotional-development-starts-co-regulation>

Cohen, E., Chazan, S., Lerner, M., & Maimon, E. (2010). Posttraumatic play in young children exposed to terrorism: An empirical study. *Infant Mental Health Journal*, *31*(2), 159–181. <https://doi.org/10.1002/imhj.20250>

*Community resiliency model (CRM)*®. Trauma Resource Institute. (n.d.). Retrieved May 12, 2022, from <https://www.traumaresourceinstitute.com/crm>

Darnell, S.C. (2012). *Sport for Development and Peace: A Critical Sociology* (Globalizing Sport Studies). London: Bloomsbury Academic. Retrieved May 12, 2022, from <http://dx.doi.org/10.5040/9781849665896>

- Gathara, P. (2020, July 3). What makes a 'humanitarian crisis'? Humanitarian Crises News | Al Jazeera. <https://www.aljazeera.com/opinions/2020/7/3/what-makes-a-humanitarian-crisis/>.
- Gosso, Y., Resende, B., & Carvalho, A. (n.d.). Play in South American Indigenous Children. In (pp. 322-342). doi:10.1017/9781108131384.018
- Gray, P. (2015). *Free to learn: Why unleashing the instinct to play will make our children happier, more self-reliant, and better students for life*. Basic Books.
- Greif, A. (1994). Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies. *Journal of Political Economy*, 102(5), 912-950. Retrieved May 2, 2021, from <http://www.jstor.org/stable/2138652>
- Grillet, M. E., Hernández-Villena, J. V., Llewellyn, M. S., Paniz-Mondolfi, A. E., Tami, A., Vincenti-Gonzalez, M. F., Marquez, M., Mogollon-Mendoza, A. C., Hernandez-Pereira, C. E., Plaza-Morr, J. D., Blohm, G., Grijalva, M. J., Costales, J. A., Ferguson, H. M., Schwabl, P., Hernandez-Castro, L. E., Lamberton, P. H. L., Streicker, D. G., Haydon, D. T., ... Alarcón-de Noya, B. (2019). Venezuela's humanitarian crisis, resurgence of vector-borne diseases, and implications for spillover in the region. *The Lancet Infectious Diseases*, 19(5), e149–e161. [https://doi.org/10.1016/S1473-3099\(18\)30757-6](https://doi.org/10.1016/S1473-3099(18)30757-6)
- Herman, J. L. (1992). *Trauma and recovery: the aftermath of violence, from domestic abuse to political terror*. Basic Books.
- Hill, R. A. (2021, November). *Send-in-the-clowns*. University of Bergen.
- Holzer, E. (2014). Humanitarian Crisis as Everyday Life. *Sociological Forum*, 29(4), 851–872. <https://doi.org/10.1111/socf.12123>

Humanitarian Crises. *Journal of Refugee Studies*, 34(2), 1787–1809.

<https://doi.org/10.1093/jrs/feaa001>

Iyadurai, L., Blackwell, S. E., Meiser-Stedman, R., Watson, P. C., Bonsall, M. B., Geddes, J.

R., Nobre, A. C., & Holmes, E. A. (2018). Preventing intrusive memories after trauma via a brief intervention involving Tetris computer game play in the emergency department: A proof-of-concept randomized controlled trial. *Molecular Psychiatry*, 23(3), 674–682.

<https://doi.org/10.1038/mp.2017.23>

Jack, C. (2021, January 5). The link Between NARCISSISTIC mothers and CPTSD.

<https://www.psychologytoday.com/intl/blog/women-autism-spectrum-disorder/202101/the-link-between-narcissistic-mothers-and-cptsd>.

Jean-Charles, W. (2021, February). Disaster Mental Health Response Experience in the Context of Haiti: Models of Interventions. Lecture.

Jung, E., & Han, S. (2019). Play in societies influenced by Confucian values. In P. K. Smith & J. L. Roopnarine (Eds.), *The Cambridge handbook of play: Developmental and disciplinary perspectives* (pp. 343–358). Cambridge University Press.

Kidd, B. (2008a). A new social movement: Sport for development and peace. *Sport in*

*Society*, 11(4), 370–380. <https://doi.org/10.1080/17430430802019268>

Lohrasbe, R. S., & Ogden, P. (2017). Somatic Resources: Sensorimotor Psychotherapy Approach to Stabilising Arousal in Child and Family Treatment. *Australian and New Zealand*

*Journal of Family Therapy*, 38(4), 573–581. <https://doi.org/10.1002/anzf.1270>

Lord, J. H., Hook, M., English, S., & Doka, K. (2003). Different Faiths, Different Perceptions of Public Tragedy. In M. Lattanzi-Licht (Ed.), *Living with Grief: Coping with Public Tragedy* (1st ed., pp. 91–107). essay, Routledge.

Maynard, D., Rodriguez, K., DeBonis, A. M., Moquin, A., & Paras, T. (2022). *Changes in the play lives of college students during the early COVID-19 pandemic lockdown. The Journal of Play in Adulthood*, <https://doi.org/10.5920/jpa.971>

Mj.proulx. (2015, May 6). What Is a Humanitarian Emergency? Mj.proulx.

<https://www.humanitariancoalition.ca/what-is-a-humanitarian-emergency#:~:text=A%20humanitarian%20emergency%20is%20an,usually%20over%20a%20wide%20area>.

Myers, C. E. (2008). Development of the Trauma Play Scale: Comparison of children manifesting a history of interpersonal trauma with a normative sample (Order No. 3352117). Available from ProQuest Central Essentials. (304538015).

<https://libdatabase.newpaltz.edu/login?url=https://www.proquest.com/dissertations-theses/development-trauma-play-scale-comparison-children/docview/304538015/se-2>

Parks, C., & Vu, A. (1994). Social Dilemma Behavior of Individuals from Highly Individualist and Collectivist Cultures. *The Journal of Conflict Resolution*, 38(4), 708-718. from <http://www.jstor.org/stable/174336>

Schwartz, A., & Schwartz, A. (2019, December 17). *Connection and co-regulation in psychotherapy: Dr. Arielle Schwartz*. Arielle Schwartz, PhD. Retrieved May 12, 2022, from <https://drarielleschwartz.com/connection-co-regulation-psychotherapy-dr-arielle-schwartz/#.Yn1E0ujMLrc>

Schwartz, D., Ryjova, Y., Kelleghan, A. R., & Fritz, H. (2021). The refugee crisis and peer relationships during childhood and adolescence. *Journal of Applied Developmental Psychology, 74*, 101263.

<https://doi.org/10.1016/j.appdev.2021.101263>

Sheffield, Carrie Louise. (2011). Native American Hip-Hop and Historical Trauma: Surviving and Healing Trauma on the “Rez”. *Studies in American Indian Literatures, 23*(3), 94- 110.  
doi:10.5250/studamerindilite.23.3.0094

Singh, J., & Santosh, P. (2018, July 31). *Key issues in Rett Syndrome: Emotional, behavioural and autonomic dysregulation (EBAD) - a target for clinical trials - orphanet journal of rare diseases*. BioMed Central. Retrieved May 12, 2022, from

<https://ojrd.biomedcentral.com/articles/10.1186/s13023-018-0873-8>

Smith, T., Norton, A. M., & Marroquin, L. (2021). Virtual Family Play Therapy: A Clinician’s Guide to using Directed Family Play Therapy in Telemental Health. *Contemporary Family Therapy*. <https://doi.org/10.1007/s10591-021-09612-7>

*Sunny predisposition? 2 genes linked to friendliness, social ability*. Genetic Literacy Project

(2018, January 12). from [https://geneticliteracyproject.org/2017/08/28/sunny-](https://geneticliteracyproject.org/2017/08/28/sunny-predisposition2-genes-linked-friendliness-social-ability/)

[predisposition2-genes-linked-friendliness-social-ability/](https://geneticliteracyproject.org/2017/08/28/sunny-predisposition2-genes-linked-friendliness-social-ability/)

Sussex Publishers. (n.d.). Trauma. Psychology Today.

<https://www.psychologytoday.com/us/basics/trauma>.

Thurman, T. R., Snider, L. A., Boris, N. W., Kalisa, E., Nyirazinyoye, L., & Brown, L. (2008).

Barriers to the community support of orphans and vulnerable youth in Rwanda. *Social*

*Science & Medicine*, 66(7), 1557–1567.

<https://doi.org/10.1016/j.socscimed.2007.12.001>

Ungar, M. (2013). Resilience, Trauma, Context, and Culture. *Trauma, Violence & Abuse*, 14(3), 255-266. Retrieved May 5, 2021, from <https://www.jstor.org/stable/26638317>

van Ee, E., Sleijpen, M., Kleber, R. J., & Jongmans, M. J. (2013). Father-Involvement in a Refugee Sample: Relations between Posttraumatic Stress and Caregiving. *Family Process*, 52(4), 723–735. <https://doi.org/10.1111/famp.12045>

Vongalis-Macrow, A. (2006). Rebuilding regimes or rebuilding community? Teachers' agency for social reconstruction in Iraq. *Journal of Peace Education*, 3(1), 99–113.

<https://doi.org/10.1080/17400200500532284>

V. der K. B., A. (2015). *The Body keeps the score brain, mind and body in the healing of trauma*. Penguin Books.

WILSON, J., DROŽDEK, B., & TURKOVIC, S. (2006). POSTTRAUMATIC SHAME AND GUILT.

*Trauma, Violence & Abuse*, 7(2), 122-141. Retrieved May 2, 2021, from

<http://www.jstor.org/stable/26636139>