

An Ecological Perspective of Intergenerational Trauma: Clinical Implications

Charmayne R. Adams

Ramona I. Grad

Matthew L. Nice

Follow this and additional works at: <https://egrove.olemiss.edu/jcrp>



Part of the [Counseling Psychology Commons](#), and the [Counselor Education Commons](#)

An Ecological Perspective of Intergenerational Trauma: Clinical Implications

Mental health practitioners and scholars refer to trauma that impacts individuals across generations as intergenerational trauma, trans-generational trauma, or multigenerational trauma (Bezo & Maggi, 2015; Dass-Brailsford, 2007; Dekel & Goldblatt, 2008; Quinn, 2019). There have been a variety of poetic ways that this transmission of trauma across generations has been described, almost as if it is a mythical process or a ghost haunting one generation after the next. Faimberg (1988) spoke of this transmission across generations as the telescoping of generations. This telescoping describes the covert process of trauma passing from one generation to the next, where at least part of the trauma does not belong to the client and is not from the present moment. Kestenberg (1990) wrote about multiple generations of the descendants of Holocaust survivors. In his writing, he described transposition as an unconscious replaying of a traumatic experience of another generation although it is not the person's personal experience. Evans-Campbell (2008) provided a well-used definition of intergenerational trauma:

A collective complex trauma inflicted on a group of people who share a specific group identity or affiliation—ethnicity, nationality, and religious affiliation. It is the legacy of numerous traumatic events a community experiences over generations and encompasses the psychological and social responses to such events. (p. 320)

For this paper, we will define intergenerational trauma by using a combination of definitions integrated from the aforementioned scholarly works (Faimberg, 1988; Kestenberg, 1990; Campbell, 2008). *Intergenerational trauma is a phenomenon where without conscious awareness individuals experience psychological distress that can be attributed to the way previous generations coped or responded to a traumatic event that the individual did not directly experience.* Intergenerational trauma can be caused by large-scale traumatic events, such as the enslavement of Africans or the Holocaust, and can be caused by more individualized trauma, such as a mother's history of sexual abuse impacting her daughter's psychological health (Substance Abuse and Mental Health Services Administrations, [SAMHSA], 2014). Either way, intergenerational trauma is not necessarily the passing of the trauma memory from one generation to another, but the passing of ways of coping and resiliency strategies on how to manage and survive distressing situations from one generation to another.

In this paper, we aim to provide an in-depth description of this type of trauma, in addition to explaining the importance of attending to it in professional counseling relationships. Due to diagnostic limitations caused by the exposure criteria in the Post-Traumatic Stress Disorder (PTSD) diagnosis, we believe it is important for counselors to continue to take into consideration that trauma has far-

reaching impacts past the person that directly experienced it. Below we will summarize the plethora of empirical information on intergenerational trauma and the vast impacts it has on multiple generations. It is beyond the scope of this article to include an extensive review of all of the literature on intergenerational trauma since it spans multiple disciplines, but we have included relevant seminal and recent studies. After that, we will introduce a model to help conceptualize and guide treatment planning so that counselors have a tool to help them integrate this information into their clinical practice intentionally.

Impact on Mental Health and Distinguishing Features

Connolly (2011) identified distinguishing factors in intergenerational trauma that differentiate it from other types of trauma. These are: (a) a rupture in time, (b) loss of language, and (c) the disappearance of narrative. The occurrence of trauma disrupts time for many, if not all, of the individuals that experience it (van der Kolk, 2015). Survivors often have a difficult time sequencing events, recalling specifics, or cannot separate the here-and-now experience from the there-and-then experience; this is what is commonly known as a flashback (Baum, 2013; Connolly, 2011; Perry & Szalavitz, 2016; Substance Abuse and Mental Health Services Administrations, [SAMHSA], 2014; van der Kolk, 2015). There is also the time spent experiencing the traumatic event and afterward reliving the traumatic event, which takes away from daily living experiences. A poignant example is the case of individuals that were captured and placed in concentration camps—there was a loss of months and years of life experience replaced with torture, starvation, physical labor, constant stress, and physical abuse (Jabłoński et al., 2016). African slaves and individuals in the Japanese internment camps were similarly dehumanized and lost time that would have been spent forming families, engaging in education, building wealth, and contributing to their communities (Epps & Furman, 2016; Rinehart, 2016).

The second distinguishing aspect of intergenerational trauma is the loss of language. Historical traumas intentionally erode culture, including language. Examples of these types of intentional acts of terror have been seen repeated throughout time, including the burning of cultural artifacts, forced use of a language other than the primary language of the culture, cutting of hair, removing artifacts or art, and the changing of names.

The final aspect of intergenerational trauma stated by Connolly (2011) is the loss of narrative. A piercing example of this type of terror can be seen in the history of African slaves in America. There is evidence of an intentional stripping of identity during record keeping, increasing the difficulty of retracing family and ancestral ties (Colbert et al., 2016). This can also be seen with the boarding of indigenous American children who were forced to move away from their families, abandon their native language, change their names, and denounce contact with their

native families in an attempt at becoming “civilized” (Gone, 2009). These types of forced cultural abandonments have long-reaching effects that impact much more than the generation that initially experienced the traumatic event.

Empirical Evidence of the Transmission of Trauma Across Generations

The foundation of intergenerational trauma research was aimed at understanding the experience of children of Holocaust survivors (Danieli, 1998; Dass-Brailsford, 2007). As research continued, this phenomenon has been used to better understand the domestic violence cycle and child maltreatment (Frazier et al., 2009; Simons & Johnson, 1998), impacts of traumatic experiences on the families of military members (Rosenheck & Fontana, 1998), and the trauma experienced by families that live in countries with extremely restrictive or persecutory government practices (Baker & Gippenreiter, 1998). Intergenerational trauma impacts and potentially causes distress in multiple systems including individuals, families, and communities at large (Evans-Campbell, 2008; Kirmayer et al., 2014).

Scholars have broadened their research on intergenerational trauma and its interplay of current and historical traumas to include other marginalized populations (Bezo & Maggi, 2015; Cross, 1998; Han, 2005; Leary, 2005). Researchers’ interests in investigating the intersection of the intergenerational trauma for Black Americans who are the decedents of slaves with current racism represents one method in which the literature on intergenerational trauma continues to be expanded (Cross, 1998; Leary, 2005). The intergenerational trauma experienced by indigenous communities in Canada is an additional example of the expansion of this literature (Marsh, Cote-Meek, Young, Najavits, Toulouse, 2016). Additionally, there is a plethora of information on the impact of trauma as it relates to a variety of populations, including the children of survivors of abuse, military conflict, and mass killings such as genocides (Bezo & Maggi, 2015; Han, 2005). Yet, specific evidence for a singular mechanism of transmission of trauma is not well consolidated as research in this area is scattered across numerous disciplines that utilize a wide variety of methodologies and approaches.

Scholars from a variety of theoretical perspectives, including family studies, epidemiology, sociology, and biology, have studied the experiences and distress that are caused by trauma passed through generations (Abrams, 1999; Danieli, 1998; Sangalang & Vang, 2017). Currently, there are hundreds of published articles and books exploring the phenomenon of intergenerational trauma that span multiple disciplines (Giladi & Bell, 2013; Letzter-Pouw et al., 2014). These scholars have aimed to increase understanding of the impacts of intergenerational trauma, the depth of its effect on individuals, and how it transmits from one generation to the next. At the center of this research, scholars pushed to understand how to increase

the physiological and psychological rebound and resilience after an individual has experienced a traumatic event (Lehrner & Yehuda, 2018).

Social and Cultural Research

Social scientists have had a longstanding interest in investigating the intergenerational transmission of the social and cultural aspects of trauma, including the influence of community-level trauma (Argenti & Schramm, 2009; Scheper-Hughes, 1993). These social science researchers focus on community-level events such as rituals, values, and habitual ways of engaging, such as the specific language a community speaks, or the way communities educate their children. From this perspective, trauma is passed through generations by the fractures created in the community, the disruptions to identity, and the break in the socio-cultural foundation caused by the traumatic event.

At micro and psychological levels, social and cultural-focused researchers explored the impacts felt by children who had traumatized parents, specifically parents who were survivors of the Holocaust. These studies laid the foundation for an extension of investigations regarding the transmission of trauma across various populations that have experienced war, mass killings, and torture, such as Indigenous communities, survivors of the genocides in Rwandan, Croatian, and Cambodian, and military veterans (Daud et al., 2005; Dekel & Goldblatt, 2008; Evans-Campbell, 2008; Field et al., 2013).

Most recently, studies have been conducted to investigate how diverse families and communities are affected by intergenerational trauma (Gayol, 2019; Gheorghie et al., 2019). The work of these researchers indicates that the vast majority of intergenerational trauma has been experienced by populations of diverse cultural identities (Coleman, 2016; Hudson, Adams, & Lauderdale, 2016; Matheson, Bombay, Dixon, and Anisman, 2020). Due to historical and current sociocultural factors, diverse individuals are most likely to experience the transmission of intergenerational trauma (Sirikantraporn & Green, 2016).

Family and Community Research

At the familial level, communication surrounding the traumatic events was one of the most important factors in the transmission of trauma across generations, specifically, researchers noted the adverse impact of shame-inducing or silencing communication (Bar-On et al., 1998; Nagata et al., 1999). Nagata and colleagues (1999) went on to note that survivors steered away from talking about their traumatic experiences in general, but especially with their children. Danieli (1998) documented this phenomenon among families of Holocaust survivors and found that family members avoided speaking with other members of their families and their children about their experiences during the war. Parents and children have different perspectives concerning this secrecy; parents describe feeling that by

keeping silent they were offering protection for their children, but children interpret the silence as confusing and shrouding the events with mystery (Bar-On et al., 1998).

Further, Nagata (1991) found in a qualitative study focused on the experiences of adult children of survivors of Japanese internment camps, that children viewed the silence of their parents as a signal that these experiences were too painful to discuss. There is both a psychological and physical impact of this silence; Lichtman (1984) reported that this vague or non-existent communication in families about historical events led to poor health outcomes in both the children and the grandchildren of survivors. These health outcomes led to distress, such as paranoia, anxiety, and low self-worth (Lichtman, 1984). At the community level, the transmission of trauma through generations is impacted by the specifics of the traumatic event in addition to the cultural resources that the community has to attend to the impacts and mend the distress caused by the trauma (Lehrner & Yehuda, 2018). There is no single outcome of how a traumatic event will impact future generations. Parents have a responsibility to be intentional and transparent about these historical events because their response mediates the reaction of children, who are vulnerable to the distress caused by social interactions and interpersonal experiences (Camara et al., 2017).

Biological Transmission of PTSD Research

Researchers have reported mixed findings between the exposure and coping of transgenerational trauma, which highlight the distinction between assessing parental exposure to traumatic events and how parents adapt after a trauma (Lehner & Yehuda, 2018). Specifically, can parents pass PTSD through generations? Yehuda and colleagues (2001) highlighted PTSD as an indicator that a parent has not recovered after a traumatic event and mitigated the impact that this trauma has on their children. For instance, Yehuda et al. (2001) found that in families where parents were diagnosed with PTSD, the children had higher rates of mental health distress, such as depression and anxiety, compared to the control group of children with parents that did not have PTSD. Similarly, in a study conducted with children and grandchildren of Holocaust survivors, Danieli et al. (2016) found that the experiences of survivors' after the Holocaust impacted their children through their parents' post-trauma adaptation styles.

Field and colleagues (2013) reported similar findings in two samples of Cambodian children and their mothers. The mothers in this study had lived through and survived the Khmer Rouge regime, and based on the findings, the PTSD symptoms of the mother had a greater impact on the anxiety in their daughter than trauma exposure (Field et al., 2013). Furthermore, Dekel and Goldblatt (2008) explored what impact paternal exposure to war and combat had on their children. Parallel to the findings of Field and colleagues (2013), they reported that paternal

PTSD had a greater association with distress in the children than exposure to trauma (Dekel & Goldblatt, 2008). Thus, as the authors suggest, it is very important to take into consideration caregiver PTSD when we are assessing how trauma is transmitted across generations.

One of the monumental findings that brought depth to the conversation on how trauma impacts individuals across generations were the discovery that children of Holocaust survivors, who had no direct exposure, had similar biological markers to those that had been directly exposed to the traumatic event (Lehrner & Yehuda, 2018). This research echoes the findings we had discussed earlier in this section, those biological markers were found in children whose caregivers were diagnosed with PTSD, not all children whose parents were in the Holocaust (Liu et al., 2016; Palma-Gudiel et al., 2015; Rodgers et al., 2015). Researchers identified many biological mechanisms that were different in children with parents diagnosed with PTSD in contrast to the control groups. As readers can see, the impacts of intergenerational trauma span from the individual level to the community.

Bronfenbrenner's Ecological Model

To understand conceptualization and potential intervention strategies for individuals experiencing intergenerational trauma, the authors suggest a systemic understanding of human development from an ecological perspective. Bronfenbrenner's ecological model (1974) describes a system that comprises subsystems to conceptualize human development. From this perspective, to understand human development, one must take into account individual characteristics as well as characteristics of one's immediate and most distant environments. This concept is especially important when speaking about trauma and its intergenerational principles because it conceptualizes a mechanism for which traumatic experience can cause a ripple effect from one generation to the next or from one area of an individual's life to another through receptacle processes. Additionally, it provides a framework for understanding how trauma does not simply function in a cause-and-effect manner, but rather has a cumulative and compounding force. Bronfenbrenner's model is a meta-theory to help organize information to better understand the unique needs of the client. According to Bronfenbrenner, (1979/1994), the ecological system consists of five layers to address interactions in environments: microsystem, mesosystem, exosystem, macrosystem, and chronosystem.

The innermost system is the *microsystem*. This includes any interaction that takes place in a face-to-face setting that the developing person comes into contact with such as friends, caregivers, teachers, or place of work (Bronfenbrenner, 1979/1994). Next is the *mesosystem* which comprises multiple microsystems and encompasses the interactions between those systems. This would include how the developing person's work and school, or home and peer microsystems interact. The

mesosystem and microsystem are nestled inside of the *exosystem*. The *exosystem* includes interactions between two settings, one that is inside the developing person's microsystem and one that is not (Bronfenbrenner, 1979/1994). An example of this would be the interaction between a caregiver experiencing stress at work, which they bring into the household that includes the developing person. In this example, the developing person does not have direct contact with the caregiver's work environment but is impacted by the stress caused in that environment because the caregiver's effect reflects that stress in the home microsystem (Bronfenbrenner, 1979/1994). The *macrosystem* girdles the micro-, meso-, and *exosystems* with the overarching cultural belief systems that impact the other systems. This could include "...bodies of knowledge, material resources, customs, lifestyles, opportunity structures, hazards, and life course options that are embedded in each of these broader systems" (Gauvain & Cole, 1993, pp. 40). The outermost system, the *chronosystem* emphasizes the developmental nature of this theory. The *chronosystem* attends to the passage of time in the developing person and the environments that they are a part of (Bronfenbrenner, 1979/1994).

In professional helping field literature, Bronfenbrenner's ecological model has been utilized to conceptualize depression in children and adolescents (Abrams et al., 2005), the experience of women who miscarry (Rogers, Crockett, & Suess, 2019), interventions for men in a college setting (Shen-Miller et al., 2013), understanding the U.S. opioid epidemic (Rogers, Gilbride, & Drew, 2018), families supporting a member with an intellectual disability (Berry, 1995), and counseling training environments (Lau & Ng, 2014). At the time of writing, there is a dearth of literature examining the utility of this model in working with individuals experiencing distress from intergenerational trauma. The comprehensive breadth of this model addresses many of the critical components of intergenerational trauma, including the impact on the developing person-caregiver relationship; the loss of culture that trauma has on the individual that experienced the event and later generations; the generic impact that traumatic experience has on the developing person; and function of social and political climates to perpetuate the effect of trauma. Due to this, we believe that by utilizing this model practitioners will better understand and support clients that have been impacted by this phenomenon. Below we present a case illustration to further explore how professional counselors could utilize Bronfenbrenner's model to guide treatment planning and interventions. We chose to demonstrate the use of this model on a client with South American heritage due to the lack of literature currently available that intentionally considers the implications of historical and structural violence on Latinx communities (Cerdeña, Rivera, and Spak, 2021).

Case Illustration: Rachel

Rachel is a 19-year-old female who looks her age. She identifies as Colombian-American, has experienced no cognitive delays, met all developmental milestones, is cisgender, identifies as female, is heterosexual, and able-bodied. She has not had any major illnesses, is in good health, and describes herself as active until recently. She has no romantic partner and has never been in a serious relationship. She is in her second year of college and has not decided on a major. Her primary source of income is her graduate assistantship, which is enough to pay rent and afford food. She has two roommates that she gets along with and enjoys spending the evenings cooking and watching movies with them as long as she does not have studying to do.

Beyond her roommates, Rachel has not connected with her peers in the community or school. She has a small group of acquaintances at the university and speaks to some of the other students in her courses. In general, her communication with others is short and interactional; she has always been a “loner”. She has consistently felt disconnected from her community and learned from her parents that educational advancement and financial security are more important than peer relationships.

Rachel’s mother and father immigrated from Colombia to the United States before Rachel was born. Both of Rachel’s parents experienced extreme hardship before immigrating. Rachel’s mother was sexually and physically abused by many of the men in her family for much of her childhood. She was denied access to educational advancement past grade six and was expected to marry young. Rachel’s father was exposed to drugs and violence during his childhood. His family lived on a farm in an area of Colombia that was disputed territory. Both of Rachel’s parents learned from a very early age that expressing their emotions could be the difference between life or death. They describe their marriage as happy and show little outward affection toward each other or their children. Once they immigrated to the United States, Rachel’s parents were very focused on creating a safe and stable environment for their children, placing value on financial security and educational advancement. They prioritized having their children in high-achieving school districts, which often meant their peers, neighbors, and community were predominantly White.

Rachel comes to your community counseling office because she is experiencing stress around choosing a major. She feels as if what she has heard from her parents about choosing an educational route that leads to stability is different from what she hears from her peers who are seeking their passion. She chose you because she wanted to go somewhere off campus but low cost. During the intake she reported feeling sluggishness, lacking motivation, decreased appetite, avoidance of others, and irritability during situations when she would typically remain calm. She feels like her reaction to this stressful transition is more

exaggerated than her peers. These symptoms seemed to worsen and make it even more challenging to decide on a major. As the therapist, you note that the level of distress Rachel was experiencing was impacting multiple domains of her life and wondered what role intergenerational trauma may be playing in her distress response. Below describes how the therapist used Bronfenbrenner's Ecological model to organize a treatment plan grounded in an understanding of intergenerational trauma.

Individual: Traditional Counseling Treatment Focus

At the center of all the systems is Rachel, an individual (Bronfenbrenner, 1979, 1994). From a developmental perspective, she is an early adult trying to figure out how to manage a large life decision. Many factors contribute to how young adults choose a major. These include family influence (Anelli & Peri, 2015; Xia, 2016), the labor market, how enjoyable the courses will be (Baker, Bettinger., Jacob, & Marinescu, 2018), a match with their interest areas (Beggs et al., 2008) and peer groups (Downey, Mcgaughey, & Roach, 2011; Wolfe & Betz, 2004).

Treatment would begin by explaining the counseling process to Rachel and asking her what her expectations were when she decided to seek out counseling. There are many theoretical orientations that professional counselors practice from, but at the foundation of each are the common factors and core conditions (Brooks & Cochran, 2016; Lambert & Cattani-Thompson, 1996). Regardless of theoretical orientation, all professional counselors would take into consideration the developmental and wellness components of Rachel's presenting concern (Kaplan et al., 2014). To do this it is common practice to conduct a full psychosocial assessment to gather information about her physical health, the history of her psychological health, substance use, family history of mental/physical health, current and previous levels of risk for suicide, and homicide, trauma history, and a mini-mental status exam.

Counselors that are taking into account the impact of intergenerational trauma would pay specific attention to the information about family history to assess how that may be impacting the presenting issue. It is important to keep in mind that there are biological and behavioral components that impact how individuals interpret and react to stressful situations. In this case, the hardships and traumas that Rachel's parents experienced impact her ability to regulate her emotional experience during stressful events, her perspective on what a career should be, and her ability to feel confident in herself while making this decision. All of these are important individual factors that should be explored in counseling to help create a treatment plan that attends to not only the symptoms but also aims to understand the origin of the exaggerated distress around choosing a major.

Microsystem: Direct Interactions Between Individual and Environment

Rachel's microsystem is the area of her life that directly impacts her, which includes her family and peers (Bronfenbrenner, 1979, 1994). Relationships with others, especially peer groups and primary caregivers, have a significant impact on the ability to manage stressful situations (Ainsworth et al., 1972; Mikulincer & Shaver, 2009; Schore, 2000). At this point, it is important to recognize the emotional and psychological effect that feeling disconnected from her primary caregivers and her peer group has on Rachel. One of the primary objectives of treatment focusing on this system is to help Rachel connect to a social group with whom she feels comfortable and can identify (Raja et al., 1992). All the treatment concerns at the individual level include microsystem-level interactions between Rachel and her environment. Her counselor should be aware that achieving these goals will depend on Rachel's quest or avoidance of direct interactions with the microsystem (individuals, groups, etc.). With this ecological perspective in mind, the counselor will have a better understanding of the challenge encountered by Rachel when pursuing the treatment goals.

With a focus on intergenerational trauma and its impact on the presenting issue, the counselor can help Rachel explore how her parent's history of trauma impacts the way she interacts with them and help her reflect on how it may have impacted their parenting styles. Additionally, the counselor can encourage Rachel to explore how those interactions with her parents may be impacting her ability to form peer relationships. Even though Rachel was born in the United States, the counselor may also discuss how children of immigrants often deal with the loss of their home communities, families, friends, routine, daily socialization, and, as a result, experience caution, which may lead to fear. Having conversations with Rachel about how her parents have modeled decision-making and managing stressful events in past interactions with her may provide some context to her current distress.

Mesosystem: Interactions Between Two Or More Environments Where Individual Exists

The mesosystem is the interaction of two or more environments, and for Rachel, one of the most salient mesosystem interactions is her family system and her educational community. Due to Rachel's first-generation status, she was able to receive funding to attend an expensive private university. This university has offered many social and educational opportunities to Rachel that she may not have had at a traditional public institution, and services she did not have access to when she was living at home. This private university has also caused some feelings of distress and isolation for Rachel, but Rachel has always prioritized her education over her emotional comfort. She has been unable to connect with many peers and

has felt more isolated due to the low ethnic diversity at the university (Arbona & Jimenez, 2014; Hall, Nishina, & Lewis, 2017).

A counselor keeping intergenerational trauma in mind will recognize Rachel's connection to low-cost mental health and health care services in her community makes it easier for her to access care. The cost of service was a starting point for care and is the reason she has sought out services, but her family values have always discouraged seeking out mental health services. Due to this, Rachel has not told her parents that she has not chosen a major and that she is seeking out counseling services. Her ability to tell that something is wrong due to her stress levels and procrastination in choosing a major shows insight on her part and a recognition that there has been a change in mood from her baseline. The counselor should explore the interaction between Rachel's microsystems, especially concerning the value conflicts that she is experiencing. It would also be helpful to explore how it feels for Rachel to hide that she is seeking counseling services (Cheng, Kwan, & Sevig, 2013) and hasn't chosen a major from her family.

Exosystem: Interactions Between Two or More Environments, at Least One of Which the individual is Not a Part Of

Rachel's exosystem includes many environments that have an impact on her but with whom she does not have direct contact. Regardless of her parents' status, she is a US citizen and has all the basic rights that come along with that, including access to medical and mental health care. Rachel's parents' interactions with the US government and social services agencies may impact how Rachel views these services, even though she never had direct contact with those services and only heard through her parents how challenging they were to navigate (Fortuny & Chaudry, 2011). Rachel was seeking out low-cost services because she was unsure how responsive her insurance company would be and had heard from her parents' stories of how challenging it was for them to access healthcare services.

Keeping intergenerational trauma in mind, the counselor must recognize that Rachel has accessed the most convenient service, a community-based mental health provider, but there may be more social services on her campus or in the community that could help support her. Rachel has heard from other students that there are career centers that she could turn to if she is struggling with decision-making concerning her major or career path, and there may be clubs on campus or programs to support first-generation students where Rachel could meet others struggling with similar issues. Additionally, the counselor may suggest that there are medical services on campus which could help determine if there is a biological component to what Rachel is experiencing.

Rachel has also heard from her roommates how their parents are encouraging them to follow their passion instead of making decisions based on potential income. Even though Rachel does not have any direct contact with her

roommates' parents, the information they are conveying to their children is impacting how Rachel is viewing her choice of major. It would be important for the counselor to help Rachel explore the different systems that she has heard about from others and her hesitation to take advantage of those systems. Even though Rachel doesn't have a direct connection to these systems yet or with her roommates' parents, the overload of information that she is getting from classmates and the campus administration may further confuse and cloud decision-making for Rachel.

Macrosystem: Cultural, Political, Economic, Societal Backdrop

The macrosystem is the societal foundation or backdrop that which the individual exists in. Rachel was raised in a family that did not speak about the traumatic events that happened in their past. They denied their children access to their extended family and prioritized assimilating to American culture while losing some of the traditional cultural aspects of Colombia (i.e., selective acculturation, Petrone, 2016). Rachel's reluctance to seek treatment until she was faced with a deadline to choose a major may reflect the family values that there is no problem unless the symptoms impact financial security and academic success.

Traumatic experience does not have a monopoly on any race, age, gender, or ethnicity. As discussed earlier, Rachel is a first-generation American with both of her parents being raised in Colombia. It will be important for intergenerational trauma-informed mental health professionals to explore with Rachel which aspects of her culture may be protective factors and which may be exacerbating the symptoms she is feeling. The counselor should adopt a multicultural orientation which includes cultural humility, cultural opportunities, and cultural comfort (Hook et al. 2013). This means that the counselor allows Rachel to drive the conversation concerning how her cultural background may be impacting her presenting problem, actively monitors cultural opportunities to allow Rachel to expand on her culture, and is comfortable engaging in these conversations (Hook et al., 2013). Regarding treatment adherence, cultural humility is a one-down approach by the mental health professional to respect the cultural perspective of the client concerning how they conceptualize mental health issues, psychiatric medication, or different treatment modalities as a way to create buy-in from Rachel (Hook et al., 2013). It may also be important for the counselor to address the current cultural climate concerning immigration from Latin America and invite Rachel to explore if this may be impacting her career decision-making.

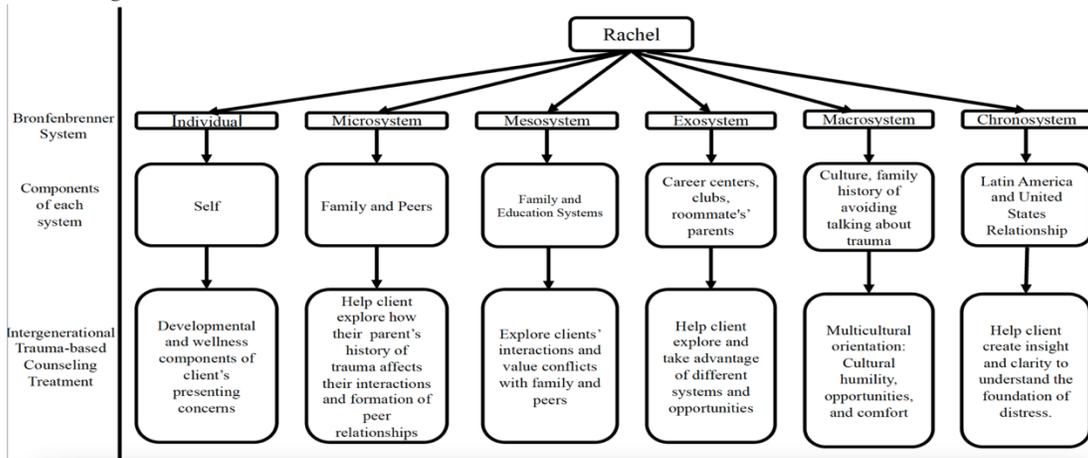
Chronosystem: Historical Context and Changes in Environments Over Time

In addition to the current United States social and political climate concerning immigration, it will also be important to take into consideration the historical relationship between Latin America and the United States. Rachel's

current distress is happening at a time when there is a significant fear for personal safety and ever-changing immigration policies (Rubio-Hernandez & Ayon, 2016). Rachel's parents originally came to the United States for stability and safety, but attitudes toward Central and South Americans have changed dramatically over the past few years and are reminiscent of the persecution they faced in Colombia before coming to the United States. This increased stress of the current climate likely is bringing up a trauma response for Rachel's parents, thus impacting the way they are interacting with her (Perreira, & Ornelas, 2013). This shift in interaction with her primary caregivers compounds the stress Rachel is already feeling about her decision on a major.

By exploring Rachel's current feelings within a broader context, the counselor can help her understand why her stress response may be more exaggerated than her peers and inform a more holistic treatment plan to address the multiple dimensions of Rachel's distress. Even though Rachel came to counseling for a very specific reason, to help with her choice of major, she was displaying symptoms that align with the criteria of a major depressive disorder diagnosis (American Psychiatric Association, 2013). A counselor that takes into consideration intergenerational trauma can approach treatment in a non-pathologizing way, creating insight and clarity to better understand the foundation of the distress instead of just the presenting symptoms.

Figure 1
Visual Representation of Treatment Planning Utilizing Bronfenbrenner's Ecological Model



Clinical Implications

The case illustration highlights many of the key aspects of Bronfenbrenner's ecological model (1981/1994). The authors offer this model as one way for practitioners to conceptualize the far-reaching impact that historical trauma has on

individuals. The practitioner-client relationship is a space where a broad range of systems can be explored including individual, familial, community, work, educational, and cultural. Because they have more power in the therapeutic relationship, it is the responsibility of the practitioner to foster an environment that encourages the client to explore the various systems, including cultural factors, that may be impacting the client's current sense of wellness (D'Andrea & Daniles, 2001; Day-Vines et al., 2007). In addition to addressing all the systems that influence the client, practitioners must broach cultural conversations (Day-Vines et al., 2007). Broaching is a technique that was created specifically to convey cultural competence, and involves having intentional conversations about the cultural characteristics of the client and the counselor (Day-Vines et al., 2007). Broaching cultural conversations are effective in improving client outcomes (Jones & Welfare, 2017).

Practitioners could use Bronfenbrenner's model overtly as an intervention with the client to facilitate awareness or covertly to conceptualize distress and inform interventions as displayed in the case illustrations. Practitioners wishing to utilize the model overtly could introduce clients to the model and move through the various systems during a session, encouraging the client to reflect on the different aspects and how they impact a sense of wellness or distress.

The ecological model reminds clinicians and professional counseling researchers alike that most trauma survivors are nestled within complex worlds. Additionally, it serves as a reminder that traumatic events are not always a reflection of what is the current context of the individual, but, in a lot of cases, they can also be a reflection of intergenerational trauma. The vignette of Rachel describes a woman who has had little prior direct exposure to violence. At the same time, her racial and ethnic characteristics, the history of her mother's childhood trauma and abuse, her father's history of significant substance abuse, her experiences of racism, her family's immigration history, and economic disenfranchisement are all daily realities that have a critical impact on Rachel's ability to manage stress.

Effective clinical intervention with clients struggling to manage trauma responses must begin with a holistic evaluation that is grounded in an ecological framework. As we have seen, such an assessment provides the opportunity to uncover hidden aspects that the individual is unaware of and that can impact their mental health. An ecological perspective gives equal attention to the many aspects of a client's life, which intergenerational trauma can penetrate, and to the clinician's understanding of the domains of their life that are influencing the trauma survivor's understanding of their own experience. Further, counselors must understand that to be clinically effective, the interventions need to be informed and sometimes challenge the understanding of trauma, especially as it pertains to identity and how individuals make meaning out of the experience. Lastly, counselors may use the

conceptual framework of intergenerational trauma (Sotero, 2006) in their clinical work. Having a complex understanding of this type of trauma will guide practitioners in being more responsive to the unique needs of individuals from this group (Brown-Rice, 2013).

Many trauma-exposed individuals do not seek out clinical services or are not responsive or resistant to interventions (Levers, 2012). This low treatment access and success call for the need for more effective community intervention efforts that support a holistic way of approaching trauma in individuals and families and communities (Harvey, 2007). Some examples of these types of community-based programs could be as wide-reaching as social media or face-to-face programs that provide information on intergenerational trauma. These types of programs could explain what intergenerational trauma is, and the many ways it is transmitted, normalize the common symptoms and provide information on how to access clinical resources. These public advocacy efforts do not take away from the need for clinical services but offer a more comprehensive range of services and increase the accessibility of services.

Conclusion

When professional counselors and researchers expand their work beyond just the individual seeking services, they not only have more opportunities for intervention but also make our work more complicated. The ecological approach to intergenerational trauma provides a framework for practice and research. It also aligns with our developmental perspective as professional counselors to utilize an ecological model such as Bronfenbrenner's that emphasizes that individuals grow and reach their potential within a complex developmental system.

Moreover, this model allows for an examination of cultural variables. The authors want to note that even though the case illustration focused on a young woman with Colombian heritage, this model has the potential to be used with any population that has historically experienced traumatic events—both large-scale and individual. The authors encourage clinicians to keep this model in mind, not only when the history of trauma is overt, but to approach all clients with the assumption that there may be a history of trauma. Currently, counselors are providing services to a wide array of clients that have presented concerns related to COVID-19 and the racial unrest seen in the United States due to police brutality.

We encourage clinicians to examine ways of coping (and all presenting concerns) holistically as they are nestled within generations of traumatic experiences. This model can promote individual healing and social justice by informing public policy as the interventions permeate all systems the client is nested in. We hope it helps clinicians conceptualize how social justice may fit into their work with clients and help clients make sense of their presenting symptoms by placing them in the context of their communities, families, and society.

References

- Abrams, M. S. (1999). Intergenerational transmission of trauma: Recent contributions from the literature of family systems approaches to treatment. *American Journal of Psychotherapy*, 53(2), 225–231. <https://doi.org/10.1176/appi.psychotherapy.1999.53.2.225>
- Abrams, K., Theberge, S. K., & Karan, O. C. (2005). Children and adolescents who are depressed: An ecological approach. *Professional School Counseling*, 8(3), 284–292. www.jstor.org/stable/42732470
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- Arbona, C., & Jimenez, C. (2014). Minority stress, ethnic identity, and depression among Latino/a college students. *Journal of Counseling Psychology*, 61(1), 162–168. <https://doi.org/10.1037/a0034914>
- Argenti, N., & Schramm, K. (2009). *Remembering violence: Anthropological perspectives on intergenerational transmission*. Berghahn Books.
- Baker, R., Bettinger, E., Jacob, B., & Marinescu, I. (2018). The effect of labor market information on community college students' major choice. *Economics of Education Review*, 65, 18–30. <https://doi.org/10.1016/j.econedurev.2018.05.005>
- Baker, D., & Gippenreiter, J. B. (1998). Stalin's purge and its impact on Russian families. In Y. Danieli (Ed.), *International handbook of multigenerational legacies of trauma* (pp. 403–434). Plenum Press.
- Bar-On, D., Eland, J., Kleber, R. J., Krell, R., Moore, Y., Sagi, A., Soriano, E., Suedfeld, P., van der Velden, P. G., van IJzendoorn, M. H. (1998). Multigenerational perspectives on coping with the Holocaust experience: An attachment perspective for understanding the developmental sequelae of trauma across generations. *International Journal of Behavioral Development*, 22(2), 315–338. <https://doi.org/10.1080/016502598384397>
- Beggs, J., Bantham, J., & Taylor, S. (2008). Distinguishing the factors influencing college students' choice of major. *College Student Journal*, 42(2), 381–394.
- Berry, J. O. (1995). Families and deinstitutionalization: An application of Bronfenbrenner's social ecology model. *Journal of Counseling & Development*, 73(4), 379–383. <https://doi.org/10.1002/j.1556-6676.1995.tb01768.x>
- Bezo, B., & Maggi, S. (2015). Living in “survival mode”: Intergenerational transmission of trauma from the Holodomor genocide of 1932–1933 in Ukraine. *Soc Sci Med*, 134, 87–94. <https://doi.org/10.1016/j.socscimed.2015.04.009>

- Bronfenbrenner, U. (1994). Ecological models of human development. In *International Encyclopedia of Education*, Vol. 3, 2nd. Ed. Oxford: Elsevier. Reprinted in: Gauvain, M. & Cole, M. (Eds.), *Readings on the development of children, 2nd Ed.* (1993, pp. 37–43). Freeman.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.
- Brooks, T.P, & Cochran, J.L.,. (2016). The core conditions in counseling chronically undecided career decision-makers, *Person-Centered & Experiential Psychotherapies*, 15(2), 142–155, <https://doi.org/10.1080/14779757.2016.1179216>
- Brown-Rice, K. (2013). Examining the theory of historical trauma among Native Americans. *The Professional Counselor* 3(3), 117-130. <https://doi.org/10.15241/kbr.3.3.117>
- Camara, M., Bacigalupe, G., & Padilla, P. (2017). The role of social support in adolescents: are you helping me or stressing me out?. *International Journal of Adolescence and Youth*, 22(2), 123–136. <https://doi.org/10.1080/02673843.2013.875480>
- Cerdeña, J., Rivera, L., & Spak, J. (2021). Intergenerational trauma in Latinxs: A scoping review. *Social Science & Medicine (1982)*, 270, 113662–113662. <https://doi.org/10.1016/j.socscimed.2020.113662>
- Cheng, H., Kwan, K. & Sevig, T. (2013). Racial and ethnic minority college students’ stigma associated with seeking psychological help: Examining psychocultural correlates. *Journal of Counseling Psychology*, 60(1), 98-111. <https://doi.org/10.1037/a0031169>
- Connolly, A.R. (2011). Healing the wounds of our fathers: Intergenerational trauma, memory, symbolization and narrative. *Analytical Psychology*, 56, 607-626. <https://doi.org/10.1111/j.1468-5922.2011.01936.x>
- Cross, W. E. (1998). Black psychological functioning and the legacy of slavery. In Y. Danieli (Ed.), *International handbook of multigenerational legacies of trauma* (pp. 387–400). Plenum.
- D’Andrea, M. & Daniels, J. (2001). RESPECTFUL counseling: An integrative multidimensional model for counselors. In D.B. Pope-Davis & H. L. K. Coleman (Eds.), *The intersection of race, class, and gender in multicultural counseling* (pp. 417-466). Thousand Oaks, CA:Sage
- Danieli, Y. (Ed.). (1998). *International handbook of multigenerational legacies of trauma*. Springer Science & Business Media. <https://doi.org/10.1007/978-1-4757-5567-1>
- Danieli, Y., Norris, F. H., & Engdahl, B. (2016). Multigenerational legacies of trauma: Modeling the what and how of transmission. *American Journal of Orthopsychiatry*, 86(6), 639–651. <https://doi.org/10.1037/ort0000145>

- Dass-Brailsford, P. (2007). *A practical approach to trauma: Empowering interventions*. Los Angeles, CA: Sage.
- Daud, A., Skoglund, E., & Rydelius, P. A. (2005). Children in families of torture victims: Transgenerational transmission of parents' traumatic experiences to their children. *International Journal of Social Welfare*, *14*, 23–32. <https://doi.org/10.1111/j.1468-2397.2005.00336.x>
- Day-Vines, N. L., Wood, S. M., Grothaus, T., Craigen, L. Holman, A., Dotson-Blake, K., & Douglass, M. J. (2007). Broaching the subjects of race, ethnicity, and culture during the counseling process. *Journal of Counseling Development*, *85*, 401-409. <https://doi.org/10.1002/j.1556-6678.2007.tb00608.x>
- Dekel, R., & Goldblatt, H. (2008). Is there intergenerational transmission of trauma? The case of combat veterans' children. *American Journal of Orthopsychiatry*, *78*, 281–289. <https://doi.org/10.1037/a0013955>
- Epps, D., & Furman, R. (2016). The “alien other”: A culture of dehumanizing immigrants in the United States. *Social Work & Society*, *14*(2). <http://nbn-resolving.de/urn:nbn:de:hbz:464-sws-1088>
- Evans-Campbell, T. (2008). Historical trauma in American Indian/Native Alaska communities: A multilevel framework for exploring impacts on individuals, families, and communities. *Journal of Interpersonal Violence*, *23*, 316–338. <https://doi.org/10.1177/0886260507312290>
- Faimberg, H. (1988). The telescoping of generations: Genealogy of certain identifications. *Contemporary Psychoanalysis*, *24*(1), 99–118. <https://doi.org/10.1080/00107530.1988.10746222>
- Field, N. P., Muong, S., & Sochanvimean, V. (2013). Parental styles in the intergenerational transmission of trauma stemming from the Khmer Rouge regime in Cambodia. *American Journal of Orthopsychiatry*, *83*, 483–494. <https://doi.org/10.1111/ajop.12057>
- Fortuny, K., & Chaudry, A. (2011). *A Comprehensive Review of Immigrant Access to Health and Human Services*. Washington, DC: U.S. Department of Health and Human Services. <http://aspe.hhs.gov/hsp/11/ImmigrantAccess/Review/index.shtml>
- Frazier, K. N., West-Olatunji, C. A., Juste, S. S., & Goodman, R. D. (2009). Transgenerational trauma and child sexual abuse: Reconceptualizing cases involving young survivors of CSA. *Journal of Mental Health Counseling*, *31*(1), 22–33. <https://doi.org/10.17744/mehc.31.1.u72580m253524811>
- Gheorghe, N., Brunke, M., Deaconu, D., Gheorghe, A., & Ionas, L. (2019). All my parents: Professional transgenerational trauma in the TA community. *Transactional Analysis Journal*, *49*(4), 263–278. <https://doi.org/10.1080/03621537.2019.1649847>

- Giladi, L., & Bell, T. S. (2013). Protective factors for intergenerational transmission of trauma among second and third generation Holocaust survivors. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5, 384–391. <https://doi.org/10.1037/a0028455>
- Hall, A., Nishina, A., & Lewis, J. (2017). Discrimination, friendship diversity, and STEM-related outcomes for incoming ethnic minority college students. *Journal of Vocational Behavior*, 103, 76-87. <https://doi.org/10.1016/j.jvb.2017.08.010>
- Han M. (2005). Relationship among perceived parental trauma, parental attachment, and sense of coherence in Southeast Asian American college students. *Journal Fam Soc Work*. 9(2), 25–45.
- Harvey, M. R. (2007). Towards an ecological understanding of resilience in trauma survivors: Implications for theory, research, and practice. *Journal of Aggression, Maltreatment & Trauma*, 14(1–2), 9–32. https://doi.org/10.1300/J146v14n01_02
- Jabłoński, R., Rosińczuk, J., Leszek, J., Uchmanowicz, I., & Panaszek, B. (2016). The progressive nature of concentration camp syndrome in former prisoners of Nazi concentration camps—Not just history, but the important issue of contemporary medicine. *Journal of Psychiatric Research*, 75, 1–6. <https://doi.org/10.1016/j.jpsychires.2015.12.017>
- Jones, C. T., & Welfare, L. E. (2017). Broaching behaviors of licensed professional counselors: A qualitative inquiry. *Journal of Addictions & Offender Counseling*, 38(1), 48-64. <https://doi-org.ezproxy.uttyler.edu/10.1002/jaoc.12028>
- Kaplan, D., Tarvydas, V., & Gladding, S. (2014). 20/20: A vision for the future of counseling: The new consensus definition of counseling. *Journal of Counseling & Development*, 92(3), 366–372. <https://doi.org/10.1002/j.1556-6676.2014.00164.x>
- Kestenberg, J. (1990). *Jewish Virtual Library, a Division of the American-Israeli Cooperative Enterprise*.
- Kirmayer, L. J., Gone, J. P., & Moses, J. (2014). Rethinking historical trauma. *Transcultural Psychiatry*, 51(3), 299–319. <https://doi.org/10.1177/1363461514536358>
- Lambert, M., & Cattani-Thompson, K. (1996). Current findings regarding the effectiveness of counseling: Implications for practice. *Journal of Counseling & Development*, 74(6), 601–608. <https://doi.org/10.1002/j.1556-6676.1996.tb02299.x>
- Lau, J., & Ng, K.-M. (2014). Conceptualizing the counseling training environment using Bronfenbrenner’s Ecological Theory. *International Journal for the Advancement of Counselling*, 36(4), 423–439. <https://doi.org/10.1007/s10447-014-9220-5>

- Leary, J. D. (2005). *Post traumatic slave syndrome*. Uptone Press.
- Lehrner, A. & Yehuda, R. (2018). Trauma across generations and paths to adaptation and resilience. *Psychological Trauma: Theory, Research, Practice*, 10(1), 22–29. <https://doi.org/10.1037/tra0000302>
- Letzter-Pouw, S. E., Shrira, A., Ben-Ezra, M., & Palgi, Y. (2014). Trauma transmission through perceived parental burden among Holocaust survivors' offspring and grandchildren. *Psychological Trauma: Theory, Research, Practice, and Policy*, 6, 420–429. <https://doi.org/10.1037/a0033741>
- Levers, L. L. (2012). *Trauma counseling: Theories and interventions*. Springer Publishing Company.
- Lichtman, H. (1984). Parental communication of Holocaust experiences and personality characteristics among second-generation survivors. *Journal of Clinical Psychology*, 40(4), 914–924. [https://doi.org/10.1002/1097-4679\(198407\)40:4<914::AID-JCLP2270400408>3.0.CO;2-U](https://doi.org/10.1002/1097-4679(198407)40:4<914::AID-JCLP2270400408>3.0.CO;2-U)
- Liu, K., Ruggero, C. J., Goldstein, B., Klein, D. N., Perlman, G., Broderick, J., & Kotov, R. (2016). Elevated cortisol in healthy female adolescent offspring of mothers with posttraumatic stress disorder. *Journal of Anxiety Disorders*, 40, 37–43. <https://doi.org/10.1016/j.janxdis.2016.04.003>
- Marsh, T., Cote-Meek, S., Toulouse, P., Najavits, L. & Young N. (2015). The application of two-eyed seeing decolonizing methodology in qualitative and quantitative research for the treatment of intergenerational trauma and substance use disorders. *International Journal of Qualitative Methods*, 14, (5), 1-13. <https://doi.org/10.1177/1609406915618046>
- Nagata, D. K., Trierweiler, S. J., & Talbot, R. (1999). Long-term effects of internment during early childhood on third-generation Japanese Americans. *American Journal of Orthopsychiatry*, 69(1), 19–29. <https://doi.org/10.1037/h0080378>
- Mikulincer, M., & Shaver, P. R. (2009). An attachment and behavioral systems perspective on social support. *Journal of Social and Personal Relationships*, 26(1), 7–19. <https://doi.org/10.1177/0265407509105518>
- Palma-Gudiel, H., Córdova-Palomera, A., Eixarch, E., Deuschle, M., & Fañanás, L. (2015). Maternal psychosocial stress during pregnancy alters the epigenetic signature of the glucocorticoid receptor gene promoter in their offspring: A meta-analysis. *Epigenetics*, 10, 893–902. <https://doi.org/10.1080/15592294.2015.1088630>
- Petrone, E. A. (2016). Reconstructing culture: The promises and challenges as articulated by Latino/a youth. *Ethnography and Education*, 11(1), 21-39. <https://doi.org/10.1080/17457823.2015.1036301>
- Quinn, A. (2019). Reflections on intergenerational trauma: Healing as a critical intervention. *First Peoples Child & Family Review*, 14(1), 196–210.

<https://fpcfr.journals.publicknowledgeproject.org/index.php/FPCFR/article/view/381>

- Rinehart, N. T. (2016). The man that was a thing: Reconsidering human commodification in slavery. *Journal of Social History, 50*(1), 28–50. <https://doi.org/10.1093/jsh/shv129>
- Rodgers, A. B., Morgan, C. P., Leu, N. A., & Bale, T. L. (2015). Transgenerational epigenetic programming via sperm microRNA recapitulates effects of paternal stress. *Proceedings of the National Academy of Sciences of the United States of America, 112*, 13699–13704. <https://doi.org/10.1073/pnas.1508347112>
- Rogers, J., Crockett, J., & Suess, E. (2019). Miscarriage: An ecological examination. *The Professional Counselor, 9*(1), 51–66. <https://doi.org/10.15241/jlr.9.1.51>
- Rogers, J., Gilbride, D., & Dew, B. (2018). Utilizing an ecological framework to enhance counselors' understanding of the U.S. opioid epidemic. *The Professional Counselor, 8*(3), 226–239. <https://doi.org/10.15241/jlr.8.3.226>
- Rosenheck, R., & Fontana, A. (1998). Transgenerational effects of abusive violence on the children of Vietnam combat veterans. *Journal of Traumatic Stress, 11*(4), 731–742. <https://doi.org/10.1023/A:1024445416821>
- Rubio-Hernandez, S. P. & Ayon, C. (2016). *Pobrecitos los Niños*: The emotional impact of anti-immigration policies on Latino children. *Children and Youth Services Review, 60*, 20-26. <https://doi.org/10.1016/j.childyouth.2015.11.013>
- Sangalang, C. C., & Vang, C. (2017). Intergenerational trauma in refugee families: A systematic review. *Journal of Immigrant and Minority Health, 19*(3), 745–754. <https://doi.org/10.1007/s10903-016-0499-7>
- Scheper-Hughes, N. (1993). *Death without weeping: The violence of everyday life in Brazil*. University of California Press.
- Schore, A. (2000). Attachment and the regulation of the right brain. *Attachment & Human Development, 2*(1), 23–47. <https://doi.org/10.1080/146167300361309>
- Simons, R. L., & Johnson, C. (1998). An examination of competing explanations for the intergenerational transmission of domestic violence. In Y. Danieli (Ed.), *International handbook of multigenerational legacies of trauma* (pp. 553–570). Plenum.
- Sirikantraporn, S., & Green, J. (2016). Introduction: multicultural perspectives of intergenerational transmission of trauma. *Journal of Aggression, Maltreatment & Trauma, 25*(6), 559–560. <https://doi.org/10.1080/10926771.2016.1194941>

- Sotero, M. M. (2006). A conceptual model of historical trauma: implications for public health practice and research. *Journal of Health Disparities Research and Practice*, 1(1), 93–108.
- Substance Abuse and Mental Health Administration. (2014). *A Treatment Improvement Protocol- Trauma-Informed Care in Behavioral Health Services*. <http://www.medicaid.gov/medicaid-chip-program-information/by-topics/benefits/mental-health-services.html>
- Wolfe, J. B., Betz, N. E. (2004). The relationship of attachment variables to career decision-making self-efficacy and fear commitment. *The Career Development Quarterly*, 52(4), 363–369. <https://doi.org/10.1002/j.2161-0045.2004.tb00952.x>
- Xia, X. (2016). Forming wage expectations through learning: Evidence from college major choices. *Journal of Economic Behavior and Organization*, 132, 176–196. <https://doi.org/10.1016/j.jebo.2016.10.013>
- Yehuda, R., Halligan, S. L., & Bierer, L. M. (2001). Relationship of parental trauma exposure and PTSD to PTSD, depressive and anxiety disorders in offspring. *Journal of Psychiatric Research*, 35(5), 261–270. [https://doi.org/10.1016/S0022-3956\(01\)00032-2](https://doi.org/10.1016/S0022-3956(01)00032-2)