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THE CONSPIRACY OF SILENCE: FAMILY COMMUNICATION EFFECTS ON  
DIFFERENTIATION OF SELF AND INTERPERSONAL FUNCTIONING IN  
CHILDREN AND GRANDCHILDREN OF HOLOCAUST SURVIVORS

BY

SARA KAPLAN, M.A., M.S.

A DOCTORAL DISSERTATION SUBMITTED TO THE GRADUATE FACULTY OF  
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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

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DEPARTMENT OF PSYCHOLOGY

SPONSORING COMMITTEE

CERTIFIED BY:

---

Philip S. Wong, Ph.D.  
Professor and Director  
Ph.D. Program in Clinical Psychology

Date: May 2, 2022

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Lisa Wallner Samstag, Ph.D.

---

Nicholas Papouchis, Ph.D.

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Nicole Nehrig, Ph.D.

## Abstract

Findings have been inconsistent regarding the existence of intergenerational transmission of trauma in offspring of Holocaust survivors (OHS) and grandchildren of Holocaust Survivors (GHS). Some studies have indeed found that OHS have more psychosocial problems than their counterparts with no family members in the Holocaust (e.g., Scharf, 2007), while others have not found any differences (e.g., Sagi-Schwartz et al., 2003). One reason for these mixed findings is the quantity and quality of communication on the part of the Holocaust survivor within their families about their trauma (e.g., Danieli et al., 2017). Another reason for the inconsistent findings is that much of the research on OHS has focused on psychopathology instead of focusing on the vulnerabilities in the areas of interpersonal difficulties and problems with separation and individuation that have been more frequently observed by clinicians working with OHS patients (e.g., Solkoff, 1992). To address these limitations with past research, the present study predicted that a lack of explicit communication between Holocaust survivor parents and their children would detrimentally impact OHS in the areas of interpersonal functioning and ability to separate from others and regulate their emotions. The study also examined the relationship between these variables in a subset of the OHS participants and their GHS children. Self-report measures were completed and analyzed from 412 OHS and 71 of their GHS children. There were several important findings, including that OHS-rated parental numbness predicted both greater OHS interpersonal problems and lower OHS differentiation of self. Additionally, OHS differentiation of self mediated the relationship between OHS-rated parental numbness and OHS interpersonal problems. Interestingly, none of these effects carried over to the GHS generation.

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## Table of Contents

Abstract.....	ii
Acknowledgments.....	iv
Table of Contents.....	vi
List of Tables.....	x
List of Figures.....	xii
List of Appendices.....	xiii
Chapter I. Introduction.....	1
Chapter II. Literature Review.....	8
Family Communication: Effects on Transmission of Trauma.....	8
Family Communication about the Holocaust.....	11
Communication in Families of Survivors: Measurements and Findings.....	15
Parental Communication of Holocaust Experiences Questionnaire.....	15
Measuring “Knowing and not Knowing”.....	18
The Danieli Inventory of Multigenerational Legacies of Trauma.....	20
Interpersonal Effects of Transmission of Trauma in OHS.....	26
The Core Conflictual Relationship Theme method.....	28
The CCRT Method: Findings in OHS.....	29
Family Communication and CCRTs.....	31
Differentiation of Self.....	36
Differentiation of Self as a Protective Factor.....	37
Differentiation of Self and OHS.....	38
Effects of the Holocaust on the Third Generation (GHS).....	41

GHS: An attachment perspective.....	42
GHS: Research findings.....	45
Research on OHS-GHS parent-child dyads.....	47
Chapter III. Statement of the Problem.....	51
Variable List.....	58
Independent Variables.....	58
Dependent Variables.....	59
Mediating Variable.....	59
Moderating Variable.....	59
Covariates.....	60
Hypotheses.....	60
Exploratory Questions.....	62
Chapter IV. Method.....	64
Participants.....	64
Recruitment.....	66
Inclusion Criteria.....	66
Measures.....	70
Procedure.....	76
Screening/Eligibility.....	77
Data Collection.....	78
Chapter V. Results.....	80
Preliminary Analyses.....	80
Missing Data and Outliers.....	80

Descriptive Statistics.....	81
Inter-Measure Correlations.....	81
Covariates.....	85
Hypothesis Testing.....	87
Study 1.....	87
Hypothesis 1.....	87
Hypothesis 2.....	88
Hypothesis 3.....	88
Hypothesis 4.....	91
Hypothesis 5.....	95
Study 2.....	95
Hypothesis 1.....	98
Hypothesis 2.....	98
Hypothesis 3.....	98
Summary of Findings from Hypothesis Testing.....	100
Exploratory Questions.....	103
Study 1.....	103
Question 1a.....	103
Question 1b.....	104
Question 2a.....	104
Question 2b.....	108
Study 2.....	108
Question 1.....	108



Question 2.....	108
Question 3a.....	110
Question 3b.....	110
Question 4a.....	110
Question 4b.....	113
Summary of Findings from Exploratory Questions.....	113
Chapter VI. Discussion.....	115
Theoretical and Clinical Implications.....	122
Limitations.....	128
Future Directions.....	131
Conclusions.....	132
References.....	135
Appendices.....	149

## List of Tables

Table 1. <i>Demographic Characteristics of OHS Sample</i> .....	65
Table 2. <i>Demographic Characteristics of GHS Sample</i> .....	67
Table 3. <i>Descriptive Statistics of Measures for OHS Sample</i> .....	82
Table 4. <i>Descriptive Statistics of Measures for GHS Sample</i> .....	83
Table 5. <i>Pearson's r Correlation Matrix for Self-Report Measures</i> .....	84
Table 6. <i>Difference in Dependent Variables Based on Sex</i> .....	86
Table 7. <i>Hierarchical Regression Analysis Predicting Interpersonal Problems in OHS</i> .....	89
Table 8. <i>Hierarchical Regression Analysis Predicting Self-Differentiation in OHS</i> .....	90
Table 9: <i>Hierarchical Regression Analysis Predicting Response of Self of Independence in OHS</i> .....	92
Table 10. <i>Mediated Regression Analysis Predicting Interpersonal Problems in OHS</i> .....	94
Table 11. <i>Moderated Mediation Analysis Predicting Interpersonal Problems in OHS</i> .....	97
Table 12. <i>Hierarchical Regression Analysis Predicting Interpersonal problems in GHS</i> .....	99
Table 13. <i>Mediated Regression Analysis Predicting Differentiation of Self in GHS</i> .....	102
Table 14. <i>Hierarchical Regression Analysis Predicting Interpersonal Problems in GHS</i> .....	105

Table 15. <i>Hierarchical Regression Analysis Predicting Interpersonal Problems in OHS</i> .....	106
Table 16. <i>Hierarchical Regression Analysis Predicting Differentiation of Self in OHS</i> .....	107
Table 17. <i>Hierarchical Regression Analysis Predicting Differentiation of Self in OHS</i> .....	109
Table 18. <i>Hierarchical Regression Analysis Predicting Interpersonal Problems in GHS</i> .....	111
Table 19. <i>Hierarchical Regression Analysis Predicting Interpersonal Problems in GHS</i> .....	112
Table 20. <i>Difference in Variables Based on Number of Survivor Parents</i> .....	161
Table 21. <i>Effect of Level of Education on Study Variables</i> .....	163

## List of Figures

- Figure 1.* Mediation Model: Standardized coefficients regarding indirect effect of OHS differentiation of self on the relationship between OHS parental numbness and OHS interpersonal problems.....93
- Figure 2.* Moderated Mediation Model: Unstandardized coefficients regarding interaction effect of OHS RS of Independence on the indirect effect of OHS differentiation of self on the relationship between OHS parental numbness and OHS interpersonal problems.....96
- Figure 3.* Mediation Model: Standardized coefficients regarding indirect effect of OHS differentiation of self on the relationship between OHS parental numbness and GHS differentiation of self.....101

## List of Appendices

Appendix A. Text of Recruitment Postings.....	149
Appendix B. Informed Consent Forms.....	150
Appendix C. Self-Report Measures.....	151
Appendix D. Debriefing Form.....	159
Appendix E. Supplemental Analyses.....	160

## **Chapter I**

### **Introduction**

Intergenerational transmission of trauma is broadly understood as the notion that the effects of traumas experienced by people throughout their lives are subsequently transmitted to their children, as well as to future generations (e.g., Danieli, 1998; Lev-Wiesel, 2007). This phenomenon was first observed among families of survivors of the Nazi Holocaust. Beginning in the 1960s, clinicians in Canada and the United States observed that many children whose parents had survived the Holocaust were seeking psychological treatment. These clinicians began to document and publish their observations from their psychotherapeutic work with these children (e.g., Sigal & Rakoff, 1971; Trossman, 1968). These therapists frequently reported similar presentations among these patients, including increased amounts of guilt, depression, aggression, interpersonal problems, and conflicts around separation-individuation and identity (Freyberg, 1980; Gampel, 1992; Kestenberg, 1982; Kogan, 1995; Pines, 1992; Wardi, 1992).

These clinical reports inspired researchers to examine the intergenerational transmission of trauma in families of Holocaust survivors. However, the findings from studies in this area have been inconsistent. Some studies have demonstrated that offspring of Holocaust survivors (OHS) do indeed have more psychosocial problems than their counterparts with no family members who survived the Holocaust, including higher levels of psychological distress, a greater number of interpersonal problems, more negative self-perceptions and relational experiences with their families, and more difficulties with separation and individuation (e.g., Brom et al., 2001; Felsen, 1998; Giladi & Bell, 2013; Scharf, 2007; Wiseman et al., 2002). Other studies, however, have

found that OHS did not suffer from an increase in any type of psychological distress (e.g., Sagi-Schwartz et al., 2003; van IJzendoorn et al., 2003).

In examining these inconsistent findings, scholars in the field (e.g., Giladi & Bell, 2013; Kellermann, 2001) have noted that there are two important aspects of intergenerational transmission of trauma that must be differentiated and further researched. The first aspect is the “how” of transmission: in other words, what are the *processes* that are occurring both within survivors of trauma psychologically, and between survivors and their children, that lead to the transmission of trauma? The second aspect is the “what” of transmission: what is the *content* of the transmission, or the effects and manifestations of the trauma that are being transmitted from generation to generation? The variety of proposed answers to these two questions may explain why the findings in the research have been so inconsistent. Thus, the present study aimed to expand on the research regarding both the process and the content of the intergenerational transmission of trauma in families of Holocaust survivors in an attempt to explain these inconsistent findings and to propose a model for how trauma transmission occurs in these families.

Regarding the *process* of transmission, researchers have asserted that there are specific mechanisms occurring both within the psychological make-up of certain Holocaust survivors and in their interactions with their families that cause trauma to be transmitted in *some* families of Holocaust survivors, but not in others (e.g., Danieli et al., 2017; Kellermann, 2008). Danieli (1998, 2015) proposed a multidimensional framework for the mechanisms through which trauma is transmitted. Her framework asserts that people who survive massive traumas develop “posttrauma adaptational styles” based on

survival strategies that they used during the massive traumas. According to Danieli (2015), after surviving a massive trauma, the survivor's adaptational styles "become an integral part of his/her personality...view of oneself, of others, and the world...they often also influence parenting and affect the children's psychosocial development and adaptation, thereby becoming intergenerational" (p. 168). As such, Danieli and others (e.g., Bar-On, 1996; Wiseman et al., 2002) have suggested that the style of family communication between the survivor of a massive trauma and his or her family will affect how trauma is transmitted to the next generation. Specifically, a pattern has been observed in some families in which the Holocaust survivor did not discuss their traumatic history with their family, leading to what has been labeled a "conspiracy of silence" (Danieli, 1998). The conspiracy of silence has been proposed as an aspect of family communication that contributes to the transmission of trauma from generation to generation.

The conspiracy of silence has been described as a pattern in which survivors did not speak about their traumatic experiences to their spouses or children (Danieli, 1998). As a result, family members received the implicit message that they should not ask any questions. This suspension of communication about the Holocaust from both the survivor and his or her family members has been termed a "double wall." Bar-On described this double wall as one where "parents do not tell, and children do not ask" (Bar-On, 1996, p. 168). Related to this notion of the conspiracy of silence is the observation made by Danieli (2015) that many Holocaust survivors displayed a lack of expression of feelings and appeared to be emotionally detached in the presence of their family members. As such, even if a survivor did discuss his or her Holocaust experiences with family, this



discussion may have been lacking in affect, which was likely also confusing to children of survivors.

Many theorists and researchers have suggested that these phenomena (i.e., the conspiracy of silence and the related emotional numbness) are important processes that contribute to the intergenerational transmission of trauma—or that explain the increased vulnerability to psychopathology and other difficulties—in *some* children and grandchildren of Holocaust survivors (e.g., Bar-On et al., 1998; Wiseman, 2002). Importantly, the conspiracy of silence is a multi-faceted concept: it includes not only the quality and quantity of communication by the Holocaust survivor to family members about his or her experience, as well as the lack of emotional displays, but also the perceptions of the OHS children about their parents' silence, and subsequent internalized feelings (e.g., anger and guilt; Wiseman et al., 2006) in OHS due to their parents' silence (Bar-On et al., 1998).

Due to the complexity of the conspiracy of silence phenomenon, it is a difficult construct to operationalize. Danieli (2015) created a self-report measure that addresses these complexities and examines the quality and quantity of family communication about the Holocaust as rated by OHS. The present study aimed to examine the family communication aspect of the conspiracy of silence among Holocaust survivors and their children using Danieli's measure. In doing so, the present study aimed to address the important question regarding how a lack of explicit communication about the Holocaust between survivors and their children affected the OHS generation.

The present study also addressed the important question related to the content of the transmission of trauma, or *what* vulnerabilities or manifestations of the trauma are

affecting the next generation(s)? Scholars in the field have noted that one limitation in much of the existing literature is that the research on OHS tends to focus on psychopathology in terms of *DSM-V* (American Psychiatric Association, 2013) disorders and symptoms, instead of on the problems in attachment, separation and individuation, and interpersonal functioning that have been observed clinically (Solkoff, 1992; Wiseman & Barber, 2008). To address this limitation, Wiseman and her colleagues studied the relational patterns and interpersonal functioning of OHS, and found that OHS struggle with feelings of anger, guilt, and difficulty with conflict and separation from their parents (Wiseman et al., 2002). The present study expanded on the work of Wiseman's team by studying how family communication about the Holocaust—particularly how the style of communication consistent with the conspiracy of silence—affects the interpersonal functioning and relational patterns of OHS.

As previously mentioned, OHS have been observed to have difficulty with separation and individuation. Differentiation of self is a construct related to separation and individuation, that refers to one's ability to maintain balance between his or her need for connectedness to others and his or her need for separation and individuation. Differentiation of self has been found to serve as a protective factor against many vulnerabilities across diverse samples (e.g., Hooper & DePuy, 2010; Peleg-Popko, 2002; Skowron et al., 2009). Additionally, one study found that both OHS and grandchildren of Holocaust survivors (GHS) had lower levels of differentiation of self as compared to controls (Giladi & Bell, 2013). The present study expanded on these findings by being the first to examine the relationship between communication about the Holocaust and differentiation of self in OHS and GHS within the same family. The present study was

also the first to examine differentiation of self as a protective factor against interpersonal problems in OHS and GHS.

Finally, the present study expanded on the research examining the effects of the Holocaust on the GHS generation. From his psychoanalytic treatment of GHS patients, Fonagy (1999) proposed an attachment-based model for how trauma is transmitted across generations. Specifically, his model explains that the child of a trauma survivor experiences attachment difficulties that subsequently interfere with his or her ability to adequately parent, leading to similar attachment difficulties in the third generation. Similar to the research on OHS, the existing research on GHS has yielded inconsistent results. For example, one study found that GHS were overrepresented by 300% in a child psychiatry clinic, as compared to age-matched controls (Sigal et al., 1998). However, other research has not found any differences in psychopathology and/or functioning between GHS and controls (e.g., Sagi-Schwartz et al., 2008).

These inconsistent findings regarding the intergenerational transmission of trauma to the GHS generation suggest that additional research needs to focus on refining the specific processes that lead to trauma being transmitted to multiple generations. The present study addressed these gaps in the literature by examining dyads of OHS parents and their GHS children in order to examine how family communication about the Holocaust as rated by the OHS parent affects their GHS children in the areas of differentiation of self and interpersonal problems. By looking at GHS in relation to their OHS parents, the goal was to investigate whether trauma is indeed being transmitted throughout multiple generations, but also to provide evidence for what specific

mechanisms occur in the relationships and interactions between all three generations which perpetuate the transmission of trauma.

## Chapter II

### Literature Review

The literature review begins with a description and critique of the existing findings regarding the effects of communication patterns in families of Holocaust survivors on the OHS generation. Then, findings regarding the interpersonal functioning of OHS will be discussed, as well as results of the research examining differentiation of self in OHS and GHS. Finally, the limited research that exists examining the effects of trauma on the GHS generation will be summarized and critiqued.

#### **Family Communication: Effects on Transmission of Trauma**

Theorists and researchers have suggested that the quality and quantity of family communication about traumatic experiences between survivors and their children contribute to the transmission of trauma from generation to generation (e.g., Bar-On et al., 1998; Sorscher & Cohen, 1997; Wiseman et al., 2002). Specifically, it has been emphasized that even if a survivor does not specifically discuss their traumatic experiences with their children, the trauma and subsequent emotional pain will reverberate implicitly in the home (Bar-On et al., 1998). For example, a trauma survivor may display post-traumatic stress disorder (PTSD) symptoms in the presence of family members, including nightmares, depression, fears, and mysterious outbursts of grief (Krell, 1979). The children of these trauma survivors may subsequently experience various reactions to witnessing their parents' pain without any explicit communication about the trauma. These children may experience feelings of guilt, anger, and confusion related to understanding that their parents are suffering without knowing the reasons for it (e.g., Ancharoff et al., 1998; Danieli, 1998; Nagata, 1998). Bettelheim (1984) articulately

described this phenomenon with the following quote: “What cannot be talked about can also not be put to rest; and if it is not, the wounds continue to fester from generation to generation” (p. 166). This quote alludes to the important notion that avoiding a discussion of painful events will *not* bury the trauma, despite a survivor’s wish that it would do so. This belief held by many survivors of trauma—that not speaking about their painful histories would be protective for their children—is believed to have contributed to the conspiracy of silence in these families (Danieli, 1998).

While the conspiracy of silence was first documented in families of Holocaust survivors (Danieli, 1998), a similar pattern has been observed in families of survivors of other massive traumas, regarding both the tendency of some trauma survivors to remain silent about their traumatic experiences and the detrimental effects that this silence can have on their children. Nagata (1998) documented his findings from interviews with 40 Japanese Americans whose parents were imprisoned in internment camps. These children described a pattern in their families of wanting to know about their parents’ histories, but perceiving their parents as being unwilling or unable to discuss their painful pasts. Additionally, these children described feelings of “a gap in their personal and family identities... [and feelings of] anger and frustration towards their parents noncommunicativeness” (p. 612).

Ancharoff (1998) and her team documented a similar occurrence through their observations of Vietnam War combat veterans and their families. Ancharoff noted that combat veterans may display PTSD symptoms in front of their families, including rage, flashbacks, and anxiety. The veterans’ children in turn received the message that they should not discuss their parents’ painful histories with them. This led to a collusion to

“maintain these silences...[and] subsequent anxiety in the children may be related to the anticipation of their parent’s symptoms and to fantasies about the uncommunicated material” (p. 263). These examples illustrate that the conspiracy of silence communication pattern generalizes across families of survivors of many massive traumas. The current study focused on communication patterns in the families of Holocaust survivors, due to the vast scale of the Holocaust and the large numbers of descendants of survivors living in the United States (Sagi-Schwartz et al., 2008).

While the conspiracy of silence phenomenon has been primarily discussed in relation to survivors of massive traumas, more generally, the power of trauma that is not articulated verbally is a topic that has been studied in depth by experts in the field of post-traumatic stress. Van der Kolk (2003), a world-renowned expert in the field of trauma and post-traumatic stress, has written about the silence maintained by some survivors of trauma as part of an attempt to avoid thinking about their painful pasts. He asserts that in an attempt to ward off thoughts about the trauma, some survivors of trauma may exhibit a “numbing response... [which consists of] emotional constriction, social isolation, retreat from family obligations, anhedonia, and a sense of estrangement” (p. 3). Van der Kolk (2003) explains that while this numbing response is an attempt to forget the trauma and move on from the past, it instead has the opposite effect, in that the numbing response “further diminishes the significance of life after the trauma, and thus perpetuates the central role of the trauma” (p. 3). This emotional constriction described by Van der Kolk has been observed in Holocaust survivors by their children (Danieli et al., 2015). As such, the notion of silence in survivors of massive trauma can be understood as consisting

of two separate parts: constriction of both verbal communication about one's traumatic experiences and emotional expression.

Dalgaard and colleagues (2016) elaborated on this idea, explaining the effects of traumas on communication from a psychodynamic framework. They assert that "the basic assumption is that trauma travels from the parents' unconscious mind to the child's unconscious mind unless it is verbalized" (p. 72). This unconscious transmission of trauma can be understood to occur as follows: when the survivor of trauma does not speak about his or her painful experiences, this silence leads to the survivor internally experiencing painful emotions stemming from the trauma (Dalgaard et al., 2016). In turn, these painful emotions experienced by the survivor are then displaced and played out indirectly in the family, leading to an awareness in the survivors' family members that their relative is suffering (e.g., Katz, 2003, Shmotkin et al., 2011).

### ***Family Communication about the Holocaust***

Those studying family communication patterns between Holocaust survivors and their children have made similar observations regarding the effects of silence on the children of survivors. Dating back to the 1960s, clinicians working with survivors and OHS have discussed both the benefits of parents speaking openly to their children about their Holocaust experiences, as well as the harm of parents remaining silent about these experiences. During this time, clinicians and scholars collected qualitative data through clinical interviews, workshops, focus groups, and direct clinical work with their patients. The findings they documented were extremely important in laying the groundwork for researchers in the future to test the intergenerational transmission of trauma in these families, which was one aim of the present study.



Several themes emerged in these clinical interviews and case reports conducted with Holocaust survivors and their OHS children in the 1960s and 1970s. One of these themes was the frequently observed feelings of confusion and guilt in OHS whose parents did not explicitly discuss their Holocaust experiences with them. Danieli (1998) began interviewing Holocaust survivors and their families in the 1960s. She observed that many of these survivors did not openly speak about their trauma histories with their families. The OHS who Danieli interviewed reported that despite a lack of explicit communication from their parents about their Holocaust experiences, there was “the constant psychological presence of the Holocaust at home...in some cases [the children] reported having absorbed the omnipresent experience of the Holocaust through “osmosis” (Danieli, 1998, p. 5). Danieli (1998) elaborated on the children’s experiences: “the children grew up in painful bewilderment; they understood neither the inexplicable torment within the family, nor their own sense of guilt” (p. 5).

Krell (1979) formed similar conclusions from his interviews with 20 families of Holocaust survivors. He observed that regardless of the amount of explicit communication about the Holocaust occurring in these families, the OHS children nonetheless perceived their parents’ grief, mourning, and emotional pain. Krell concluded that those children whose parents discussed their painful histories openly were less likely to feel confused, guilty, and responsible for their parents’ grief. Similarly, Trachtenberg (1978), who led workshops for children of Holocaust survivors, observed that the children of survivors who shared openly about their Holocaust experiences “seemed to have less difficulty dealing with the parent-child relationship” (p. 299). He elaborated on this by explaining that OHS children were able to feel less hurt and confused by their

parents' seemingly odd behavior after learning about their parents' traumatic histories. These various examples (i.e., Danieli, 1998; Krell, 1979; Trachtenberg & Davis, 1978) all describe a similar pattern in which OHS children were able to perceive their parents' emotional pain and suffering regardless of the amount of explicit communication about the Holocaust. Further, the children whose parents did not explicitly discuss the cause of their grief with them were more likely to experience negative feelings towards their parents, including guilt and confusion. The present study expanded on these clinical observations by testing the effects of various family communication styles on OHS.

Another theme that emerged from these early reports was the observation made by clinicians that OHS had difficulties in the area of separation and individuation. Fishbane (1979), through group discussions, support groups, and individual interviews with OHS, observed that "there were strong forces in most of the survivor-families against the separation of the young adult [OHS] from the parents...in only a few families was separation appropriately encouraged" (p. vi). Further, Fishbane concluded that it was in the families in which the OHS reported experiencing open communication with their parents about the Holocaust that separation from their parents was appropriately encouraged. However, for those OHS who reported that discussion about the Holocaust was taboo in their families, a healthy and normative separation from their parents was discouraged. Davidson (1980) documented similar observations from her clinical treatment of Holocaust survivors and OHS in Israel. She described seeing her OHS patients struggle with separation anxiety and difficulty gaining autonomy from their parents. Additionally, Davidson noted that, "denying, silent parents have often raised the most disturbed children" (1980, p. 14). She described a pattern in which these parents

became overly invested in their children's lives in order to forget their own pasts, which further contributed to these problems in separation and individuation in the OHS.

The present study aimed to operationalize and measure the family communication style consistent with the conspiracy of silence, using a recently developed measure that assesses both the quantity and quality of family communication about the Holocaust between survivors and their children (Danieli et al., 2015). The next section will discuss this measure, as well as others that have been created thus far, in an attempt to operationalize the construct of family communication about the Holocaust.

### **Communication in Families of Holocaust Survivors: Measurements and Findings**

As discussed above, clinical observations of OHS have led researchers studying the transmission of trauma to understand that a lack of open and explicit family communication about the Holocaust may be a potential risk factor for increased psychological vulnerabilities in OHS. More recently, researchers have attempted to measure and test family communication specifically about the survivors' Holocaust experiences using valid and reliable self-report measures (Danieli et al., 2015; Lichtman, 1983, 1984; Wiseman et al., 2002).

#### ***Parental Communication of Holocaust Experiences Questionnaire***

Lichtman (1983) created the Parental Communication of Holocaust Experiences Questionnaire to assess various aspects of Holocaust survivors' communication with their children about their experiences. The original measure consisted of 19 questions measuring several aspects of this communication, including (1) mother's frequent and willing discussion of wartime experiences and the transmission of factual information, (2) guilt-inducing communication by either parent, (3) father's frequent and willing

discussion of wartime experiences and transmission of factual information, (4) awareness of the Holocaust at a young age and its non-verbal presence in the home, as conveyed by either parent, (5) indirect communication about the Holocaust, as conveyed by both mother and father, and (6) affective communication about the Holocaust, as conveyed by both mother and father.

Lichtman administered this measure, as well as several others which measured various aspects of emotional functioning, including depression, anxiety, hypochondriasis, paranoia, guilt, empathy, and ego-strength, to 64 children of Holocaust survivors. The OHS that Lichtman included in her study had parents who either (1) had two parents who were prisoners in Nazi concentration camps, (2) had one parent who was a prisoner in a Nazi concentration camp, (3) had two parents who were in “a difficult hiding situation” (p. 916) during the Holocaust, and (4) had parent(s) who escaped from a Nazi-occupied territory to another country after “exposure to a considerable degree of persecution” (p. 916).

Lichtman found that guilt-inducing communication about the Holocaust (i.e., parent making comments such as “for this I survived Auschwitz/Hitler” in response to the child saying something that upset them) by either parent was related significantly to paranoia, hypochondriasis, and low ego strength in OHS participants. Additionally, indirect communication about the Holocaust (i.e., references to the Holocaust while the OHS was in earshot without any factual information being conveyed) by both parents was significantly related to anxiety, hypochondriasis, paranoia, and low ego strength. Further, the non-verbal presence of the Holocaust in the home (i.e., “the gloomy, panicky atmosphere...permeated my parents’ home”) was significantly related to anxiety,

paranoia, and low ego strength. Interestingly, the father's willingness to discuss his Holocaust experiences factually was related to lower depression, lower hypochondriasis, and higher levels of educational attainment in OHS, while the mother's willingness to do the same was related to higher paranoia, lower ego strength, and lower empathy in OHS. Lichtman understood this difference in findings between mothers' and fathers' communication by discussing Kav-Venaki and Nadler's (1981) theory that mothers may be more likely to recount their stories in a way that is high in victimization, while fathers may do so in more of a "fighter" style. This difference between the communication style of mothers and fathers suggests it is important to understand the nuances of family communication about the Holocaust. It may not just be the presence or absence of such communication that is important, but also the quality of the communication with both mothers and fathers. Additionally, this finding suggests that the affect or emotional tone with which the Holocaust is discussed by the survivor likely contributes to the effect on OHS as well.

Lichtman's work was very important: she was the first to create a measure that specifically assessed the various aspects of family communication about the Holocaust that had been observed repeatedly by clinicians but had yet to be tested in larger samples. Additionally, the findings from her research confirmed the observations of clinicians: that a lack of direct communication about the Holocaust was detrimental to OHS, and that the quality and emotional tone of the communication impacted the emotional functioning of OHS, as well. Lichtman's findings regarding the detrimental effects of the non-verbal presence of the Holocaust in the home echo the previously discussed understanding that

OHS will absorb their survivor parents' pain and suffering regardless of if this pain is verbally discussed.

However, a limitation of Lichtman's study is that the psychometric properties of her family communication measure are unknown. Lichtman created this 19-item measure to use for her dissertation and the study did not report the internal consistency estimate. The previous edits need to be eliminated. Lichtman's measure includes six subscales each with approximately three questions, but it is uncertain if she used a factor analysis or other analytic method to confirm this structure. Additionally, to this author's knowledge, the measure has not been used in other research. For these reasons, the current study expanded on Lichtman's findings using another measure that has been validated in multiple studies and has strong psychometric properties maybe you should say what the measure is (i.e., Danieli et al., 2015).

### ***Measuring "Knowing and not Knowing"***

Wiseman and her colleagues (2002) expanded on Lichtman's work by shortening the parental communication measure to specifically measure two aspects of family communication directly related to the conspiracy of silence pattern: (1) verbal communication about the Holocaust (three items) and (2) non-verbal presence of the Holocaust in the home (three items).

In Wiseman et al.'s (2002) study, the researchers examined the participants' response to this shortened family communication measure using a cluster analysis procedure in which they were able to place participants into distinct groups based on their responses. These researchers specifically created a group of participants that they

described as “knowing and not knowing,” based on a concept described by Jucovy (1985).

Jucovy (1985) based this concept of “knowing and not knowing” on his discussions with a group of psychoanalysts about their treatment of children of Holocaust survivors. He described the “knowing and not knowing” as the presence and impact that parents’ secrets and silence about their pasts have on their children. In other words, despite the lack of communicated factual information about the parents’ Holocaust experiences (i.e., the “not knowing”), the children still develop an awareness of the existence of their parents’ trauma unconsciously (i.e., the “knowing”).

Wiseman et al. (2002) classified the participants who endorsed high levels of non-verbal presence of the Holocaust in the home, but low levels of verbal communication about the Holocaust with their survivor parents as the knowing-not-knowing (KNK) group. They compared the KNK group to both a control group of Israelis who were not OHS, as well as to a group of OHS who endorsed high levels of verbal communication with their survivor parents about the Holocaust. Participants in the KNK group reported greater levels of interpersonal distress compared to the two other groups. Additionally, the KNK participants reported central relationship patterns (both with their parents and current romantic partners) that included feeling less independent in these relationships, and more desire to be in conflict with significant others, as compared to the two other groups. This notion of wishing to be in conflict can be understood as the desire to assert oneself in one’s relationship, even if this will lead to disagreement or discord in the relationship.

More details about the methods and findings of Wiseman et al.'s (2002) study are discussed in a subsequent section of the literature review. Of note, these findings provide additional support for the idea that differences in family communication are one important way to differentiate among groups of OHS and to understand the mechanisms leading to the transmission of trauma. Additionally, Wiseman et al.'s study established that the family communication style consistent with the conspiracy of silence can be operationalized, validated, and reliably measured, such that the observations from clinical reports can be tested in large sample, quantitative research.

However, as with Lichtman's original measure, Wiseman et al.'s (2002) version of the measure has limitations pertaining to its psychometric properties. The internal consistency for the two subscales (comprised of three items, each) used in this measure ranged from .76 to .79 based on a sample of 54 OHS adults. As this was the only study to the author's knowledge to use this shortened measure, this is a small sample on which to validate the measure to ensure reliability and validity. Additionally, other psychometric information is not available for this measure. To this author's knowledge, these researchers were the first to use this shortened version of Lichtman's measure and to use the cluster analysis procedure to group participants. For these reasons, the present study used a psychometrically stronger measure that more specifically addresses the notion of silence in family communication about the Holocaust: the Danieli Inventory of Multigenerational Legacies of Trauma, Part I: Posttrauma Adaptational Style (2015).

***The Danieli Inventory of Multigenerational Legacies of Trauma***

Beginning in the 1970's, Danieli and her team of researchers have studied the intergenerational impact of massive traumas, primarily, but not limited to, the Holocaust.



Danieli's research has been informed by her clinical work: she has provided group and individual therapy for survivors of massive traumas and their children for decades.

Danieli's clinical observations have allowed her to observe certain processes that occur within some families of survivors that may contribute to the transmission of trauma, and to understand the limitations of the existing research that may contribute to the inconsistent findings regarding the impact of the Holocaust on children of survivors.

Specifically, Danieli noted that the majority of this body of research was conducted "using available unidimensional measures...intended for the population at large...that might not meaningfully apply to (massively) traumatized cohorts" (Danieli et al., 2015, p. 168). Danieli's critique of the methodology used in the majority of this research inspired her to create measures that were multidimensional and could capture the specific processes unique to families of survivors of trauma that may contribute to increased vulnerabilities in children of survivors of the Holocaust.

To capture the multidimensional and complex nature of the transmission of trauma in the families of Holocaust survivors, Danieli proposed a theoretical framework for how this process occurs: *Trauma and the Continuity of Self: A Multidimensional, Multidisciplinary, Integrative Framework* (TCMI; Danieli, 1998). The goal of this framework was to fully capture the complexities at play when a person survives a massive trauma and attempts to adapt to life in its aftermath. The TCMI framework asserts that after surviving a massive trauma, people develop posttrauma adaptational styles. Danieli describes these posttrauma adaptational styles as follows:

These styles encompass those intrafamilial and interpersonal psychological, social, and behavioral coping, mastery, and defense mechanisms the

victim/survivor adopted as survival strategies during and after the Holocaust.

These styles generalize to a way of life and become an integral part of his/her personality...view of oneself, of others, and the world...they often also influence parenting and affect the children's psychosocial development and adaptation, thereby becoming intergenerational (Danieli et al., 2015, p. 168).

In other words, Danieli's theory explaining the transmission of trauma asserts that the parents' method of coping with their trauma histories contribute to the emotional functioning of their children, the OHS. As such, Holocaust/trauma survivors should not be viewed as a single entity who will transmit trauma to the next generation. Instead, it should be understood that a parent with a more adaptive posttrauma adaptational style may not transmit any symptoms of trauma to his or her child, while a parent with a less adaptive style may have children who do experience certain vulnerabilities related to their parent's trauma history. Danieli asserts that the lack of consideration for these different adaptational styles among survivors of the Holocaust in the research may explain why many of the larger quantitative studies using community rather than clinical samples have not consistently found evidence for the intergenerational transmission of trauma.

The second part of Danieli's TCMI framework involves how the child of the trauma survivor is affected by his or her parents' trauma and emotional pain: Danieli referred to this construct as reparative adaptational impacts. Danieli defined these reparative adaptational impacts as "the core, perhaps unconscious, motivation of the second generation to undo and repair the past and heal their parents and themselves" (Danieli et al., 2017). The TCMI framework asserts that the severity of a child's

reparative adaptational impacts will be directly affected by the trauma survivor parent's posttrauma adaptational style.

In order to operationalize and test these constructs, Danieli created self-report measures for OHS to assess both their perception of their survivor parents' posttrauma adaptational styles as well as their own reparative adaptational impacts (Danieli et al., 2015, 2016, 2017). Part I of Danieli's measure assessed OHS' perceptions of their survivor parents' posttrauma adaptational styles. Danieli's measure specifically assesses Holocaust survivor parents' adaptational style (as measured by their OHS children) with three subscales for the different styles that Danieli observed throughout her research and clinical work: (1) numb style, (2) victim style, and (3) fighter style. Danieli describes the numb style as "characterized by pervasive silence and depletion of all emotions, minimal tolerance to stimuli" (2015, p. 168). This numb style subscale of Danieli's measure was created through exploratory factor analysis. Danieli combined two factors: (1) emotional barrenness and (2) conspiracy of silence to create the numb style subscale. As previously discussed, both the lack of explicit communication of survivors about their Holocaust experiences (i.e., the conspiracy of silence) as well as the lack of emotional expression by survivors in front of their families, appear to impact OHS. Danieli's decision to combine the emotional barrenness factor and the conspiracy of silence factor suggests that she understands these two experiences to be related and to both be encompassed by the idea of "numbness." The present study examined this understanding by studying both factors of the numb style subscale, as well as the overall subscale, to understand how well these items predicted functioning in OHS and GHS.

Part II of Danieli's measure assesses reparative adaptational impacts in OHS. Some of the factors that this measure consists of include "insecurity about one's competence," "need for power or control," and "immature dependency." Danieli's TCMI model explaining the mechanism of the intergenerational transmission of trauma asserts that less adaptive posttrauma adaptational styles on the part of the Holocaust survivor (i.e., consistent with the victim style and the numb style) will lead to a higher level of reparative adaptational impacts in OHS. Danieli first tested her model using data from 422 adult OHS, in which she examined the relationships between the various posttrauma adaptational styles of survivor parents as rated by OHS, and the resulting OHS reparative adaptational impacts.

Findings confirmed Danieli's theoretical model: she indeed found that higher scores on the victim style subscale in either survivor parent as well as higher scores on the numb style subscale as it pertained to the OHS ratings of their Holocaust survivor mothers only, predicted higher reparative adaptational impacts (i.e., higher levels of problems in functioning in the areas being assessed by this measure) in OHS. The higher scores of reparative adaptational impacts indicated that these participants struggled in the areas of insecurity about competence, protectiveness over parents, need for power or control, obsession with the Holocaust, defensive psychosocial constriction, immature dependency, and broken generational linkages.

These findings are important as they validate the notion that Danieli's posttrauma adaptational style piece of the measure can be predictive of certain outcomes in OHS, including the problems with dependency and separation and individuation that have been observed clinically. However, a limitation with this study is that the only measure used to

assess functioning was the specific Reparative Adaptational Impacts measure created by Danieli. The present study used Part I of Danieli's measure (posttrauma adaptational styles) to test its ability to predict other important outcomes in OHS, including differentiation of self, relational perceptions, and interpersonal problems, areas of dysfunction that have been observed in clinical samples.

More recently, Danieli and her team (2017) examined the ability of both parts of the measure (i.e., Posttrauma Adaptational Styles and Reparative Adaptational Impacts) to predict past year diagnoses of depression, anxiety, and PTSD in OHS as measured by the Structured Clinical Interview for DSM-IV-TR Axis I Disorders (SCID). Results of this study found that OHS reparative adaptational impacts directly predicted past-year diagnoses of all three disorders. Additionally, OHS ratings of their parents' posttrauma adaptational styles that were high in the victim style in either parent and the numb style in the mother were predictive of all three diagnoses as well. However, this effect diminished when the effect of reparative adaptational impacts was controlled for.

These findings provided support for Danieli's TCMI theoretical model: they provide evidence for the idea that it is *through* the specific reparative adaptational impacts from Danieli's measure that the posttrauma adaptational styles have an effect on psychopathology and emotional functioning in OHS. Danieli's theoretical framework explaining the intergenerational transmission of trauma asserts that the Holocaust survivors' posttrauma adaptational style directly affects the OHS reparative adaptational impacts, which in turn may affect other aspects of the OHS functioning. Indeed, the results of these two studies provide evidence for Danieli's theory. However, the examination of diagnoses of depression, anxiety, and PTSD in OHS neglects many of the

other vulnerabilities that have been observed in OHS. The present study expanded on this body of research by using the Posttrauma Adaptational Style part of Danieli's measure to examine how these styles of family communication predicted other outcomes that have been observed in OHS, including difficulties in interpersonal functioning, relational perceptions, and differentiation of self.

### **Interpersonal Effects of Transmission of Trauma in OHS**

As previously discussed, the findings in research studies examining how OHS are affected by their parents' Holocaust trauma have been inconsistent. Specifically, clinicians working with OHS have documented the commonly observed vulnerabilities in this group of patients, such as high rates of anger, guilt, interpersonal problems, attachment difficulties, and problems in the area of separation and individuation (e.g., Freyberg, 1980; Gampel, 1992; Kestenberg, 1982; Kogan, 1995; Pines, 1992; Wardi, 1992). However, researchers attempting to study these vulnerabilities have not consistently replicated the observations documented in clinical case studies. Many quantitative studies and meta-analyses have been conducted examining levels of psychopathology in OHS, and have concluded that OHS are no more vulnerable to developing a psychological disorder (e.g., depression, anxiety, PTSD) than age-matched controls (e.g. Brom et al., 2001; Keinan et al, 1988; Nadler et al., 1985; Sagi-Schwartz et al., 2008; Sigal & Weinfeld, 1989; van IJzendoorn et al., 2003).

Some scholars in the field have suggested that a reason for the lack of consistent findings in the literature is that the methodologies of the research (i.e., the variables being studied and the measures being used) are not adequately capturing the complexities of the vulnerabilities experienced by OHS (e.g., Bar-On et al., 1998; Danieli et al., 2015). This

echoes Danieli's assertion that there are specific psychological processes that are unique to survivors of massive traumas. Danieli has asserted that research measures must be used that adequately capture the complexities of the vulnerabilities experienced by this population. Thus, research in this area must aim to more accurately measure the areas of vulnerability in this group that have been observed clinically. Quantitative research in this area, thus far, has been more focused on psychopathology in terms of disorders and symptomology, including depression, anxiety, PTSD, and secondary traumatic stress (STS), which likely explains why the research has not been replicating the clinical findings (Solkoff, 1992). For these reasons, the present study examined OHS functioning in the areas of interpersonal functioning, relational patterns and perceptions, and differentiation of self.

In doing so, the current study drew upon the work done by Wiseman (2002, 2006, 2008) and her team of researchers. Wiseman has extensively studied the transmission of trauma in OHS as it pertains to core relational patterns in this group, with the aim of more adequately capturing the complex and relational nature of the vulnerabilities experienced by OHS. Wiseman explained her rationale in studying these relational themes in OHS with the following quote by Hillel Klein, a psychoanalyst who treated and documented his work with Holocaust survivors and their children:

Research has shown that we can no longer speak of the transmission of psychopathology from one generation to the next, but rather of the transmission of common motifs, mythologies, issues, sensitivities within families and between the generations (Klein, 1980, p. 553).

Wiseman and her colleagues had found that their OHS psychotherapy patients were not necessarily experiencing increased levels of psychopathology as compared to other patients, but nonetheless the OHS patients shared commonalities in terms of relational themes that may contribute to specific vulnerabilities and difficulties in interpersonal functioning (Wiseman & Barber, 2008). Wiseman's team chose to use the Core Conflictual Relationship Theme (CCRT; Luborsky & Crits-Christoph, 1990) method to conduct their examination of relational themes in OHS.

### ***The Core Conflictual Relationship Theme Method***

The CCRT method assesses the dynamic and subtle attributes of a person's core relational perceptions using relationship narratives (called relationship episodes, or REs) that are written by the research participants and coded by trained coders. Specifically, the relationship episodes are coded on three components: (1) response of self (RS), or how the participant perceives his or herself to have responded during the episode (i.e., thoughts, behaviors, or emotional reactions), (2) response of other (RO), or how the individual perceives the other to have responded during the interaction (i.e., thoughts, behaviors, or emotional reactions), and (3) wish (W), or what the person's desire or intention was during the relationship episode. The items from each of these three categories that occur most frequently in a person's relationship episodes comprise that person's CCRT which "captures the central pattern, script, schema that each person follows in conducting relationships" (Luborsky & Crits-Christoph, 1998, p. 3).

Initially, the CCRT was created for use in psychotherapy sessions (Luborsky, 1977). Luborsky created this method based on his realization that through his patients' descriptions of their interactions with other people, he was able to formulate an



understanding of their central relational conflicts. As such, the CCRT was initially used to code REs from transcripts of psychotherapy sessions in order for clinicians to enrich their understandings about their patients' relational patterns. The Relationship Anecdotes Paradigm (RAP) Interview was then created in order to expand the application of the CCRT to other contexts (Luborsky & Crits-Christoph, 1998). With the RAP interview, research participants are asked to write their descriptions about actual events that have occurred in their relationships with specific significant others (e.g., parents, romantic partners). From the participants' responses, the REs are defined and coded in order to capture each participant's CCRT.

### ***The CCRT Method: Findings in OHS***

Wiseman and Barber (2008) collected RAP interviews from 56 OHS living in Israel in order to study their CCRTs. The OHS included in the study all had mothers who were survivors of Nazi concentration camps and had fathers who were either also survivors of concentration camps (38%), in Europe during the war (30%), outside of Europe during the war (13%), or had migrated to Israel before 1939 (19%). The researchers chose to require for inclusion that all participants have mothers who were in concentration camps in order to reduce heterogeneity in the parents' Holocaust experiences, as suggested by Danieli (1983). The participants in this research project were asked to provide ten REs: two about their mothers, two about their fathers, two about a spouse/romantic partner, two about a close same-sex friend, and two about one of their own children, or a niece or nephew (if they did not have children). Trained judges then defined the REs and coded the RSs, ROs, and Ws using the CCRT standard categories that were created by the creators of the CCRT (Barber et al., 1998).

Wiseman and Barber (2008) published their findings regarding relational and emotional themes found in the CCRTs of OHS in their book, *Echoes of the Trauma*. Their findings largely mirrored the clinical observations of therapists regarding their work with OHS patients. For instance, many of the OHS participants' CCRTs included the wish for greater autonomy in their relationships, especially with their Holocaust survivor parents. Their REs describe memories from childhood and adolescence when their parents were controlling and critical, telling them what kind of clothes to wear, not allowing them to date, and forbidding them from travelling for school trips, for example. These OHS describe similar conflicts between the need to please their parents and the desire for independence to make their own decisions. In the narratives provided by the participants, the desire to keep their parents happy seemed to overrule their desire for independence during the OHS' child and adolescent years. This finding corresponds with the previously discussed clinical observations that problems in separation and individuation are a common vulnerability among OHS (e.g., Davidson; 1980; Fishbane, 1979; Trossman, 1968).

Similarly, another wish observed frequently in these participants was that of wanting to protect their survivor parent(s), whom they viewed as vulnerable, and the related wish to avoid conflicts in their relationships with their parents to avoid upsetting them. For example, one participant described her attempts to protect her survivor mother as follows:

Every time I think what a difficult life she had...and how much...she suffered...if you don't do what she asks or...if you hurt her in a certain thing, it's very hard for her after this. You feel...that you are hurting the...I don't know how to explain it.

She's very vulnerable, and it's very difficult for me with this vulnerability.  
(Wiseman & Barber, 2008, pp. 74-75).

In this narrative, the participant describes her perception of her mother as someone who can be easily upset due to her past traumas. Thus, the participant believes that she must work hard to avoid conflict with her mother as to not upset her further.

These relational themes: the feeling of a lack of independence and a subsequent wish for autonomy, the view of the other as vulnerable and in need of protection, and the view of the self as working to avoid conflict, are ones that have permeated the documented clinical observations of OHS and now have been quantifiably studied using the CCRT method. Many of the previously discussed clinical observations have asserted that a lack of open communication about the Holocaust between survivor parent and OHS child are connected to these themes of a lack of independence and a view of the parent as vulnerable. Additionally, it has been asserted that one consequence of less frequent explicit communication about the Holocaust between survivors and their OHS children is that it instills in OHS negative feelings and perceptions towards their parents, including increased feelings of confusion, anger, and guilt (e.g., Davidson, 1980; Krell, 1979; Trachenberg, 1978). The present study expanded on these findings both from clinical case studies and the use of the CCRT method in order to quantifiably examine the effect of a lack of explicit family communication about the Holocaust on interpersonal problems and relational patterns in OHS.

### ***Family Communication and CCRTs***

The narratives provided by OHS in Wiseman and Barber's (2008) book described the presence of the conspiracy of silence in the families of the participants, and the

authors discussed how this silence appeared to be detrimental to the emotional and relational functioning of OHS. Wiseman explains this occurrence from an attachment perspective based on Bowlby's (1973) theory:

Open and coherent communication between parents and children from infancy to adolescence are associated with well-organized and revisable internal models of attachment relationships...when lines of communication are open, disruptive events can be discussed in the attachment relationship and threats to availability can be disconfirmed. (Wiseman & Barber, 2008, p. 92).

The commonly observed CCRTs of OHS in Wiseman and Barber's research can be understood from this attachment perspective. The lack of open communication coupled with the presence of non-verbal cues of their parents suffering is confusing and upsetting to OHS, who in turn feel overly responsible for their parents' pain and unable to adequately separate from their parents.

Wiseman's observations from her qualitative research about the power of the conspiracy of silence pattern led her team to conduct a quantitative study examining the effects of family communication about the Holocaust on the interpersonal functioning and relational themes in OHS (Wiseman et al., 2002). As previously discussed, Wiseman and her team used a shortened version of Lichtman's (1983) family communication measure to operationalize the family communication style consistent with the conspiracy of silence, or the "knowing and not knowing" phenomenon. The participants in this study included the same 55 OHS who participated in Wiseman's larger CCRT project.

Additionally, this study included a control group of 54 participants who were not OHS,

but were similar in other demographic variables (e.g., parent's country of origin, age, and marital status).

The OHS participants were administered the previously discussed shortened version of Lichtman's Parental Communication of Holocaust Experiences Questionnaire, and from their responses on this measure, these participants were divided into two groups: (1) the Knowing Not Knowing (KNK) group and (2) the Informative Verbal Communication (IVC) group. All participants (OHS and non-OHS controls) were administered the Inventory of Interpersonal Problems Circumplex (IIP-C; Alden, Wiggins, & Pincus, 1990). This 64-item self-report measure assesses interpersonal problems and functioning as they pertain to the circumplex, on the dimensions of Affiliation and Dominance. Participants were also administered the Central Relationship Questionnaire (CRQ; Barber et al., 1998). The CRQ is a self-report measure derived from the CCRT method that assesses participants' RSs, ROs, and Ws. For Wiseman et al.'s (2002) study, participants were asked to fill out the CRQ separately for their relationships with their mothers, their fathers, and their spouses. Additional measures included the Marlowe Crowne Social Desirability Scale (Crowne & Marlowe, 1960), which assesses their tendency to respond to questions in a socially desirable way, and the Mental Health Index (MHI; Veit & Ware, 1983) which assesses psychological distress and psychological wellbeing. Psychological distress was measured on three subscales: (1) depression, (2) anxiety, and (3) loss of behavioral/emotional control, and psychological wellbeing is measured in two subscales, (1) general positive affect and (2) emotional ties.

Results of this study found that there were no differences in psychological distress or psychological wellbeing between OHS (both the KNK group and the IVC group) and

the control group. This finding provides evidence for the assertion made by many in the field (e.g., Bar-On, 1996; Jucovy, 1992; Klein, 1980) that the trauma transmission from Holocaust survivors to their children is *not* expressed in increased psychopathology. In contrast, levels of interpersonal distress were found to be higher among the KNK group of OHS than in either of the other groups (the IVC-OHS group and the non-OHS control group). This finding is important as it provides additional evidence for the frequent clinical observations and research findings that a lack of verbal communication with their parents about their parents' Holocaust experiences is determinantal to OHS, particularly in the realm of interpersonal functioning.

Central relationship themes (as measured by the CRQ) were also found to differ between the KNK-OHS group and the other two groups. In terms of wishes (W), participants in the KNK-OHS group scored significantly higher on the wish "to be in conflict" than did participants in the other two groups. For responses of other (RO), participants in the KNK-OHS groups more frequently perceived the other as controlling, out of control, anxious, and hurtful than did the participants in the other two groups. Regarding responses of self (RS), the findings differed between men and women in the KNK-OHS group. Compared to the other two groups, men in this group reported significantly less independence in relation to their spouses, and women reported less independence in their relationships with their parents, but not with their spouses.

The central relationship patterns that were found in the KNK-OHS group provide further evidence for the detrimental effects that silence in the family (i.e., a lack of open communication) can have on OHS. The greater frequency of the wish "to be in conflict" suggests that the OHS in the KNK group are feeling a desire or need to express

themselves and their feelings that they believe may cause a negative reaction in the other person. In other words, this wish to be in conflict may be indicative of “unfinished business” (Wiseman et al., 2002, p. 377) experienced by the KNK-OHS, as they have felt hindered in their abilities to express themselves freely out of fear of the others’ reactions. This notion is underscored by the responses of other found more frequently in the KNK-OHS group. The fact that this group viewed the other (both spouses and parents) as more controlling, out of control, anxious, and hurtful may contribute to this group having more difficulty expressing themselves and attempting to avoid conflict. This conscious need experienced by these OHS to avoid conflict may subsequently lead to the (potentially unconscious) wish to be able to express their feelings and be in conflict with their parents or others. Additionally, the finding that the KNK-OHS group had less independence in their responses of self provides further evidence for this idea: those OHS who did not experience open about their parents’ pain and trauma may feel responsible for their parents’ happiness and feel more pressure to remain in a more dependent relationship with their parents, sacrificing the independence that they likely desire and need.

This last finding, that OHS who did not experience open communication with their parents about their Holocaust experiences, despite observing their parents’ pain, felt less independent than did OHS who did communicate verbally with their parents about this topic, is indicative of a larger issue that has been observed by clinicians regarding their work with OHS: problems with separation and individuation. The present study expanded on Wiseman and colleague’s research by examining the effects of family communication about the Holocaust on interpersonal problems and relational patterns,

while also examining how differentiation of self, a construct related to separation and individuation, is related to these variables as well.

### **Differentiation of Self**

Differentiation of self is a construct stemming from Bowen's (1978) family system theory; it refers to one's ability to maintain balance between the need for connectedness to others and the need for separation and individuation. Differentiation of self also assesses one's intrapersonal capacity to differentiate between feelings and thoughts, and to maintain awareness of one's emotions. Differentiation of self has been described as follows:

Greater differentiation is thought to enable one...to maintain a sense of self in an intense emotional relationship...it also involves a capacity to decrease one's own anxiety and to resist being overwhelmed by the anxiety of others...differentiation refers to the ability to experience autonomy from others and intimacy with others. More differentiated people tend to have greater autonomy in their relationships without experiencing debilitating fears and anxieties of abandonment, and more intimacy in their relationships without feeling smothered (Peleg-Popko, 2002, p. 356).

As such, the construct of differentiation of self can be understood as being related to the concept of separation and individuation.

Four factors comprise the construct of differentiation of self. The first is emotional reactivity: people with poor differentiation of self are emotionally reactive and expend a large amount of energy coping with the intensity of their feelings. The second factor is the ability to take an I-position, or to maintain a clearly defined sense of self in



the midst of pressure from others. The third factor is fusion with others: people with poor self-differentiation are likely to be overly involved or enmeshed with others in their close relationships, and “remain emotionally ‘stuck’ in the position they had in their families of origin, have few firmly held convictions and beliefs, are either dogmatic or compliant, and seek acceptance and approval above all else” (Peleg-Popko, 2002, p. 256). The fourth factor is emotional cutoff, or a tendency to socially isolate and to emphasize independence at the expense of having meaningful and close relationships.

### ***Differentiation of Self as a Protective Factor***

The descriptions of differentiation of self and the four factors that comprise it suggest that those with poor differentiation of self will likely struggle in terms of interpersonal and emotional functioning, while those with high levels of differentiation of self will likely have more positive outcomes in these areas (Kerr & Bowen, 1988). Skowron and Friedlander (1998) developed the Differentiation of Self Inventory (DSI) to quantifiably examine the notion that differentiation of self is predictive of various outcomes, including adjustment, psychopathology, and relational functioning. Skowron and Friedlander (1998) piloted the DSI on a sample of 609 adults (age 25+) and used factor analysis to select the items that most accurately measured the four subscales pertaining to the four factors of differentiation of self. They further validated their measure by examining participants’ DSI scores in relation to several outcome variables. Differentiation of self, as measured by the DSI, was found to significantly predict lower levels of chronic anxiety, better psychological adjustment, and greater marital satisfaction. These initial findings using the DSI suggested that Bowen’s assertion—that

differentiation of self is a protective factor and can predict many positive outcomes—is correct.

Since the creation and validation of the DSI, more recent research across diverse samples has provided additional evidence for Bowen’s assertion that differentiation of self is a protective factor against many psychological difficulties. For instance, Murdock and Gore (2004) found that differentiation of self (measured by the DSI) protected against higher levels of psychological distress in a sample of 119 college students. Additionally, Hooper and DePuy (2010) found that poor differentiation of self was predictive of higher levels of depression in a sample of 60 racially diverse adults in a rural community. Differentiation of self was also found to protect against interpersonal problems in a sample of 132 college students (Skowron et al., 2009). These findings provide further evidence that differentiation of self is a protective factor against many vulnerabilities, including problems in interpersonal functioning, an area with which OHS have been found to struggle. The present study was the first to examine differentiation of self, using the well-validated DSI, as a protective factor against interpersonal problems in OHS.

### *Differentiation of Self and OHS*

Research and clinical case studies alike have indicated that one effect on OHS of being raised by survivors of the Holocaust is difficulties with separation and individuation (Brom et al., 2001; Gampel, 1992). Additionally, researchers have found more overprotection and fusion in the relationships between Holocaust survivors and their children compared to controls (Kellermann, 2008; Wiseman & Barber, 2008). Researchers have proposed that the occurrence of the conspiracy of silence

communication pattern in these families is an explanation for the attachment and separation-individuation difficulties in these parent-child relationships (Giladi & Bell, 2013; Wiseman et al., 2006).

The differentiation of self construct is related to separation and individuation and fusion in relationships. As such, the findings both from clinical observations and the existing research strongly suggest that this group may experience problems with differentiation of self. However, at the present time, only one quantitative study has examined differentiation of self in OHS. Giladi and Bell (2013) examined both family communication and differentiation of self as variables that could potentially serve as protective factors against increased levels of secondary traumatic stress (STS) in both OHS and GHS. They collected data from a sample consisting of 77 American/Canadian OHS, 52 American/Canadian GHS, and an age-matched control group for each generation consisting of American/Canadian Jewish people without ancestors in the Holocaust.

Participants in this study completed a demographic questionnaire, as well as the Secondary Trauma Scale (STS; Motta et al., 2001) which assesses the presence of trauma symptoms that are acquired through contact with individuals who have experienced trauma. To assess differentiation of self, participants completed the Crucible Differentiation Scale (CDS; Schnarch & Regas, 2008). Finally, participants completed the Family Communication Scale (FCS; Olson et al., 2004), which assesses positive aspects of communication in families, with an emphasis on the open and free-flowing exchange of factual and emotional information.

Results of this study found that both OHS and GHS had lower levels of differentiation of self compared to controls. Additionally, both OHS and GHS had lower levels of positive family communication than did controls. Further, both differentiation of self and positive family communication were found to be protective against secondary traumatic stress (STS) in OHS and GHS. These findings provide an important contribution to the literature by confirming that problems in family communication as well as problems with differentiation of self may be contributing to other vulnerabilities in OHS, as well as in GHS.

However, this study had several limitations. The use of the CDS instead of the DSI is questionable, as this measure has not been used widely and its ability to capture the construct of differentiation of self as defined by Bowen (1978) is uncertain. Additionally, while the researchers examined both family communication and differentiation of self, they did not examine the relationship between these two variables. As previously discussed, theorists and clinicians have documented their findings that deficits in open family communication about the Holocaust seems to contribute to problems with separation and individuation (e.g., Fishbane, 1979), suggesting that this relationship is an important one that should be examined quantifiably. The present study expanded on the work of Giladi and Bell to answer the question as to whether a lack of open family communication about the Holocaust, as rated by OHS, causes problems in differentiation of self in both the OHS generation and their GHS children. The present study also examined the relationship between family communication about the Holocaust, as rated by OHS, and general family communication (using the FCS) as rated by GHS.

Additionally, while Giladi and Bell's study took the important step of examining differentiation of self and family communication in both OHS and GHS, they did not study dyads of OHS and GHS from the same family in order to capture how trauma may be transmitted from generation to generation within one family system. As will be discussed in the following section, the transmission of trauma to the third generation (GHS) can be understood from an attachment perspective (e.g., Fonagy, 1999), making the specifics of the dynamics of the OHS parent—and the dynamics in the relationship between the survivor and their OHS child—very important in understanding the vulnerabilities that may be experienced by the GHS generation. The present study built on this research by testing the relationships among family communication about the Holocaust between survivors and their OHS children, and differentiation of self and interpersonal problems in both OHS and GHS, in order to better understand how the detrimental effects of certain family communication patterns may transmit not only to the OHS child, but to the GHS as well.

### **Effects of the Holocaust on the Third Generation (GHS)**

Giladi and Bell's 2013 study illustrates that similar to their OHS parents, GHS are affected by transmission of trauma from the Holocaust. Additionally, clinical observations have led to an understanding that trauma can be transmitted across multiple generations (Fossion et al., 2003; Scharf, 2007). Fossion documented his findings from therapeutic treatment of several families of Holocaust survivors, specifically as they pertained to his observations of problems observed in GHS. Fossion reported that though the GHS whom he treated clinically presented with a variety of difficulties, including problems in school, cannabis use, eating disorders, depression, anxiety, and problems

with aggression, the families of these patients presented with similar patterns and relational dynamics that led him and his team to believe that this variety of symptoms in GHS may be related to their family history of trauma pertaining to the Holocaust. Fossion elaborated on this notion as follows:

CHSs (i.e., OHS) depended emotionally on their children...from whom they demanded compensation for their own damaged childhood...the GHS bore the brunt of the “shock wave” of the Holocaust trauma. Due to the lack of autonomy of their parents, they did not enjoy a family climate that allowed them to experiment with new forms of expression. Fear and anxiety were everywhere...they had to sacrifice themselves in order to protect their parents from their own feeling of helplessness. For GHS, separation individuation conflicts appeared insoluble. (Fossion et al., 2003, pp. 522-523).

Fossion’s description illustrates how the difficulties in separation and individuation may be passed down from generation to generation, and how the problems experienced by OHS due to their parents’ traumas may in turn affect their GHS children.

***GHS: An Attachment Perspective***

Fonagy (1999) formulated his understanding of the GHS patients he treated using an attachment framework, stating that the intergenerational transmission of trauma led to difficulties in attachment among the OHS (due to their survivor parent’s trauma) that interfered with their ability to adequately parent their GHS children. Specifically, Fonagy discussed his treatment of an adolescent GHS boy, Glen, who experienced many symptoms of obsessive compulsive disorder and presented to treatment in a severely dissociated state. Fonagy had knowledge of Glen’s OHS mother from consultation with

the mother's psychoanalyst: his mother was severely depressed and according to the mother's therapist, she described memories from when Glen was an infant of "staring at the baby and wondering if it was worthwhile to bring another human being into the world with so much suffering" (Fonagy, 1999, p. 102). Glen's mother's mother had survived the Holocaust, and though she never spoke about her experiences or the related profound losses and emotional pain, Glen's mother nonetheless was aware of her mother's suffering, and the Holocaust seemed to have affected Glen's mother, the OHS, profoundly, which in turn affected her GHS son.

Fonagy asserted that Glen's mother was in too much emotional pain of her own to provide the proper mirroring to Glen that would have allowed him to develop a secure attachment style and the sufficient understanding of the feelings of himself and others. According to Fonagy's theory, instead of Glen learning about his own mental states from his mother—who should have been mirroring his mental states to him—Glen likely observed his mother's feelings of distress and fear about motherhood, and internalized his mother's painful feeling states as his own. As such, Glen's dissociative state can be understood as his attempt to ward off these "bad" internalized self-states that he had acquired from his mother during infancy. Through this case study, Fonagy eloquently uses his theory of attachment, mirroring, and reflective function to explain how emotional pain can be transmitted to multiple generations due to trauma.

Fonagy's theory has been validated in the trauma research more generally. One comprehensive study (Berthelot et al., 2015) examined the relationship between a mother's history of abuse and/or neglect and their infant's attachment styles in a sample of 57 dyads, incorporating multiple methods and rating perspectives (e.g., self-report,

interview ratings, direct observation). Specifically, the mothers completed the Parental Bonding Inventory (PBI; Parker, Tupling, & Brown, 1979) to assess their perceptions about the level of parental care and support they received during their first 16 years of life, as well as the Childhood Experience of Care and Abuse Interview (CECA; Bifulco, Brown, & Harris, 1994) which assesses adverse childhood experiences before the age of 17. These two measures allowed the researchers to classify the mothers in terms of their own histories of abuse, neglect, and nurturing from their own parents. The mothers were also administered the Adult Attachment Interview (AAI; George et al., 1985) in order to assess both the mothers' attachment styles and their levels of reflective functioning. The researchers also coded the AAIs specifically for reflective functioning regarding traumatic experiences (RF-T). Finally, the mother-infant dyads participated in the Strange Situation Procedure (SSP; Ainsworth et al., 1978) to assess the mother-infant attachment styles.

Berthelot found that mothers who reported abuse and neglect during their own childhoods were more likely to have children with insecure and disorganized attachment styles. Additionally, results showed that the mothers' difficulties with reflective functioning, specifically reflective functioning regarding their own trauma (RF-T), played a significant role in predicting the insecure and disorganized attachment styles in their infants. This finding supports Fonagy's theories regarding the effects of trauma on reflective functioning. Specifically, the results from Berthelot's (2015) study further illustrate the notion that people who do not receive responsive mirroring as infants due to their caregivers' traumas and emotional pain, will subsequently struggle to mentalize



their own infants' mental states, leading to a perpetuation of deficits in reflective functioning.

This understanding of the transmission of trauma through deficits in reflective function and problems with attachment aligns with the previously discussed descriptions of the relationships between Holocaust survivors and their OHS children. Some survivors' own trauma histories affected their ability to adequately focus on their children's emotional needs and mental states. Instead, the survivors may have either been emotionally absent due to their attempts to forget their own trauma histories and not share it with their children, or they may have been overly concerned with protecting and controlling their children, thus not allowing their children to individuate. As such, it is understandable that the difficulties experienced by OHS in the realms of attachment and separation and individuation would be passed down to their GHS children. More recently, this understanding that the transmission of trauma can span multiple generations, has motivated researchers to begin to examine the effects of the Holocaust on GHS.

### ***GHS: Research Findings***

Similar to the research on OHS, findings in the literature regarding the effect of the Holocaust on GHS have been inconsistent. Findings from some studies have suggested that GHS experience higher levels of psychopathology. For example, one group of researchers conducted a chart review of all patients who attended a child outpatient mental health clinic over a period of ten years, and found that GHS were overrepresented by over 300% as compared to children who had no relatives who survived the Holocaust (Sigal et al., 1998). While this finding is important, the frequency likely overestimates rates of distress in the GHS population in that the study specifically

examined a *clinical* sample (i.e., children who received psychiatric treatment). The extent of psychopathology in the wider GHS community remains unknown.

In order to assess the transmission of trauma to GHS in a community sample, Illiceto et al. (2011) assessed 62 GHS from the community in Italy in the areas of hopelessness, temperament, personality, attitudes, and interpersonal expectations. These same domains were also measured in a group of 62 age-matched control participants with no family who had been in the Holocaust. To assess temperament, the participants completed the Temperament Evaluation of Memphis, Pisa, Paris, and San Diego (TEMPS-A; Akiskal et al., 1998). Participants completed the Beck Hopelessness Scale (BHS; Beck & Steer, 1989) to assess hopelessness. Anger and anger expression were assessed using the State-Trait Anger Expression Inventory (STAXI; Spielberger, 1996). The 9 Attachment Profile (9AP; Candilera, 2007)—a semi-projective test—was used to examine interpersonal relationships based on perceptions of self and other and internal working models.

Results of this study found that there were no differences between GHS and controls in several areas including hopelessness and dysthymic, cyclothymic, and anxious temperaments. However, GHS participants were significantly more likely to have an irritable temperament and were higher both in anger and anger expression than controls. Additionally, GHS' perceptions of others were found to be significantly more negative than those of the control group. Specifically, GHS participants were more likely to view the other person in interpersonal relationships as rejecting, hostile, submissive, insecure, unreliable, and competitive. These results are important as they illustrate how just as with OHS, GHS' vulnerabilities seem to be more related to their interpersonal functioning and

perceptions and less related to increases in psychopathology. These findings indicate that these problems in relational perceptions may be carried over from the OHS generation to their GHS children.

Some studies, however, did not find any significant differences between GHS and controls. A meta-analysis (Sagi-Schwartz et al., 2008) examined the quantitative research on transmission of trauma to GHS, looking at the results of 13 studies of non-clinical samples. Specifically, the studies included in this meta-analysis examined many potential vulnerabilities among GHS, including aggression, attachment, communication, self-esteem, coping, psychological distress, behavioral problems, psychopathology, anxiety/depression, and eating problems. Summarizing these studies, the researchers found *no* evidence of tertiary traumatization to GHS (Sagi-Schwartz et al., 2008). Other researchers in the field have suggested that a reason for these results and other null findings may be problems with the research questions and the selection of measures used (e.g., Scharf, 2007): similar to the discussion above regarding limitations in the existing research on OHS, much of the GHS research may be asking the wrong questions and focusing too much on psychopathology and less on the difficulties with separation and individuation, as well as interpersonal functioning, that have been observed clinically. A gap in the literature is the fact that most studies examining GHS do not examine the OHS parents in relation to their GHS' children's' functioning which is especially important in the context of the attachment model of transmission of trauma that was discussed above. Without an understanding of the vulnerabilities experienced by the OHS parents, it is hard to draw firm conclusions about the GHS generation.

### ***Research on OHS-GHS Parent-Child Dyads***

As previously discussed, the vulnerabilities experienced by GHS can be understood from an attachment perspective in which OHS—due to their experience with their parents and their parents’ trauma—have certain deficits in attachment and ability to mentalize which are transmitted to their children during infancy. This understanding suggests that an important next step in studying the functioning of GHS would be an examination of GHS in relation to their OHS parents. At the time the current research was conducted, very few studies had examined OHS-GHS dyads.

One study (Letzter-Pouw et al., 2014) examined GHS in relation to their OHS parents’ perceptions of parental burden. The authors describe the transmission of parental burden (ToPB) as “children’s evaluation of the extent to which they received the inner pains of their parents, in turn causing them to feel responsible and protective of their parents” (Letzter-Pouw et al., 2014, p. 421). The researchers hypothesized that OHS level of ToPB would affect their GHS children’s’ level of Holocaust salience, which they defined as “the extent to which the Holocaust is present in everyday thoughts, feelings, and behaviors” (p. 421). The sample consisted of 161 OHS-GHS dyads, in which at least one parent of every OHS had lived under Nazi occupation in Europe during World War II. The OHS and GHS participants completed the Holocaust Salience Scale, which was created by the authors to assess the extent of Holocaust salience. ToPB was measured using the Transmission subscale of the Perceived Parental Rearing Behavior Questionnaire (Kellermann, 2001).

Results from this study confirmed the researchers’ hypothesis: a higher level of ToPB in OHS significantly predicted Holocaust salience in GHS. This finding provides evidence for the importance of examining the transmission of trauma in GHS in relation

to their OHS parents: the importance of the Holocaust and the role it plays in GHS lives was found to be directly impacted by the amount of suffering their OHS parents believed that their own parents had experienced.

Similarly, Palgi et al. (2015) also examined how GHS Holocaust salience could be affected by their OHS parents. Instead of measuring ToPB, this study examined the relationship between family involvement as rated by OHS, and Holocaust salience, as rated by GHS. These researchers described their concept of family involvement as consisting of several themes, including (1) Compensating for Parents' Suffering, (2) Worrying about Parents' Happiness, (3) Shielding Parents from Pain and Suffering, (4) Avoiding Sharing Personal Worries with Parents, (5) Caring for the Continuity of the Family Chain, and (6) Guilt Feelings towards the Parents. These six themes provide an understanding for the concept of family involvement that is consistent with the previously discussed difficulties in separation and individuation that have been observed in OHS. Palgi and his team created the Family Involvement Questionnaire (FIQ: Palgi, 1997) to assess many of the feelings and experiences that have been documented in OHS pertaining to their Holocaust survivor parents.

In Palgi et al.'s (2015) study, the researchers hypothesized that OHS' higher levels of family involvement and Holocaust salience would significantly predict both family involvement and Holocaust salience in their GHS children. Ninety-two dyads of OHS parents and their GHS children completed the FIQ as well as the Holocaust Salience Scale (Letzter-Pouw et al., 2014). Results of this study showed that level of family involvement in OHS parents significantly predicted the level of family involvement in their GHS children. Additionally, level of Holocaust salience in OHS parents

significantly predicted the level of Holocaust salience in their GHS children. These findings provide additional evidence for the idea that the transmission of certain vulnerabilities to GHS can likely be explained by the functioning of their OHS parents, particularly in the area of family communication and feelings that OHS experience towards their survivor parents. The present study expanded on the literature including OHS-GHS dyads by studying how explicit communication about the Holocaust between survivors and their OHS children can affect both OHS and GHS in several areas of functioning, specifically differentiation of self, interpersonal functioning, and relational perceptions.

## Chapter III

### Statement of the Problem

Since the 1960s, as survivors of the Nazi Holocaust immigrated to the United States and other countries and began starting families, clinicians have extensively documented observations from their treatment of patients who were children of Holocaust survivors (OHS; e.g., Rakoff, 1969; Sigal et al., 1973; Trossman, 1968). Specifically, these clinicians observed the following vulnerabilities in OHS: increased amounts of guilt, aggression, interpersonal problems, and conflicts around separation and individuation (Freyberg, 1980; Gampel, 1992; Kestenberg, 1982; Kogan, 1995; Pines, 1992; Wardi, 1992). However, when researchers attempted to assess these symptoms in large sample studies and test hypotheses about consequences for the families of Holocaust survivors, the findings were inconsistent. Some studies have indeed found that OHS have more psychosocial problems than their counterparts with no family members in the Holocaust, including higher levels of psychological distress and more negative self-perceptions and relational experiences with their families (e.g., Scharf, 2007). Other studies, however, have not found any differences between OHS and controls in terms of psychological distress or other difficulties (e.g., Sagi-Schwartz et al., 2003).

More recently, researchers have proposed that one explanation for these mixed findings is that there are certain mechanisms occurring in some families of Holocaust survivors that cause their children to be more affected by their parents' traumatic experiences (e.g., Danieli et al., 2017). Danieli (2015), an expert on the effects of massive traumas, has proposed that when people survive massive traumas, they adapt in complex

and unique ways that affect their psychological functioning, interpersonal relationships, and ways of communicating with and relating to others, including their children.

Danieli and others (e.g., Wiseman et al., 2002) have proposed that one way that survivors of massive trauma may cope is by attempting to forget about their traumatic histories and by not discussing their pain with their families. It has been proposed that this lack of explicit communication about their histories to their children contributes to the transmission of trauma to the next generation (Wiseman et al., 2002). Danieli termed this phenomenon the “conspiracy of silence,” and the conspiracy of silence communication pattern has been frequently observed in families of Holocaust survivors. Danieli has also proposed that Holocaust survivors may exhibit a lack of affect or emotional expression, which she termed “emotional barrenness.” Danieli understood this emotional barrenness coupled with the survivors’ lack of explicit communication about their Holocaust experiences with family members (i.e., the conspiracy of silence communication pattern) to align with one adaptation style, which she termed the “numb” post-adaptational style.

The conspiracy of silence communication pattern, as well as the detrimental effects it can have on OHS, has been documented by clinicians working with Holocaust survivors and OHS since the 1960s (e.g., Danieli, 1998; Krell, 1979). These clinical observations have led researchers to consider this lack of explicit communication about the Holocaust as a potential mechanism through which trauma is transmitted. However, the multi-faceted nature of the conspiracy of silence communication pattern as a construct has made it difficult to measure. As a step towards its operationalization, the present



study sought to study the pattern in family communication about the Holocaust and how explicit communication about the survivors' Holocaust experience affect OHS and GHS.

While researchers have created several measures to operationalize the family communication style consistent with the conspiracy of silence (Danieli et al., 2015; Lichtman, 1983, 1984), studies examining family communication about the Holocaust are sparse in the literature. Findings, thus far, have concluded that a lack of explicit dialogue about the Holocaust leads to detrimental effects in OHS, including increases in psychopathology (Lichtman, 1984) and interpersonal difficulties (Wiseman et al., 2002). While the findings from these studies are important first steps in the empirical literature, they have limitations involving the measure used to assess family communication patterns. Both Wiseman et al.'s (2002) and Lichtman's (1984) studies used various forms of Lichtman's (1983) parental communication measure, for which the psychometric properties were not reported and remain unknown. Due to questions about the psychometric strength of this measure, the present study used a measure that was recently created by Danieli (2015), that has been validated and has promising psychometric properties.

Danieli's measure was created to specifically assess the unique and multidimensional effects of surviving the Holocaust, and to quantifiably examine family communication about Holocaust experiences, as rated by OHS children. As Danieli's measure is relatively new, prior to the present study it had not been used by other researchers to examine various outcomes that may be associated with different qualities and quantities of communication about the Holocaust in families. The present study used Danieli's (2015) measure to study the family communication style consistent with the

conspiracy of silence. Danieli's measure assesses three post-trauma adaptational styles in Holocaust survivors: the numb style, the fighter style, and the victim style. As previously mentioned, the numb style encompasses items related to both the conspiracy of silence pattern as well as to the emotional barrenness quality. The present study sought to differentially examine both the conspiracy of silence and emotional barrenness features of the numb style subscale to gain a better understanding of how each of these phenomena in Holocaust survivors affect the OHS generation. Additionally, this study examined how this style of communication in families (i.e., consistent with the conspiracy of silence and emotional barrenness) affects various outcomes in both OHS and GHS, specifically outcomes that have been observed clinically but not frequently studied in the OHS and GHS populations, including interpersonal problems, relational perceptions, and differentiation of self.

As mentioned in the literature review section, the mixed findings in the research regarding the extent to which trauma from the Holocaust is transmitted to subsequent generations has led researchers to more recently focus on the potential reasons for these mixed findings (e.g., Bar-On et al., 1998). Another suggestion that has been made for the reasons for some of the null findings is that much of the research on OHS has focused on psychopathology in terms of *DSM-V* (American Psychiatric Association, 2013) diagnoses and symptomatology, instead of focusing on the vulnerabilities in the areas of interpersonal difficulties and problems with separation and individuation that have been more frequently observed by clinicians working with OHS patients (e.g., Solkoff, 1992). It has been suggested that the measures used to detect problems in the OHS generation

have not been sensitive enough to adequately capture the complexities of the vulnerabilities and difficulties experienced by OHS (e.g., Nadler et al., 1985).

To address this limitation in the literature, researchers have more recently begun to examine interpersonal functioning and relational perceptions among OHS (e.g., Wiseman et al., 2002). Wiseman and her colleagues (2002, 2006, 2008) have studied OHS using the Core Conflictual Relationship Theme (CCRT; Luborsky & Crits-Christoph, 1990) method to capture relational perceptions and themes that are common in OHS. Findings from this research suggest that OHS who did not experience open communication with their parents about their Holocaust experiences have an increased number of interpersonal problems and problematic relational perceptions. However, research thus far in this area has been sparse, and the measure used in the one existing quantitative study had psychometric limitations, as discussed above. The present study expanded on Wiseman's research by examining the relationship between family communication style and these interpersonal variables in both OHS and GHS, using a measure that has better psychometric properties and more fully operationalizes the conspiracy of silence communication pattern. Additionally, as these findings suggest problems with separation and individuation in OHS, the present study aimed to examine how family communication about the Holocaust relates to differentiation of self, a construct related to separation and individuation, in OHS.

Clinicians and researchers alike have demonstrated that OHS have difficulties with separation and individuation (e.g., Brom et al., 2001; Fishbane, 1979). In a study testing concurrent validity of the protective factors for intergenerational trauma, Giladi and Bell (2013) found that both second and third generation Holocaust survivors had

poorer self-differentiation compared to age-matched controls, and rated their level of open and positive family communication more poorly compared to those controls. However, these researchers did not examine the relationship between family communication and differentiation of self. The present study addressed this gap in the literature by being the first to examine the relationship between family communication style and differentiation of self.

Giladi and Bell (2013) also found that differentiation of self was a protective factor for OHS and GHS: specifically, those OHS and GHS with higher levels of differentiation of self were less likely to experience secondary traumatic stress (STS). However, research thus far has not examined differentiation of self as a protective factor against the interpersonal problems that have been observed in OHS. This gap in the literature is one that is important to address, as research has concluded that OHS likely have more vulnerabilities in the areas of relationships and interpersonal functioning than in levels of psychopathology (Nadler et al., 1985). The present study addressed this additional gap in the literature by examining differentiation of self as a protective factor against interpersonal problems in both OHS and GHS. Similar to research findings regarding the OHS generation, research on the transmission of trauma to the GHS generation has yielded inconsistent results. Some studies, such as the Giladi and Bell (2013) study, have found greater vulnerabilities in GHS compared to controls (e.g., lower differentiation of self, poorer family communication), while other studies have found no differences between GHS and controls (e.g., Sagi-Schwartz et al., 2008).

One limitation of the majority of research on the GHS generation is that most studies examining GHS did *not* examine the functioning of the OHS parents of these

GHS. For example, while Giladi and Bell (2013) found that both OHS and GHS had poorer family communication and differentiation of self compared to controls, they did not examine OHS and GHS from the same families in order to see if the parents' functioning in these areas was predictive of the child's functioning. This limitation is important, as the potential difficulties of the GHS generation can be understood from an attachment perspective, as proposed by Fonagy (1999), in which the trauma of some Holocaust survivors leads to deficits in parenting, in turn leading to insecure attachment and problems with reflective function in their OHS children, which then leads to problems in attachment and reflective function in the GHS children of these OHS. As such, it is important to study parent-child OHS-GHS dyads in order to understand how the transmission of trauma may be occurring across multiple generations. The present study addressed this limitation in the literature by examining how the effects of a lack of open family communication about the Holocaust between survivors and their OHS children may reverberate to the GHS generation.

Another limitation in the GHS literature has been that similar to the research on OHS, the GHS literature tends to focus on psychopathology instead of the more complex difficulties with attachment, interpersonal functioning, and separation and individuation that are seen clinically. The few studies that have examined relational perceptions and interpersonal functioning among GHS (e.g., Illiceto et al., 2011) have, indeed, found that GHS experience more anger and negative perceptions of other people compared to controls. However, interpersonal functioning and relational perceptions in GHS have not yet been examined in relation to the functioning of their OHS parents. This was the first study (known to the researcher) to examine how the family communication style of

Holocaust survivors as rated by OHS parents affects GHS' interpersonal problems, relational perceptions and differentiation of self, making this study an important contribution to the GHS literature.

### **Variable List**

Two groups of participants, Offspring of Holocaust Survivors (OHS) and Grandchildren of Holocaust Survivors (GHS), completed self-report measures for hypothesis testing in Study 1 (OHS only) and Study 2 (OHS-GHS dyads). Variables for the two studies are listed, below.

### ***Independent Variables***

A self-report measure for the following independent variable was completed by Study 1's OHS participants only:

1. Parental numbness: Numb Style Subscale of the Danieli Inventory of Multigenerational Legacies of Trauma, Posttrauma Adaptational Style (Danieli et al., 2015). The numb style subscale consists of two factors: one measuring "conspiracy of silence in the home" and one measuring "emotional barrenness." As such, after data were collected, preliminary analyses were conducted to determine if the items comprising these two factors were correlated with one another in the study sample. These preliminary findings will be discussed in subsequent sections. Of note, the two factors were found to be highly correlated with one another, and the decision was made for the Numb Style subscale to be used to measure the variable of parental numbness. Scores the Numb Style subscale were computed using mean scores, with higher mean scores indicating higher levels of parental numbness.

The following independent variable was measured using a self-report measure that was completed by Study 2's GHS participants only:

2. Family Communication: Family Communication Scale (FCS; Olson et al., 2004).

The FCS's items pertain to positive aspects of family communication, including the open communication of both factual information and emotions. Total scores are then computed to assess the level of positive family communication.

### ***Dependent Variables***

The following variable was measured using a self-report measure that was completed by OHS participants only:

1. Response of Self of "independence": Central Relationship Questionnaire (CRQ; Barber et al., 1998; McCarthy et al., 2008). This subscale consists of three items: (1) "I am independent," (2) "I am my own person," and (3) "I am self-sufficient."

A mean score was computed to assess each participant's RS of independence.

The following variables were measured using self-report measures that were completed by all study participants:

2. Differentiation of Self: Differentiation of Self Inventory—Short Form (Drake et al., 2015). Mean scores were used for analyses, with a higher mean score indicating higher differentiation of self.
3. Interpersonal Problems: Inventory of Interpersonal Problems—Short Circumplex (IIP-SC; Hopwood et al., 2008; Soldz et al., 1995). A mean score of all items was used to assess total interpersonal distress.

### ***Mediating Variable***

The following variable was measured using self-report measures that were completed by all study participants:

1. Self-Differentiation: Differentiation of Self Inventory—Short Form (Drake et al., 2015). Mean scores were used for analyses, with a higher mean score indicating higher differentiation of self.

### ***Moderating Variable***

The following variable was measured using self-report measures that was completed by OHS participants only:

1. A) Response of Self of “independence”: Central Relationship Questionnaire (CRQ; Barber et al., 1998; McCarthy et al, 2008). This subscale consists of three items: (1) “I am independent,” (2) “I am my own person,” and (3) “I am self-sufficient,” A mean score was computed to assess each participant’s RS of independence.

### ***Covariates***

The following demographic variables, asked on the demographic questionnaire, were analyzed as potential covariates:

1. Sex: measured using a bi-variate, categorical variable in which the two categories analyzed were “male” and female.”
2. Age in years: measured using a continuous variable.

## **Hypotheses**

### ***Study 1***

In a sample of adults with at least one parent who survived the Holocaust (OHS), it was hypothesized that:



1. There will be a significant positive effect between survivor parent's level of numbness rated by OHS and interpersonal problems among OHS, such that OHS who report higher levels of numbness displayed by their survivor parent will report a higher level of interpersonal problems.
2. There will be a significant negative effect between survivor parent's level of numbness rated by OHS and differentiation of self among OHS, such that OHS who report higher levels of numbness displayed by their survivor parent will have a lower level of self-differentiation.
3. There will be a significant negative effect between the survivor parent's level of numbness rated by OHS and the response of self of "independence" such that OHS who report higher levels of numbness displayed by their survivor parent will be less likely to endorse the response of self (RS) of "independence."
4. The relationship between the survivor parent's level of numbness as rated by OHS and interpersonal problems in OHS will be mediated by OHS differentiation of self. The direct effect of OHS-rated parent level of numbness on OHS interpersonal problems will be partially explained by the indirect effect of OHS differentiation of self.
5. The mediating effect of OHS differentiation of self on the relationship between the survivor parent's level of numbness, as rated by OHS, and interpersonal problems in OHS will be moderated by the response of self of "independence," such that the negative relationship between survivor parent level of numbness, as rated by OHS, and differentiation of self will be

amplified for those with lower levels of the response of self of  
 “independence,” leading to a higher level of interpersonal problems.

### *Study 2*

In a sub-sample of parent-child dyads of OHS (i.e., participants from study 1) and their GHS adult children, it was hypothesized that:

1. There will be a significant negative effect for survivor parent’s level of numbness as rated by OHS and differentiation of self in their GHS children, such that the GHS children of OHS who endorse a higher level of numbness as displayed by their survivor parent will have lower differentiation of self.
2. There will be a significant positive effect for survivor parent’s level of numbness as rated by OHS and interpersonal problems in their GHS children, such that the GHS children of OHS who endorse a higher level of numbness as displayed by their survivor parent will have a higher level of interpersonal problems.
3. The relationship between survivor parent’s level of numbness as rated by OHS and GHS differentiation of self will be mediated by OHS differentiation of self. The direct effect of OHS-rated level of numbness on GHS differentiation of self will be partially explained by the indirect effect of OHS differentiation of self.

### *Exploratory Questions*

In a sample of OHS:

- 1a. How will the Fighter style subscale of the Danieli measure (as compared to the Numb style subscale which was tested in the hypotheses) relate to interpersonal problems in OHS?
- 1b. How will the Victim style subscale of the Danieli measure (as compared to the Numb style subscale which was tested in the hypotheses) relate to interpersonal problems in OHS?
- 2a. How will the Fighter style subscale of the Danieli measure (as compared to the Numb style subscale which was tested in the hypotheses) relate to differentiation of self in OHS?
- 2b. How will the Victim style subscale of the Danieli measure (as compared to the Numb style subscale which was tested in the hypotheses) relate to differentiation of self in OHS?

In a sample of parent-child dyads of OHS and their GHS adult children:

1. Will the level of numbness as rated by OHS be predictive of less positive family communication as rated by GHS?
2. Will OHS differentiation of self be predictive of GHS differentiation of self?
- 3a. Will OHS scores on the Fighter style subscale of the Danieli measure be related to GHS interpersonal problems?
- 3b. Will OHS scores on the Victim style subscale of the Danieli measure be related to GHS interpersonal problems?
- 4a. Will OHS scores on the Fighter style subscale of the Danieli measure be related to GHS differentiation of self?

4b. Will OHS scores on the Victim style subscale of the Danieli measure be related to GHS differentiation of self?

## Chapter IV

### Method

#### Participants

##### *Offspring of Holocaust Survivors (OHS)*

A total of 660 participants clicked on the link to the Qualtrics survey for the OHS portion of the study. Participants' data were excluded if they did not complete *at minimum* the demographic questionnaire and at least one of the subsequent self-report measures. Other reasons for exclusion included multiple surveys from the same IP address and if a participant answered "no" to the consent form or eligibility criteria. After removing the responses from excluded participants,  $N = 412$  OHS participants' data were used for all analyses. The demographics for the OHS sample are presented in Table 1.

##### *Grandchildren of Holocaust Survivors (GHS)*

For the second part of this two-part study, the data from parent-child dyads of OHS and their GHS children were analyzed to examine intergenerational effects within families. As such, GHS were only eligible to participate after their OHS parent completed their portion of the study. OHS who participated had the option of providing their own email address so that a follow-up email could be sent to them for them to forward to one of their GHS children to invite them to participate. Out of the 412 OHS participants, 225 opted to receive an email to invite their GHS child to participate. From these emails, 83 GHS clicked the link to begin participating in the study. The data from GHS participants were excluded if (1) they did not complete at least the demographic form and one self-report measure, or (2) if multiple children of the same OHS parent participated, only one GHS's data were counted. Additionally, one GHS participant's responses were excluded

**Table 1***Demographic Characteristics of OHS Sample (N = 412)*

Characteristic	<i>M (SD)</i>
Age	63.92 (7.45)
	<i>% (n)</i>
Sex	
Female	77.2 (318)
Male	22.8 (94)
Education	
High school graduate	5.3 (22)
Associates/Professional Degree	6.1 (25)
Bachelor's Degree	29.6 (122)
Master's Degree	35.7 (147)
Doctorate	21.8 (90)
Prefer not to answer	1.5 (6)
Marital Status	
Married (legally)	74.0 (305)
Not married, living together	4.6 (19)
Divorced	10.0 (41)
Separated	1.2 (5)
Widowed	2.9 (12)
Single	6.6 (27)
Prefer not to answer	0.5 (2)
Holocaust Survivor Parent(s)	
Mother	13.3 (55)
Father	26.0 (107)
Both	60.7 (250)

*Note.* *M* = mean; *SD* = standard deviation.

because they were an extreme outlier on one of the measures. As such, the data of  $N = 71$  GHS participants (i.e., OHS-GHS matched dyads) were used in all analyses. The demographics for the GHS sample are presented in Table 2.

### ***Recruitment***

OHS participants were recruited primarily through emails sent out to listservs of Jewish and Holocaust-related organizations, as well as posts made in Jewish and Holocaust-related Facebook groups. Many Facebook groups exist specifically for OHS to connect with and support one another all around the world, and this study was advertised in several of these groups. The text of the advertisements used for this study can be found in Appendix A. Additionally, many participants expressed interest in sharing the study with other family members and friends after they had participated as well, leading to snowball sampling.

### ***Inclusion Criteria: Defining “Holocaust Survivor”***

In the vast amount of research studying Holocaust survivors, OHS, and GHS, researchers have differed greatly in how they defined “Holocaust survivor” and whom they chose to include in their studies. For example, Wiseman and Barber (2008) chose to include only OHS who had a mother who survived a concentration camp. They reported that they made this decision in order to reduce heterogeneity in their sample regarding the survivors’ experiences, as well as to control for sex differences. However, a limitation of the use of this inclusion criteria is that this study (and others with more stringent definitions of Holocaust survivor) does not include participants whose ancestors’ lives were disrupted and changed permanently by the Nazis in other ways, though they themselves were not prisoners in concentration camps. To address this wider range of

**Table 2***Demographic Characteristics of GHS Sample (N = 71)*

Characteristic	<i>M (SD)</i>
Age	32.83 (8.52)
	<i>% (n)</i>
Sex	
Female	76.1 (54)
Male	23.9 (17)
Education	
High school graduate	5.6 (4)
Associates/Professional Degree	4.2 (3)
Bachelor's Degree	32.4 (23)
Master's Degree	36.6 (26)
Doctorate	21.1 (15)
Marital Status	
Married (legally)	43.7 (31)
Not married, living together	12.7 (9)
Divorced	5.6 (4)
Single	38.0 (27)
Holocaust Survivor Grandparent(s)	
Mother's mother only	7.0 (5)
Mother's father only	21.1 (15)
Father's mother only	5.6 (4)
Father's father only	2.8 (2)
Both maternal grandparents only	36.6 (26)
Both paternal grandparents only	16.9 (12)
Three grandparents	1.4 (1)
All four grandparents	8.5 (6)

*Note.* *M* = mean; *SD* = standard deviation.



experiences had by Jewish people who were affected by the Holocaust, Lichtman (1983, 1984) chose to include in her study OHS with parents who had not only survived concentration camps, but also those who were in hiding, or who escaped from a Nazi-occupied territory after experiencing persecution at the hands of the Nazis. In doing so, the argument can be made that Lichtman's findings are more generalizable to the large amount of Jewish people whose ancestors' lives were in some way affected by the Nazi Holocaust.

Indeed, several prominent Holocaust-related organizations have published their own answers to the question, "what is a Holocaust survivor?" to address this debate. The United States Holocaust Memorial Museum, the official Holocaust memorial of the United States, located in Washington DC, states the following regarding their understanding of the definition of a Holocaust survivor on their website:

The museum honors as survivors any persons, Jewish or non-Jewish, who were displaced, persecuted, or discriminated against due to the racial, religious, ethnic, social, and political policies of the Nazis and their collaborators between 1933 and 1945. In addition to former inmates of concentration camps, ghettos, and prisons, this definition includes, among others, people who were refugees or were in hiding.

This definition speaks to the idea that Holocaust survivors include people who experienced a wide range of hardships due to actions of the Nazis.

Yad Vashem, the official Holocaust memorial and museum of Israel, provides a similar explanation on their website regarding their definition of Holocaust survivors:

We define Shoah (i.e., Holocaust) survivors as Jews who lived for any amount of time under Nazi domination, direct or indirect, and survived. This includes French, Bulgarian and Romanian Jews who spent the entire war under anti-Jewish terror regimes but were not all deported, as well as Jews who forcefully left Germany in the late 1930s. From a larger perspective, other destitute Jewish refugees who escaped their countries fleeing the invading German army, including those who spent years and in many cases died deep in the Soviet Union, may also be considered Holocaust survivors. No historical definition can be completely satisfactory.

This definition is important, as it not only clarifies that people who experienced a wide range of disruptions to their lives due to the Nazis should be considered to have survived the Holocaust, but it also asserts that there is no one answer to this question that will be completely satisfactory or complete. As such, the goal is to use a definition that is as complete and accurate as possible.

The present study drew on the definitions of these organizations that are devoted to the study and remembrance of the Holocaust, and thus chose to define “Holocaust survivor” as anyone who faced persecution at the hands of the Nazis, and/or whose life was affected and disrupted by the Nazi occupation of Europe. As such, the present study included participants whose parents and grandparents faced a wide range of challenges related to the actions perpetrated by the Nazis. Thus, OHS were eligible to participate as long as their parent experienced any persecution at the hands of the Nazis, including being removed from their home, fleeing or escaping from the threat of the Nazis, being in hiding, or being in a concentration camp.

## Measures

### *Danieli Inventory of Multigenerational Legacies of Trauma, Part I: Posttrauma Adaptational Style (Danieli, Norris, Lindert, Paisner, Engdahl, & Richter, 2015)*

This 60-item self-report measure was created to assess multidimensional multigenerational effects of surviving massive trauma. This measure consists of three subscales: fighter style (12 items), victim style (30 items), and numb style (18 items). The fighter style is defined by Danieli (2015) as “intense drive to build and achieve, compulsive activity and prohibition of weakness or self-pity” (p. 168). The victim style is defined as including “sadness, worry, mistrust, fear of the outside world and symbiotic clinging within the family” (Danieli et al., 2015, p. 168). Finally, the numb style subscale encompasses “pervasive silence and depletion of all emotions, minimal tolerance to stimuli, and children expected to grow up on their own” (Danieli et al., 2015, p. 168). These three subscales were created by exploratory factor analysis (EFA). Items of this measure are answered on a 5-point Likert scale, (1 = *strongly disagree*, 2 = *disagree*, 3 = *neither way*, 4 = *agree*, 5 = *strongly agree*). Scores for each of the three subscales are computed using mean scores, with higher mean scores of each subscale indicating higher levels of that post-trauma adaptational style.

All three subscales demonstrated adequate internal consistency during the development and pilot testing of this measure in a sample of 482 OHS. For this previous sample, the numb style sub-scale had excellent internal consistency ( $\alpha = .89$ ). The victim style subscale also had excellent internal consistency in the same sample ( $\alpha = .92-.93$ ). The fighter style subscale’s internal consistency was more moderate ( $\alpha = .69-.70$ ). This measure demonstrated strong predictive validity in relation to part II of Danieli’s

measure, the Reparative Adaptational Impacts scale. The victim style subscale of part I had the strongest correlations with part II of the measure, both for mothers ( $r = .65$ ) and fathers ( $r = .63$ ). The numb style subscale of part I also had strong correlations with part II of the measure for mothers ( $r = .47$ ) and fathers ( $r = .40$ ). While this measure is relatively new, there is also promising support for its' validity. Danieli (2015) found that both the numb style subscale ( $r = .47$ ) and the victim style subscale ( $r = .65$ ) had significant predictive validity in their relationship to part II of her measure, the Reparative Adaptational Impacts scale, which assesses the specific impacts of the intergenerational trauma on the emotional functioning of OHS.

In the present study, only the OHS participants completed this measure and the numb style subscale was included in the main hypotheses. The 18 items comprising the numb style subscale pertain to two separate factors: (1) conspiracy of silence in the home (6 items) and (2) emotional barrenness (12 items). One example of an item on the conspiracy of silence in the home factor of the numb style subscale is as follows: "In our family, the Holocaust was never mentioned." One example of an item on the emotional barrenness factor of the numb style subscale is as follows: "Our home was devoid of emotions."

Due to the fact that the numb style subscale features these two distinct factors, for the present study, the decision was made to conduct preliminary analyses not only on the overall numb style subscale but also on the two separate factors. In the present study sample, the numb style subscale had excellent internal consistency ( $\alpha = .88$ ). The conspiracy of silence in the home factor had good internal consistency ( $\alpha = .75$ ). The emotional barrenness factor had excellent internal consistency ( $\alpha = .89$ ). After examining

these internal consistencies, the decision was made to proceed with hypothesis testing using the overall numb style subscale scores.

The participants' scores on the fighter style and the victim style subscales were analyzed in the exploratory part of the present study. One example of an item of the victim style subscale is as follows: "The Holocaust was always present in the house." For the present study, the victim style subscale demonstrated excellent internal consistency ( $\alpha = .92$ ). One example of an item on the fighter style subscale is as follows: "I was taught to honor and remember the history of our people." The internal consistency for the fighter style subscale was much more moderate than that of the other two subscales ( $\alpha = .50$ ).

***Differentiation of Self Inventory—Short Form (DSI-SF; Drake, Murdock, Marszalek, & Barber, 2015)***

The DSI-SF is a 20-item self-report measure that is an abbreviated version of the Differentiation of Self Inventory—Revised (DSI-R; Skowron & Schmitt, 2003). The DSI-SF assesses overall self-differentiation as well as assessing the four subscales of differentiation of self: (1) Emotional Reactivity (6 items), (2) I Position (6 items), (3) Emotional Cutoff (3 items), and (4) Fusion with Others (5 items). Each item is answered on a 6-point Likert scale, ranging from 1 (*not true at all of me*) to 6 (*very true of me*). Mean scores are used for analyses, with a higher mean score indicating higher differentiation of self. One example of an item on the emotional reactivity subscale is as follows: "I'm very sensitive to being hurt by others." One example of an item on the I position subscale is "No matter what happens in my life, I know that I'll never lose my sense of who I am." One example of an item of the emotional cutoff subscale is as

follows: “I tend to distance myself when people get too close to me.” Finally, an example of an item on the fusion with others subscale is as follows: “I feel a need for approval from virtually everyone in my life.”

In a sample of 344 adult participants on whom the shortened measure was initially validated (Drake et al., 2015), the DSI-SF was found to have high internal consistency ( $\alpha = .89$ ). In this same sample, the DSI-SF had high test-retest reliability ( $r = .85$ ) after a four-week period between the initial and subsequent tests. Further, the DSI-SF was found to have high construct validity: scores on the DSI-SF were significantly correlated ( $r = .57$ ) with scores on another measure of differentiation of self, the Level of Differentiation of Self Scale (LDSS; Haber, 2003). Additionally, in this same sample, the DSI-SF had strong convergent validity, as scores on this measure were significantly correlated with scores on measures of depression ( $r = -.68$ ), state anxiety ( $r = -.58$ ), trait anxiety ( $r = -.75$ ), and self-esteem ( $r = .61$ ).

Internal consistency was high for the overall DSI-SF ( $\alpha = .89$ ) and ranged from moderate to high for the four subscales, (Emotional Reactivity = .84, I Position = .72, Emotional Cutoff = .81, and Fusion with Others = .74) in a convenience sample of 355 college students on which the measure was originally validated. For the present study, internal consistency was high for the DSI-SF in both the OHS sample ( $\alpha = .91$ ) and the GHS sample ( $\alpha = .89$ ).

***Inventory of Interpersonal Problems-Short Circumplex (IIP-SC; Soldz, Budman, Demby, & Merry, 1995)***

The IIP-SC is a self-report measure which is a short version of the Inventory of Interpersonal Problems (Horowitz et al., 1988). This measure includes 32 of the 127

items from the original measure. Each item is answered on a five-point Likert scale ranging from 0 (*not at all*) to 4 (*extremely*). Examples of items on the IIP-SC are, “It is hard for me to understand another person’s point of view” and “I try to please other people too much.” The IIP-SC includes items that comprise eight subscales:

Domineering, Vindictive, Cold, Socially Avoidant, Nonassertive, Exploitable, Overly Nurturant, and Intrusive. Additionally, an average of all items can be used to assess total interpersonal distress, the score which was used for the present study. Previous studies using the IIP-SC have found that the measure has strong psychometric properties, including high internal consistency ( $\alpha = .90$ ; Wei, Heppner, & Mallinckrodt, 2003). Additionally, in a sample of 397 college students, the IIP-SC was found to have strong concurrent validity, as scores on the IIP SC were significantly correlated with scores on the original, longer measure, the IIP-C (Hopwood et al., 2008). In the present study, the IIP-SC demonstrated high internal consistency both in the OHS sample ( $\alpha = .92$ ) and the GHS sample ( $\alpha = .86$ ).

***Central Relationship Questionnaire (CRQ ; McCarthy, Gibbons, & Barber, 2008)***

The CRQ is a self-report measure derived from the clinician-rated CCRT method (Luborsky & Crits-Christoph, 1998). Like the CCRT method, the CRQ assesses central relationship patterns by examining three components: Responses of Self (RS), Responses of Other (RO), and Wishes (W). The CRQ consists of 40 W items, 23 RO items, and 13 RS items. These items correspond to 7 W subscales (to be supportive, to be independent, to be in conflict, to be recognized, to be trusted, to be sexual, not to be abandoned), 7 RO subscales (hurts me, loves me, is independent, controls me, is out of control, is anxious, is sexual), and 8 RS subscales (feel valued, care for other, feel anxious, feel disliked, avoid

conflict, am independent, am sexual, am domineering). Each item is answered on a 7-point Likert scale, ranging from 1 (*never true or typical of me*) to 7 (*always true or typical of me*). The subscales are scored using mean scores. One example of a W item on this measure is as follows: “I wish for my partner not to leave me.” This item corresponds with the wish not to be abandoned. An example of a RS item of this scale is “I feel unsure about our relationship.” This item corresponds with the feel anxious RS. An example of an item assessing ROs in this measure is as follows: “My partner is frantic,” which corresponds with the is anxious RO.

Previous research has found internal consistency of the overall scale, as well as each subscale to be high, with a median alpha of .79 in sample of OHS (Wiseman et al., 2002). The CRQ has demonstrated strong test-retest reliability, with an average of  $r = .65$  for the W subscale,  $r = .66$  for the RO subscale, and  $r = .63$  for the RS subscale (Barber et al., 1998). The CRQ has demonstrated convergent validity as well: the various subscales correlated with the subscales of the IIP in the expected ways (Barber et al., 1998).

For the present study, only the RS scale was used. Specifically, the RS of “am independent” was used as a variable for hypothesis testing with the OHS generation. This subscale consists of three items: (1) “I am independent,” (2) “I am my own person,” and (3) “I am self-sufficient.” For the present study, OHS participants answered these questions as they pertained to a current or previous romantic partner<sup>1</sup>. For the present

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<sup>1</sup> This measure being completed in relation to a current romantic partner was due to an error on the part of the researcher. Past studies using this measure with OHS (e.g., Wiseman et al., 2002) asked participants these questions in relation to their Holocaust survivor parents. As such, findings related to this measure should be interpreted with caution.



study, the “am independent” RS subscale demonstrated good internal consistency ( $\alpha = .79$ ).

***Family Communication Scale (FCS; Olson, Gorall, & Tiesel, 2004)***

The FCS is a 10-item self-report measure assessing different aspects of communication between family members. Specifically, the FCS “accesses the degree to which family members feel unconstrained and satisfied with the communication in their family” (Olson et al., 2004, p. 3). The FCS’s items pertain to positive aspects of family communication, including the open communication of both factual information and emotions. These 10 items are rated by participants on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*very well*). Examples of items in this scale include “family members express their true feelings to each other” and “family members can calmly discuss problems with each other.” Total scores are then computed to assess the level of family communication. When Olson et al. (2004) created this measure, they found high internal consistency in a national sample ( $\alpha = .88$ ). In a sample of OHS and GHS, the internal consistency was even higher ( $\alpha = .94$ ; Giladi & Bell, 2013). The FCS has been found to have high test-retest reliability ( $\alpha = .88$ ; Rivadeneira & Lopez, 2017). Additionally, the FCS has demonstrated concurrent validity. When studied alongside the Social Climate in the Family Scale (Moos, Moos, & Trickett, 1987), the FCS was positively correlated with the communication subscale ( $r = .68$ ) and the expressiveness subscale ( $r = .59$ ), while it was negatively correlated with the conflict subscale ( $r = -0.37$ ). These correlations also indicate that this measure has adequate convergent and divergent validity (Rivadeneira & Lopez, 2017).

## Procedure

Before recruitment and data collection began, approval was obtained by Long Island University's Institutional Review Board (IRB; PROTOCOL ID NO: 21/03-029). The study was advertised to Facebook groups and email listservs targeted at OHS. The study announcement explained that participants were invited to participate in a study examining the potential intergenerational effects of the Holocaust in children and grandchildren of Holocaust survivors: the specific hypotheses and variables of the study were not disclosed. Additionally, the study announcement stated that all participants who completed the study had the opportunity to be entered to win a raffle. After data collection was completed, 4 OHS participants and 4 GHS participants were chosen at random to win a \$50 Amazon gift certificate and the gift cards were distributed.

This study collected data from two groups of participants: (1) OHS and (2) GHS. GHS were only eligible to participate after their OHS parent had participated and forwarded them an email inviting them to participate. When OHS completed the demographic portion of the questionnaire, they were asked if they had any children over the age of 18 whom they believed might be interested in participating. If they answered 'Yes,' they then were asked to provide their own email addresses so that a follow-up email could be sent to them (the OHS) so that they could forward it to their GHS child to invite them to participate. These follow up emails were sent daily throughout data collection to those OHS participants who completed their portion of the study. These follow up emails contained a unique five-digit code for the GHS to enter into Qualtrics once they began their participation so that the data between OHS parent and their GHS child could be linked to one another while maintaining privacy and anonymity.

### ***Screening/Eligibility***

After clicking on the link to the Qualtrics survey, participants were asked a set of eligibility questions. OHS participants were asked (1) to confirm that they were 18 and older and (2) to confirm that at least one of their parents survived the Nazi Holocaust. The definition being used by this study for “Holocaust survivor” was provided to assist OHS with determining their eligibility. GHS participants were asked (1) to confirm that they were 18 and older, (2) to confirm that at least one of their grandparents survived the Holocaust, and (3) to confirm that their OHS parent had already participated in the study by entering the unique five-digit code that they had received in an email. All participants were asked to sign an informed consent form prior to beginning their participation in the study. The consent forms can be found in Appendix B.

### ***Data Collection***

The OHS survey included the following measures in the order that they are listed here: (1) Demographics Questionnaire, (2) the Danieli Inventory of Multigenerational Legacies of Trauma, Part I: Posttrauma Adaptational Style (Danieli et al., 2015), (3) the Differentiation of Self Inventory Short Form (DSI-SF, Drake et al., 2015), (4) the Inventory of Interpersonal Problems Short Circumplex (IIP-SC; Hopwood et al., 2008; Soldz et al., 1995) and the (5) Central Relationship Questionnaire (Barber et al., 1998). The full text for all of these measures can be found in Appendix C. The order of the measures was chosen in this way so that if participants did not complete the entire survey, the data that was collected would be able to be analyzed optimally. For the OHS who indicated that have both of their parents survived the Holocaust, they were asked to

choose one parent to focus on while answering the Danieli Inventory of Multigenerational Legacies of Trauma.

The GHS survey included the following measures in the order that they are listed here: (1) Demographics Questionnaire, (2) the Family Communication Scale (Olson et al., 2004), (3) the Differentiation of Self Inventory Short Form (DSI-SF, Drake et al., 2015), (4) the Inventory of Interpersonal Problems Short Circumplex (IIP-SC; Hopwood et al., 2008; Soldz et al., 1995). Similarly, this order was chosen to make the best use of out of data from those who did not complete the full survey.

All participants, both GHS and OHS, were presented with a debriefing document upon completion of all of the study measures. The debriefing document explained in more detail the aims of the study, and provided referrals and resources for support. The full text of the debriefing document can be found in Appendix D.

## Chapter V

### Results

This chapter is divided into several subsections. First, preliminary analyses are discussed. Next, the results of hypothesis testing are presented. Finally, the results of the exploratory questions are presented. For all statistical analyses, IBM Statistical Package for the Social Sciences (SPSS), Version 27, was used.

#### **Preliminary Analyses**

##### *Missing Data and Outliers*

**OHS.** For all OHS measures (i.e., Danieli Inventory, DSI-SF, IIP-SC, and CRQ) the participant scores were computed using mean scores. In order for a participant's score on any measure to be considered completed and included in the relevant analyses, they must have completed a minimum of 80% of the items for that measure. Of the 660 people who volunteered to participate in the OHS portion of the study (i.e., clicked on the survey link), 412 participants completed at minimum the demographics questionnaire and the Danieli Inventory and were thus included in all relevant analyses. Of these 412 OHS participants, 13 participants (3.1%) did not complete the DSI-SF; 18 participants (4.4%) did not complete the IIP-SC; and 45 participants (10.9%) did not complete the CRQ. The data of these participants were excluded from analyses involving these specific variables and were included in the remainder of analyses.

Additionally, the data for each self-report measure were examined for outliers using stem and leaf plots, boxplots, and histograms. These analyses determined that there were no significant outliers for any of the measures (i.e., Danieli Inventory Numb Subscale, IIP-SC, DSI-SF, CRQ).

**GHS.** Of the 83 people who volunteered to participate in the GHS portion of the study (i.e., clicked on the Qualtrics link), 72 participants completed all of the study measures. There were no GHS participants who only partially completed the survey. Additionally, the GHS data for each self-report measure was examined for outliers using stem and leaf plots, boxplots, and histograms. There was one participant who's score on the IIP-SC was an extreme outlier: as such, this participant's data was removed from the data set. All analyses for GHS included the data from 71 participants.

### *Descriptive Statistics*

Descriptive statistics for OHS are displayed in Table 3. Descriptive statistics for GHS are displayed in Table 4.

**OHS.** Data for all three subscales of the Danieli Inventory, as well as for the DSI-SF and IIP-SC were found to be approximately normally distributed with no significant skewness or kurtosis. In contrast, the RS Independence subscale of the CRQ was significantly positively skewed and was not normally distributed. Bootstrapping processes were employed for all analyses using this measure to account for this.

**GHS.** Data for the FCS and DSI-SF were normally distributed with no significant skewness or kurtosis. After the extreme outlier from the IIP-SC was removed from the GHS data set, these data were normally distributed with no significant skewness nor kurtosis.

### *Inter-Measure Correlations*

Pearson's  $r$  correlations for all study variables for both OHS and GHS are displayed in Table 5.

**Table 3***Descriptive Statistics of Measures for OHS Sample*

Measure	Observed Min and Max Values	Possible Min and Max Values	Mean ( <i>SD</i> )	Skew ( <i>SE</i> )	Kurtosis ( <i>SE</i> )	Norm Mean ( <i>SD</i> )
Danieli Inventory Numb Style Subscale ( <i>N</i> = 412)	1.11 - 4.67	1 – 5	2.60 (0.75)	.388 (.12)	-.471 (.24)	2.84 (0.89) <sup>2</sup>
Danieli Inventory Fighter Style Subscale ( <i>N</i> = 412)	2.00 - 4.75	1 – 5	3.54 (0.44)	-.412 (.12)	.758 (.24)	3.56 (0.68) <sup>3</sup>
Danieli Inventory Victim Style Subscale ( <i>N</i> = 412)	1.10 - 4.73	1 – 5	2.68 (0.68)	.230 (.12)	-.312 (.24)	2.75 (0.80) <sup>4</sup>
DSI-SF ( <i>N</i> = 399)	1.45 - 5.95	1 – 6	3.89 (0.92)	-.112 (.12)	-.508 (.24)	4.31 (0.66) <sup>5</sup>
IIP-SC ( <i>N</i> = 394)	.03 - 3.09	0 – 4	1.09 (0.59)	.691 (.12)	.176 (.25)	1.66 (0.53) <sup>6</sup>
CRQ: Independent RS ( <i>N</i> = 367)	1 - 7	1 – 7	5.72 (1.20)	-1.272 (.13)	1.549 (.25)	4.97 (1.37) <sup>7</sup>

*Note.* DSI-SF = Differentiation of Self Inventory—Short Form (Drake et al., 2015); IIP-SC = Inventory of Interpersonal Problems—Short Circumplex (Soldz et al., 1995); CRQ = Central Relationship Questionnaire (Barber et al., 1998); RS = Response of Self.

<sup>2</sup> Norms from Danieli et al., (2015).

<sup>3</sup> Norms from Danieli et al., (2015).

<sup>4</sup> Norms from Danieli et al., (2015).

<sup>5</sup> Norms from Drake et al., (2015).

<sup>6</sup> Norms from Soldz et al., (1995).

<sup>7</sup> Norms from McCarthy et al., (2008).

**Table 4***Descriptive Statistics of Measures for GHS Sample (N = 71)*

Measure	Observed Min and Max Values	Possible Min and Max Values	Mean ( <i>SD</i> )	Skew ( <i>SE</i> )	Kurtosis ( <i>SE</i> )	Norm Mean ( <i>SD</i> )
FCS	10 – 50	10 – 50	33.65 (8.59)	-.40 (.285)	-.21 (.563)	36.20 (9.00) <sup>8</sup>
DSI-SF	1.70 – 5.90	1 – 6	3.62 (0.85)	-.04 (.285)	.24 (.563)	4.31 (0.66) <sup>9</sup>
IIP-SC	.09 – 2.81	0 – 4	1.20 (0.48)	.47 (.285)	1.03 (.563)	1.66 (0.53) <sup>10</sup>

*Note.* FCS = Family Communication Scale (Olson et al., 2004); DSI-SF = Differentiation of Self Inventory—Short Form (Drake et al., 2015); IIP-SC = Inventory of Interpersonal Problems—Short Circumplex (Soldz et al., 1995).

<sup>8</sup> Norms from Olson & Gorall., (2006).

<sup>9</sup> Norms from Drake et al., (2015).

<sup>10</sup> Norms from Soldz et al., (1995).



**Table 5***Pearson's r Correlation Matrix for Self-Report Measures for OHS and GHS Samples*

Measure	Danieli Numb	Danieli Victim	Danieli Fighter	OHS DSI-SF	OHS IIP-SC	OHS CRQ: RS Ind	GHS FCS	GHS DSI-SF	GHS IIP-SC
Danieli Numb		.54**	-.12*	-.41**	.38**	-.10	-.13	-.14	.09
Danieli Victim			.16**	-.38**	.33**	-.05	-.02	-.03	.09
Danieli Fighter				-.02	.01	.03	-.05	-.11	.13
OHS DSI-SF					-.72**	.26**	.19	.14	-.06
OHS IIP-SC						-.16**	-.26*	-.07	.15
OHS CRQ: RS Ind							.19	.14	-.01
GHS FCS								-.02	.10
GHS DSI-SF									-.67**
GHS IIP-SC									

*Note.* OHS = Offspring of Holocaust Survivors; GHS = Grandchildren of Holocaust Survivors; Danieli = Danieli Inventory of Multigenerational Legacies of Trauma-Part I: Posttrauma Adaptational Styles (Danieli et al., 2015); Numb = Numb style subscale (of Danieli measure); Victim = Victim style subscale (of Danieli measure); Fighter = Fighter style subscale (of Danieli measure); DSI-SF = Differentiation of Self Inventory-Short Form (Drake et al., 2015); IIP-SC = Inventory of Interpersonal Problems-Short Circumplex Soldz et al., 1995); CRQ = Central Relationship Questionnaire (Barber et al., 1998); RS Ind= Response of Self of Independence; FCS = Family Communication Scale (Olson et al., 2004).

\* $p < .05$ ; \*\* $p < .01$ .

### *Covariates*

The potential covariates of sex and age were tested to examine potential relationships with all dependent variables.

**Sex.** For both OHS and GHS participants, independent samples *t*-tests were conducted (see Table 6) to compare male and female participants on all dependent variables. For OHS, sex differences were examined for the three dependent variables of differentiation of self, interpersonal problems, and a response of self of independence, the study's three dependent variables. For OHS, there were no significant sex differences for interpersonal problems. However, there were significant differences between sexes for both differentiation of self and the response of self of independence in the OHS sample. For both variables, males' scores were significantly higher than females. Due to the significant sex differences in these two variables, sex was controlled for in all hypothesis testing involving differentiation of self and the response of self of independence for OHS.

For GHS, independent samples *t*-tests were conducted to compare male and female participants on differentiation of self and interpersonal problems, the study's two dependent variables for the hypotheses for the GHS sample. There were no significant sex differences for interpersonal problems nor differentiation of self for GHS.

**Age.** For the data from the OHS sample, three Pearson's *r* correlations were conducted to examine the effect of age on differentiation of self, interpersonal problems, and a response of self of independence, the study's three dependent variables. Results indicated that age was significantly correlated with two of the dependent variables in the OHS sample. Age was significantly negatively correlated with interpersonal problems,  $r(393) = -.16, p = .002$ . Age was positively significantly correlated with differentiation of

**Table 6***Difference in Dependent Variables Based on Sex*

Variable	Male ( $N_{\text{OHS}} = 94$ , $N_{\text{GHS}} = 17$ )		Female ( $N_{\text{OHS}} = 318$ , $N_{\text{GHS}} = 54$ )		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )			
OHS DSI-SF	4.16	(0.94)	3.81	(0.90)	3.20	397	.001**
OHS IIP-SC	1.03	(0.66)	1.10	(0.57)	-1.07	365	.29
OHS RO Independence	5.49	(1.20)	5.79	(1.20)	-2.05	365	.04*
GHS DSI-SF	3.70	(0.93)	3.60	(0.83)	0.42	69	.68
GHS IIP-SC	1.18	(0.39)	1.20	(0.51)	-0.16	69	.88

*Note.* OHS = Offspring of Holocaust Survivors; GHS = Grandchildren of Holocaust Survivors; DSI-SF = Differentiation of Self Inventory-Short Form; IIP-SC = Inventory of Interpersonal Problems-Short Circumplex; CRQ = Central Relationship Questionnaire; RS = Response of Self.

\* $p < .05$ . \*\* $p < .01$ .

of self,  $r(398) = .19, p < .001$ . Age was not significantly correlated with the response of self of independence,  $r(366) = -.03, p = .64$ .

For the GHS sample, two Pearson's  $r$  correlations were conducted to examine the effect of age on differentiation of self and interpersonal problems, the two dependent variables for analyses involving GHS. Age was significantly negatively correlated with interpersonal problems,  $r(71) = -.32, p = .006$ . Age was not significantly correlated with differentiation of self,  $r(71) = .19, p = .11$ . Thus, age was controlled for in all GHS analyses examining interpersonal problems.

**Summary of covariate analyses.** In the OHS sample, the covariate of sex was controlled for in all analyses examining differentiation of self. Additionally, in the OHS sample, the covariate of age was controlled for in all analyses examining both differentiation of self and interpersonal problems. In the GHS sample, the covariate of age was controlled for in all analyses examining interpersonal problems.

## **Hypothesis Testing**

### ***Study 1***

All hypotheses for Study 1 included the OHS participants only.

**Hypothesis 1.** Hypothesis 1 predicted a positive relationship between OHS level of parental numbness and OHS level of interpersonal problems. The current study assessed this relationship while controlling for the covariate of age. A hierarchical multiple regression was conducted to test this hypothesis. In the first step of the regression, the covariate, age, was entered to control for its effect on the dependent variable of interpersonal problems. This variable explained 2.5% of the variability ( $R = .16, F[1, 391] = 9.94, p < .001$ ). In the second step, parental numbness was entered and

explained an additional 15.3% of variability ( $R^2$  change = .153,  $F$ change [1, 390] = 72.59,  $p < .001$ ), a medium effect size. Together, the variables explained 17.8% of the variability in interpersonal problems ( $R = .42$ ,  $F$  [2, 390] = 42.17,  $p < .001$ ). Parental numbness was significantly positively associated with interpersonal problems (see Table 7). Specifically, for every standard deviation increase in the independent variable of parental numbness, there was a .39 standard deviation increase in interpersonal problems. Hypothesis 1 was supported.

**Hypothesis 2.** Hypothesis 2 predicted a negative relationship between OHS level of parental numbness and OHS differentiation of self. The current study assessed this relationship while controlling for age and sex. A hierarchical multiple regression was conducted to test this hypothesis. In the first step of the regression, the covariates of age and sex were entered to control for their effect on differentiation of self. These variables together explained 5.9% of the variability ( $R = .24$ ,  $F$  [2, 395] = 12.34,  $p < .001$ ). In the second step, parental numbness was entered and explained an additional 18.0% of variability ( $R^2$  change = .18,  $F$  change [1, 394] = 92.92,  $p < .001$ ), a medium effect size. Together, the variables explained 23.8% of the variability in the dependent variable of differentiation of self ( $R = .49$ ,  $F$  [3, 394] = 41.11,  $p < .001$ ). Individually, all three variables were significant unique predictors of differentiation of self. Parental numbness and differentiation of self were negatively associated (see Table 8). For every standard deviation increase in numbness, there was a .42 standard deviation decrease in differentiation of self. Hypothesis 2 was supported.

**Hypothesis 3.** Hypothesis 3 predicted a negative relationship between OHS level of numbness and OHS response of self of “independence.” The current study assessed

**Table 7***Hierarchical Regression Analysis Predicting Interpersonal Problems in OHS*

Variable	Coefficients					
	<i>B</i>	<i>SEB</i>	$\beta$	<i>t</i>	<i>p</i>	<i>semipartial r</i> <i>r<sub>sp</sub></i>
Age	-.014	.004	-.174	-3.786	<.001**	-.174
Parental Numbtess <sup>a</sup>	.311	.036	.392	8.520	<.001**	.391

<sup>a</sup>  $R^2_{\text{change}} = .153$ ,  $F_{\text{change}}(1, 390) = 72.586$ ,  $p < .001$ .

\* $p < .05$ . \*\* $p < .01$ .

**Table 8***Hierarchical Regression Analysis Predicting Differentiation of Self in OHS*

Variable	Coefficients					
	<i>B</i>	<i>SEB</i>	$\beta$	<i>T</i>	<i>p</i>	<i>semipartial r</i> <i>r<sub>sp</sub></i>
Age	.025	.005	.201	4.56	<.001**	.201
Sex	-.334	.097	-.152	-3.45	<.001**	-.152
Parental Numbness <sup>a</sup>	-.523	.054	-.424	-9.64	<.001**	-.424

<sup>a</sup>  $R^2_{\text{change}} = .18$ ,  $F_{\text{change}}(1, 394) = 92.918$ ,  $p < .001$ .

\* $p < .05$ . \*\* $p < .01$ .

this relationship while controlling for the covariate of sex. A hierarchical multiple regression was conducted to test this hypothesis. Additionally, bootstrapping was employed for this analysis, with 5000 bootstrap samples used. In the first step of the regression, the covariate, sex, was entered to control for its effect on level of the RS of independence. This variable explained 1.1% of the variability ( $R = .11$ ,  $F [1, 365] = 4.19$ ,  $p = .04$ ). In the second step, parental numbness was entered and explained an additional 1.0% of variability ( $R^2$  change = .01,  $F$  change  $[1, 364] = 3.61$ ,  $p = .058$ ), a small effect size. Together, the variables explained 2.1% of the variability in the dependent variable of RS of independence ( $R = .15$ ,  $F [2, 364] = 3.92$ ,  $p = .021$ ). While the model with both variables was statistically significant, the variable of parental numbness alone did not significantly predict the RS of independence (see Table 9). This hypothesis was not supported.

**Hypothesis 4.** Hypothesis 4 predicted that OHS differentiation of self would mediate the positive relationship between OHS level of numbness and OHS interpersonal problems such that there would be a significant positive indirect effect. This mediation was tested using Hayes' PROCESS 3.5.2 Macro model #4. Bootstrapping was employed, with 5000 bootstrap samples used. Covariates included were sex and age. All paths were significant (see Table 10 and Figure 1), including the hypothesized indirect or mediating effect, which was .23 and statistically significant at  $p < .05$  (95% CI: .1763, .2861). The effect size for this relationship is the completely standardized indirect effect, .29, which indicates that for every standard deviation increase in numbness there was a .29 standard deviation change in interpersonal problems accounted for by the mediator of differentiation of self. This was a small effect size. Numbness led to a decrease in



**Table 9***Hierarchical Regression Analysis Predicting Response of Self of Independence in OHS*

Variable	Coefficients					
	<i>B</i>	<i>SEB</i>	$\beta$	<i>t</i>	<i>p</i>	<i>semipartial r</i> <i>r<sub>sp</sub></i>
Sex	.301	.149	.105	2.020	.044*	.105
Parental Numbness <sup>a</sup>	-.157	.083	-.099	-1.900	.058	-.099

<sup>a</sup> $R^2_{\text{change}} = .010$ ,  $F_{\text{change}}(1,364) = 3.611$ ,  $p = .058$ .

\* $p < .05$ . \*\* $p < .01$ .

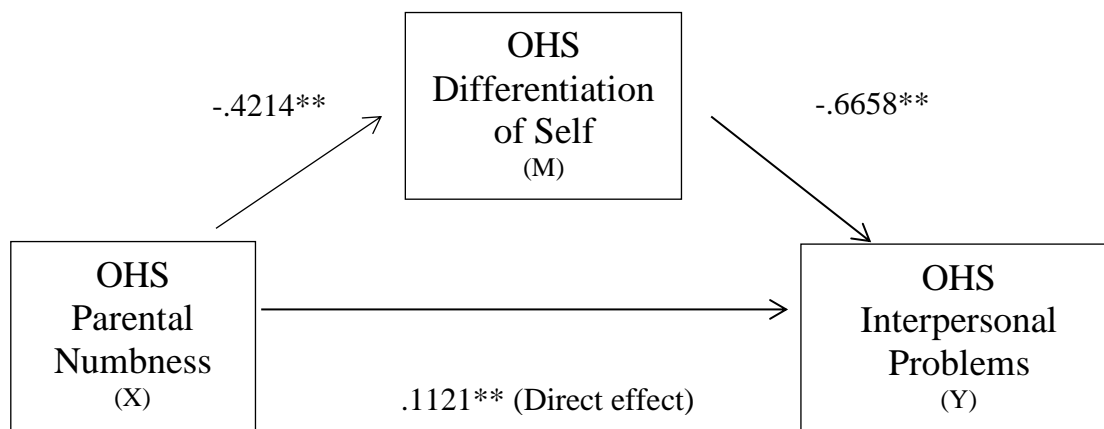


Figure 1. Mediation Model: Standardized coefficients regarding indirect effect of OHS differentiation of self on the relationship between OHS parental numbness and OHS interpersonal problems.

*Note.* Indirect effect =  $.2806$ ,  $p < .05$ .

$*p < .05$ .  $**p < .01$

**Table 10***Mediated Regression Analysis Predicting Interpersonal Problems in OHS*

Path	B	SE(b)	Std Coeff	<i>t</i>	<i>p</i>	95% LLCI	95% ULCI
a: OHS-rated Parental Numbness (X) >> OHS Differentiation of Self (M)	-.521	.056	-.421	-9.37	<.0001**	-.6303	-.4117
b: OHS differentiation of self >>OHS interpersonal problems	-.437	.026	-.679	-16.98	<.0001**	-.4872	-.3861
ab Indirect	.229	.029	.288	--	<.05*	.1763	.2861
c' Direct	.084	.031	.112	2.72	.0068**	.0233	.1447
c Total	.313	.037	.393	8.56	<.0001**	.2412	.3851

*Note.* Age and sex were covariates in the model.

\**p* < .05. \*\**p* < .01.

differentiation of self which led to an increase in interpersonal problems. It is of interest to note that the direct effect indicates that there is also a statistically significant relationship between numbness and interpersonal problems independent of the mediator of differentiation of self. This direct effect is shown in Figure 1 and Table 10, as well. This hypothesis was supported.

**Hypothesis 5.** Hypothesis 5 predicted that for OHS, the mediating effect of differentiation of self on the relationship between level of numbness and interpersonal problems would be moderated by the response of self of “independence,” such that the negative association between level of numbness and differentiation of self will be strengthened for those with less independence, in turn leading to more interpersonal problems. Hypothesis 5 was tested via moderated mediation analysis using Model #7 in Hayes’ PROCESS 3.5 Macro. Bootstrapping was employed with 5000 bootstrap samples used. Covariates included were age and sex. The index of moderated mediation was not significant (index = .0061, 95% CI: -.0336, .0450), indicating that there was not a significant interaction of OHS RS of independence and OHS parental numbness on differentiation of self ( $B = -.0148$ ,  $p = .74$ ). The percent of variability explained by the interaction term was .02%, a negligible effect size. The coefficients of the entire model are presented in Figure 2 and Table 11. It is interesting to note, however, that OHS RS of Independence was a significant predictor of differentiation of self, even though it was not a significant moderator.

## *Study 2*

All hypotheses for Study 2 examined the dyads of OHS parents and their GHS children.

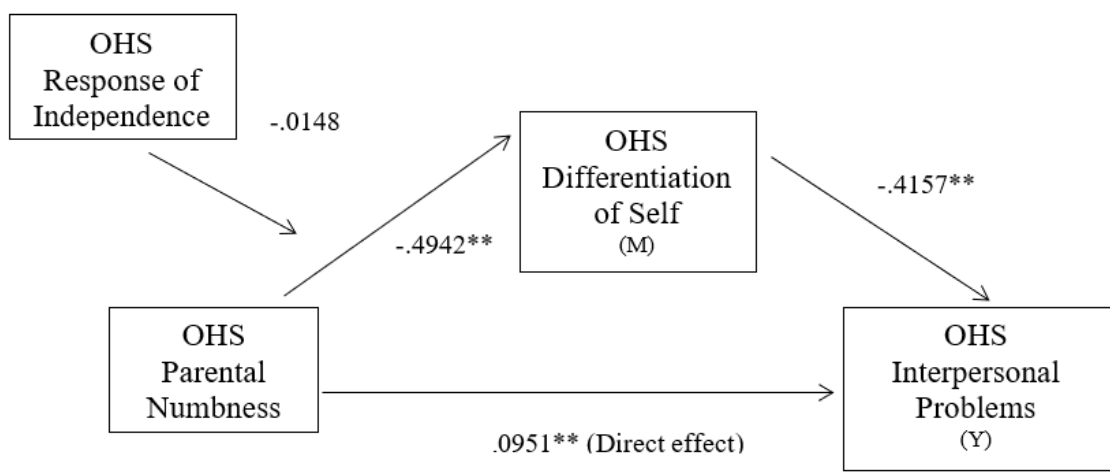


Figure 2. Moderated Mediation Model: Unstandardized coefficients regarding interaction effect of OHS RS of Independence on the indirect effect of OHS differentiation of self on the relationship between OHS parental numbness and OHS interpersonal problems.

*Note.*  
Indirect effect (low) = .1989,  $p < .05$ .  
Indirect effect (medium) = .2071,  $p < .05$   
Indirect effect (high) = .2133,  $p < .05$   
\* $p < .05$ . \*\* $p < .01$

**Table 11***Moderated Mediation Analysis Predicting Interpersonal Problems in OHS*

Effect	Unstandardized Path Estimate
OHS Parental Numbness (X) to OHS Differentiation of Self (Mediator)	-.4942***
OHS Differentiation of Self (Mediator) to OHS Interpersonal Problems (Y)	-.4157***
OHS RS of Independence to OHS Differentiation of Self (Mediator)	.1885***
OHS Parental Numbness X OHS RS of Independence to OHS Differentiation of Self (Mediator)	-.0148
Indirect ab at low levels of RS of Independence	.1980
Indirect ab at median levels of RS of Independence	.2054
Indirect ab at high levels of RS of Independence	.2128
Direct c'	.0951**
Index of Moderated Mediation	.0061

\* $p < .05$ . \*\* $p < .01$  \*\*\*  $p < .001$ .

**Hypothesis 1.** Hypothesis 1 predicted a negative relationship between OHS level of parental numbness and GHS level of differentiation of self. A linear regression was conducted to test this hypothesis. OHS level of parental numbness was not significantly associated with GHS differentiation of self ( $R = .14$ ,  $F[1, 69] = 1.31$ ,  $p = .26$ ). This was a small effect size. Hypothesis 1 was not supported.

**Hypothesis 2.** Hypothesis 2 predicted a positive relationship between OHS level of parental numbness and GHS level of interpersonal problems. The current study assessed this relationship while controlling for age. A hierarchical multiple regression was conducted to test this hypothesis (see Table 12). In the first step of the regression, the covariate of age was entered to control for its effect on GHS interpersonal problems. Age explained 10.5% of the variability ( $R = .32$ ,  $F [1, 69] = 8.06$ ,  $p < .006$ ). In the second step, OHS parental numbness was entered and explained an additional 0.1% of variability ( $R^2$  change = .001,  $F$  change  $[1, 68] = 0.04$ ,  $p = .84$ ), a negligible effect size. Therefore, parental numbness was not associated with GHS interpersonal problems. This hypothesis was not supported.

**Hypothesis 3.** Hypothesis 3 predicted that OHS differentiation of self would mediate the positive relationship between OHS level of numbness and GHS differentiation of self, such that there would be a significant positive indirect effect. This mediation was tested using Hayes' PROCESS 3.5.2 Macro model #4. Bootstrapping was employed, with 5000 bootstrap samples used. The covariate of age was included in the model. The only significant path was from OHS parental numbness to OHS differentiation of self (see Figure 3 and Table 13). The hypothesized indirect or mediating effect, was -0.04 and was not statistically significant (95% CI: -0.18, 0.06). The effect

**Table 12***Hierarchical Regression Analysis Predicting Interpersonal problems in GHS*

Variable	Coefficients					
	<i>B</i>	<i>SEB</i>	$\beta$	<i>t</i>	<i>p</i>	<i>semipartial r</i> <i>r<sub>sp</sub></i>
Age	-.018	.007	-.319	-2.726	.008*	-.313
Parental Numbness <sup>a</sup>	.016	.080	.023	0.201	.84	.023

<sup>a</sup> $R^2_{\text{change}} = .001$ ,  $F_{\text{change}}(1,68) = 0.04$ ,  $p = .841$ .

\* $p < .05$ . \*\* $p < .01$ .



size for this relationship is the completely standardized indirect effect, -0.03, which indicates that for every standard deviation increase in numbness there was a .03 standard deviation decrease in GHS differentiation of self accounted for by the mediator of OHS differentiation of self. This was a negligible effect size. Hypothesis 3 was not supported.

### ***Summary of Findings from Hypothesis Testing***

In summary, for Study 1, which tested the hypotheses with the OHS sample, results demonstrated that OHS ratings of their survivor parents' numbness (i.e., silence and emotional barrenness) were predictive of multiple outcomes with these adults. Specifically, those OHS who reported that their parents did not speak about their Holocaust experiences or express emotions in the home were more likely to struggle in their interpersonal relationships and in their ability to regulate their emotions and function independently from others. OHS ratings of their parents' level of numbness were not predictive of their perceptions of themselves as independent in their adult romantic relationships. However, it is important to note that, as mentioned in the methods section, there was an oversight made on the researcher's part regarding the wording of the CRQ questionnaire which measured the RS of independence. The measure was initially created to assess people's feelings about their current romantic partners, but for the purpose of this study, the original intention had been for the questionnaire to be re-worded to ask OHS about their relationships with their Holocaust survivor parents. However, the wording was not changed and this questionnaire asked about responses of self in relation to current romantic partners. While this finding did not correspond with the prediction of the study, it is nonetheless important as it suggests that perhaps the same difficulties that

these OHS have experienced in their family relationships have not carried over to their romantic relationships.

Results also demonstrated that the relationship between OHS-rated parental numbness and the interpersonal difficulties experienced by OHS occurs through the mechanism of the difficulties that these OHS experience in emotion regulation and separation from others. Finally, the response of self of independence was not found to affect this relationship, although this must be considered in light of the administration error made with the CRQ.

Study 2 examined the impact of OHS-rated parental numbness on the GHS generation. None of the effects were found to carry over to the third generation. Specifically, OHS-rated parental numbness did not impact GHS in the areas of interpersonal functioning or separation and individuation. Additionally, the fact that all of these analyses had small to very small effect sizes indicates that the lack of significant findings was not related to the smaller sample size for Study 2, but that the effects found in the OHS generation did not carry over intergenerationally to the GHS generation.

### **Exploratory Questions**

#### *Study 1*

**Question 1a.** Exploratory Question 1a asked how the OHS participants' scores on the Fighter style subscale of the Danieli measure (as compared to the Numb style subscale which was tested in the hypotheses) would relate to interpersonal problems in OHS. The current study assessed this relationship while controlling for age. A hierarchical multiple regression was conducted to answer this question (see Table 14). In the first step of the regression, age was entered to control for its effect on OHS

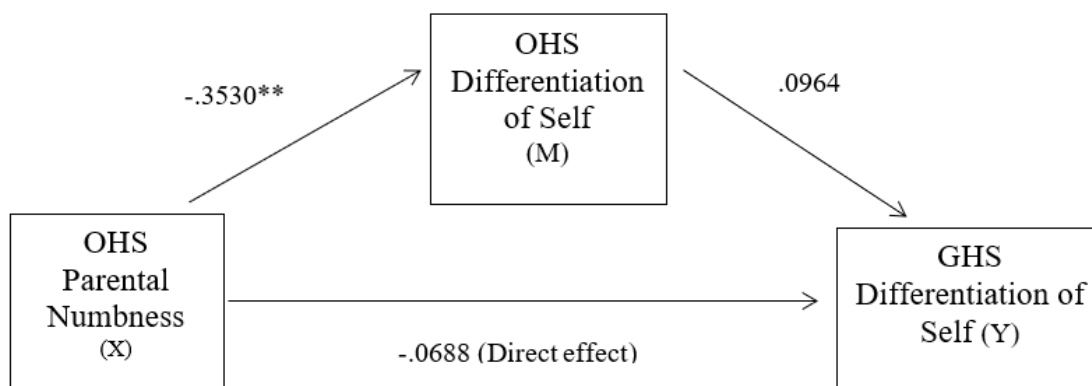


Figure 3. Mediation Model: Standardized coefficients regarding indirect effect of OHS differentiation of self on the relationship between OHS parental numbness and GHS differentiation of self.

*Note.* Indirect effect =  $-.034$ ,  $p > .05$ .

**Table 13***Mediated Regression Analysis Predicting Differentiation of Self in GHS*

Path	B	SE(b)	Std Coeff	T	p	95% LLCI	95% ULCI
a: OHS-rated Parental Numbness (X) >> OHS Differentiation of Self (M)	-.4350	.5885	-.3530	-3.057	.0032**	-.7190	-.1510
b: OHS differentiation of self >>GHS differentiation of self	.0946	.1248	.0964	0.758	.45	-.1546	.3438
ab Indirect	-.0412	.0578	-.0340	--	>.05	.1809	.0592
c' Direct	-.0832	.1562	-.0688	0.533	.60	-.3951	.2286
c Total	-.1244	.1460	-.1028	-0.852	.40	-.4158	.1670

\* $p < .05$ . \*\* $p < .01$

interpersonal problems. Age explained 2.5% of the variability ( $R = .16$ ,  $F [1, 391] = 9.94$ ,  $p = .002$ ). In the second step, OHS parental fighter style was entered and did not explain any additional variability ( $R^2$  change = 0,  $F$  change  $[1, 390] = 0.01$ ,  $p = .91$ ), a miniscule effect size. Therefore, parental fighter style was not associated with OHS interpersonal problems.

**Question 1b.** Exploratory Question 1b asked how the OHS participants' scores on the Victim style subscale would relate to interpersonal problems in OHS. The current study assessed this relationship while controlling for age. A hierarchical multiple regression was conducted to answer this question (see Table 15). In the first step of the regression, age was entered to control for its effect on OHS interpersonal problems. Age explained 2.5% of the variability ( $R = .12$ ,  $F [1, 391] = 9.94$ ,  $p = .002$ ). In the second step, OHS parental victim style was entered and explained an additional 12.1% of variability in OHS interpersonal problems ( $R^2$  change = .121,  $F$  change  $[1, 390] = 55.36$ ,  $p < .001$ ), a medium effect size. OHS parental victim style was significantly positively associated with OHS interpersonal problems.

**Question 2a.** Exploratory Question 2a asked how the OHS participants' scores on the Fighter style subscale would relate to differentiation of self in OHS. The current study assessed this relationship while controlling for age and sex. A hierarchical multiple regression was conducted to answer this question (see Table 16). In the first step of the regression, the covariates of age and sex were entered to control for their effect on differentiation of self. These variables together explained 5.9% of the variability ( $R = .24$ ,  $F [2, 395] = 12.34$ ,  $p < .001$ ). In the second step, parental fighter style was entered and did not explain any additional variability ( $R^2$  change = 0,  $F$  change  $[1, 394] = .015$ ,  $p =$

.90), a miniscule effect size. Therefore, parental fighter style was not associated with OHS differentiation of self.

**Question 2b.** Exploratory Question 2b asked how the OHS participants' scores on the Victim style subscale would relate to differentiation of self in OHS. The current study assessed this relationship while controlling for age and sex. A hierarchical multiple regression was conducted to answer this question (see Table 17). In the first step of the regression, the covariates of age and sex were entered to control for their effect on differentiation of self. These variables together explained 5.9% of the variability ( $R = .24$ ,  $F [2, 395] = 12.34$ ,  $p < .001$ ). In the second step, OHS parental victim style was entered and explained an additional 15.3% of variability in OHS interpersonal problems ( $R^2$  change = .153,  $F$  change  $[1, 394] = 76.45$ ,  $p < .001$ ), a medium to large effect size. OHS parental victim style was significantly associated with OHS differentiation of self.

### ***Study 2***

**Question 1.** Exploratory Question 2 for Study 2 asked if OHS parental numbness would predict less positive family communication in the OHS' GHS children. A Pearson's  $r$  correlation was conducted to examine the effect of OHS parental numbness on GHS positive family communication. OHS parental numbness was not significantly correlated with GHS positive family communication,  $r (71) = -.13$ ,  $p = .297$ . Of note, this relationship had a small effect size.

**Question 2.** Exploratory Question 2 for Study 2 asked if OHS differentiation of self would be predictive of GHS differentiation of self. A Pearson's  $r$  correlation was conducted to examine the effect of OHS differentiation of self on GHS differentiation of

**Table 14***Hierarchical Regression Analysis Predicting Interpersonal Problems in OHS*

Variable	Coefficients					
	<i>B</i>	<i>SEB</i>	$\beta$	<i>t</i>	<i>p</i>	<i>semipartial r</i> <i>r<sub>sp</sub></i>
Age	-.013	.004	-.157	-3.140	.002**	-.157
Parental Fighter Style <sup>a</sup>	-.007	.063	-.006	-.113	.91	-.006

<sup>a</sup> $R^2_{\text{change}} = .000$ ,  $F_{\text{change}}(1,390) = 0.013$ ,  $p = .91$ .

\* $p < .05$ . \*\* $p < .01$ .

**Table 15***Hierarchical Regression Analysis Predicting Interpersonal Problems in OHS*

Variable	Coefficients					
	<i>B</i>	<i>SEB</i>	$\beta$	<i>t</i>	<i>p</i>	<i>semipartial r</i> <i>r<sub>sp</sub></i>
Age	-.015	.004	-.191	-4.059	<.001***	-.190
Parental Victim Style <sup>a</sup>	.309	.042	.350	7.441	<.001***	.348

<sup>a</sup> $R^2_{\text{change}} = .121$ ,  $F_{\text{change}}(1,390) = 55.361$ ,  $p < .001$ . \*\*

\* $p < .05$ . \*\* $p < .01$  \*\*\* $p < .001$ .



**Table 16***Hierarchical Regression Analysis Predicting Differentiation of Self in OHS*

Variable	Coefficients					
	<i>B</i>	<i>SEB</i>	$\beta$	<i>t</i>	<i>p</i>	<i>semipartial r</i> <i>r<sub>sp</sub></i>
Age	.023	.006	.184	3.769	<.001***	.184
Sex	-.319	.107	-.145	-2.968	.003**	-.145
Parental Fighter Style <sup>a</sup>	-.012	.098	-.006	-.123	.90	-.006

<sup>a</sup>  $R^2_{\text{change}} = .00$   $F_{\text{change}}(1, 394) = 0.015, p < .90$ .

\* $p < .05$ . \*\* $p < .01$  \*\*\* $p < .001$ .

**Table 17***Hierarchical Regression Analysis Predicting Differentiation of Self in OHS*

Variable	Coefficients					
	<i>B</i>	<i>SEB</i>	$\beta$	<i>t</i>	<i>p</i>	<i>semipartial r</i> <i>r<sub>sp</sub></i>
Age	.027	.006	.222	4.926	<.001**	.220
Sex	-.243	.099	-.111	-2.464	.014*	-.110
Parental Victim Style <sup>a</sup>	-.541	.062	-.394	-8.744	<.001**	-.391

<sup>a</sup>  $R^2_{\text{change}} = .153$   $F_{\text{change}}(1, 394) = 76.452, p < .001.$

\* $p < .05.$  \*\* $p < .01$  \*\*\* $p < .001.$

self. OHS differentiation of self was not significantly correlated with GHS differentiation of self,  $r(71) = .14, p = .256$ . The effect size of this relationship was small.

**Question 3a.** Exploratory Question 3a for Study 2 asked if OHS scores on the Fighter style subscale of the Danieli measure would be related to GHS interpersonal problems. The current study assessed this relationship while controlling for age. A hierarchical multiple regression was conducted to answer this question (see Table 18). In the first step of the regression, the covariate of age was entered to control for its effect on GHS interpersonal problems. Age explained 10.5% of the variability ( $R = .32, F [1, 69] = 8.06, p = .006$ ). In the second step, OHS parental fighter style was entered and explained an additional 2.9% of variability in GHS interpersonal problems ( $R^2$  change = .029,  $F$  change  $[1, 68] = 2.25, p = .139$ ), a small effect size. OHS parental fighter style was not significantly associated with GHS interpersonal problems.

**Question 3b.** Exploratory Question 3b asked if OHS scores on the Victim style subscale of the Danieli measure would be related to GHS interpersonal problems. The current study assessed this relationship while controlling for age. A hierarchical multiple regression was conducted to answer this question (see Table 19). In the first step of the regression, the covariate of age was entered to control for its effect on GHS interpersonal problems. Age explained 10.5% of the variability ( $R = .32, F [1, 69] = 8.06, p = .006$ ). In the second step, OHS parental victim style was entered and explained an additional 1.0% of variability in GHS interpersonal problems ( $R^2$  change = .01,  $F$  change  $[1, 68] = .80, p = .374$ ), a small effect size. OHS parental victim style was not significantly associated with GHS interpersonal problems.

**Table 18***Hierarchical Regression Analysis Predicting Interpersonal Problems in GHS*

Variable	Coefficients					
	<i>B</i>	<i>SEB</i>	$\beta$	<i>t</i>	<i>p</i>	<i>semipartial r</i> <i>r<sub>sp</sub></i>
Age	-.018	.006	-.318	-2.817	.006**	-.318
Parental Fighter Style <sup>a</sup>	.203	.135	.169	1.498	.14	.169

<sup>a</sup> $R^2_{\text{change}} = .029$ ,  $F_{\text{change}}(1,68) = 2.245$ ,  $p = .139$ .

\* $p < .05$ . \*\* $p < .01$  \*\*\* $p < .001$ .

**Table 19***Hierarchical Regression Analysis Predicting Interpersonal Problems in GHS*

Variable	Coefficients					
	<i>B</i>	<i>SEB</i>	$\beta$	<i>t</i>	<i>p</i>	<i>semipartial r</i> <i>r<sub>sp</sub></i>
Age	-.018	.006	-.329	-2.878	.005**	-.328
Parental Victim Style <sup>a</sup>	.085	.095	.102	.895	.37	.102

<sup>a</sup> $R^2_{\text{change}} = .010$ ,  $F_{\text{change}}(1,68) = .801$ ,  $p = .374$ .

\* $p < .05$ . \*\* $p < .01$  \*\*\* $p < .001$ .

**Question 4a.** Exploratory Question 4a asked if OHS scores on the Fighter style subscale of the Danieli measure would be related to GHS differentiation of self. A Pearson's  $r$  correlation was conducted to examine the effect of OHS parental fighter style on GHS differentiation of self. OHS parental fighter style was not significantly correlated with GHS differentiation of self,  $r(71) = -.15, p = .226$ . This relationship had a small effect size.

**Question 4b.** Exploratory Question 4b asked if OHS parental victim style would be related to GHS differentiation of self. A Pearson's  $r$  correlation was conducted to examine the effect of OHS parental victim style on GHS differentiation of self. OHS parental victim style was not significantly correlated with GHS differentiation of self,  $r(71) = -.03, p = .777$ . This relationship also had a small effect size.

#### ***Summary of Findings from Exploratory Questions***

For Study 1, the exploratory questions examining the impacts of OHS ratings of their parents found no relationship between OHS ratings of their survivor parents having an intense desire to achieve (i.e., the fighter style) and any outcome variable. Specifically, OHS rating their parents as high in the fighter style had no impact on OHS interpersonal functioning or their ability to function independently from others.

On the other hand, the exploratory questions examining the impacts of OHS ratings of their parents' levels of sadness and mistrust of the outside world (i.e., the victim style) did find that higher victim style was predictive of both OHS interpersonal difficulties and OHS difficulties separating and individuating from others.

Finally, another exploratory piece of this study examined the ability of the numb style, victim style, and fighter style to predict GHS outcomes in the area of interpersonal

functioning and the ability to regulate emotions and separate from others. Results demonstrated that none of these OHS-rated parental communication styles were predictive of any outcome variables in the GHS generation. The results of these exploratory questions examining the dyads of OHS parents and their GHS children are similar to those of the hypotheses with the dyads: no relationships were found between any variables intergenerationally, suggesting that these impacts do not carry over into the third generation.

## **Chapter VI**

### **Discussion**

The present study aimed to expand the existing literature on the intergenerational transmission of trauma in families of Holocaust survivors, as research in this area has generated mixed results. Specifically, the present study examined a communication pattern in families of Holocaust survivors called “the conspiracy of silence,” which is operationalized by a measure of “parental numbness,” or a lack of verbal communication and an accompanying emotional barrenness on the part of the Holocaust survivor. This study found that OHS ratings of parental numbness impacted both children (OHS) and grandchildren (GHS) of Holocaust survivors in their functioning in several areas including interpersonal relationships, ability to identify and regulate emotions, and ability to separate and individuate from others.

The present study made several important and unique contributions to the literature on intergenerational trauma. First, this study found that a lack of open communication about their trauma and a related lack of emotional expression on the part of Holocaust survivors did indeed function as a risk factor that leads to detrimental impacts in the aforementioned areas of functioning (i.e., interpersonal functioning and ability to manage emotions and function independently) such that those OHS who endorsed less open communication and more emotional barrenness on the part of their Holocaust survivor parents during their upbringings reported more difficulty functioning in these areas. Importantly, these impacts of parental communication on interpersonal functioning and ability to function independently and regulate one’s emotional states did not carry over into the GHS generation, which will be discussed in greater detail below.



Additionally, this study found that the impact of parental numbness and silence on OHS interpersonal problems occurred *through* the aforementioned problems in differentiation of self. In other words, OHS difficulties in their interpersonal functioning were found to be caused by their problems in separation and individuation from others, which were in turn caused by the lack of open communication about the Holocaust on the part of their survivor parents.

The finding that a lack of open parental communication impacted OHS interpersonal functioning replicated that of a previous study (Wiseman et al., 2002), and generalized the past findings to a significantly larger sample while also using a more psychometrically sound measure of parental communication. As such, this finding from the present study is extremely important because it strengthens the evidence for this relationship and generalizes this finding from one sample and measure to another.

The present study was the first to examine the impact of parental communication about the Holocaust on OHS' ability to differentiate and separate their emotions and identity from others. As predicted, the present study found that OHS whose parents did not speak openly about their Holocaust experiences (i.e., those with high OHS-rated parental numbness) were less able to separate and individuate from others, as indicated by lower self-reported levels of a construct known as differentiation of self, which measures one's capacity to separate from others and to function independently as well as one's ability to regulate their emotions. This finding is important as it is the first to this author's knowledge to empirically demonstrate that parental communication about the Holocaust is one factor that contributes to the difficulties in emotional separation and individuation that have been observed clinically in OHS for many decades.

Additionally, the present study found that these deficits in the capacity to emotionally separate and individuate from others was an important mechanism through which OHS interpersonal problems occurred. In other words, the effect of OHS-rated parental numbness on OHS interpersonal problems can be partially understood as occurring as a direct result of the problems in separating from others in this sample of OHS.

In contrast, OHS' view of themselves as having independence in their current romantic relationships, which was expected to not only be negatively impacted by parental numbness but also to serve as a protective factor against the detrimental impacts of parental numbness on interpersonal functioning and ability to regulate and individuate, was not related to any of the other phenomena in the study. This finding is noteworthy, as it suggests that these problems with separation and individuation may be more related to parental relationships than to later romantic ones. The notion that those who experienced negative relationship histories with their parents can, nonetheless, form more secure attachments and corrective relationships in adulthood has been identified in research and clinical settings and has been labeled *earned security* (Saunders et al., 2011). It is possible that this concept of earned security explains the finding in the present study that the OHS reported high levels of independence in their relationships with romantic partners despite their difficulties with their parents in their upbringings and their deficits in interpersonal relationships more generally as well as in their abilities to separate and individuate.

As mentioned above, while the hypotheses predicting an impact of parental silence and numbness on OHS interpersonal functioning and ability to separate and

individuate from others were confirmed, neither of these findings carried over into the GHS generation. In other words, while OHS-rated parental numbness had statistically significant impacts on multiple areas of functioning in OHS, the impacts of this communication style between Holocaust survivors and their OHS children did not affect the GHS generation. Moreover, the GHS on average scored lower on a measure assessing interpersonal problems than did a normative community sample, suggesting that in some areas, this sample of GHS may be emotionally healthier than average people in the community. Additionally, the GHS participants completed a measure assessing for family communication patterns, specifically pertaining to open and honest communication within their families, and the level of open family communication as rated by GHS had no relationship with GHS interpersonal problems nor GHS difficulties in separating and individuating as well as in identifying and regulating their emotions independently.

There are several possible explanations that may explain why the intergenerational transmission of trauma was not found to continue to the GHS generation in the present study. First, the review of past literature on intergenerational trauma in GHS revealed several important differences from the present study in how GHS and OHS-GHS parent-child dyads were examined that may have led to significant findings. For example, unlike the present study, Giladi and Bell (2013) provided evidence for the intergenerational transmission of trauma to the third generation with their finding that compared to age-matched controls, GHS reported lower levels of open family communication and lower levels of differentiation of self than did their non-GHS counterparts. There are several differences in the methodology between the past study and this one that may explain the different findings regarding differentiation of self in

GHS. First, while Giladi and Bell (2013) compared differentiation of self between GHS and a control group, the present study did not include a control group. Instead, the present study extrapolated from the past study's findings in making an argument that differentiation of self was one area in which GHS would continue to struggle. Perhaps if the present study had featured a control group, results would have found that GHS did indeed have lower differentiation of self than age-matched controls, but that differentiation of self was not impacted by family communication. However, it is important to note that compared to a normative sample (Drake et al., 2015), both the OHS and GHS in the current sample had mean scores of differentiation of self that were within one standard deviation of a normative community sample. Thus, the fact that the present study did not find any significant impact on differentiation of self in GHS based on OHS-rated parental numbness or GHS-rated family communication does not necessarily mean that GHS are not struggling in this area, it simply means that the mechanism through which differentiation of self in GHS may be affected is not through the Holocaust survivor grandparents' family communication styles.

Regarding the two past studies that examined OHS-GHS dyads and had significant results, there are two important differences between these past studies and the present one that must be addressed. The first major difference is that these past studies were conducted in Israel and the participants were Israeli OHS and GHS, while the present study was conducted in the United States and the participants were primarily American OHS and GHS.

This demographic difference between the participants is important to take into consideration, as past research and theory alike have agreed that in Israel, the Holocaust

is a “cultural trauma” that impacts all Israelis regardless of whether or not they have direct ancestors who survived this traumatic event (Lazar et al., 2008; Wistrich, 1997). Due to the exposure to ongoing violence in Israel in the context of the socio-political conflict between Israel and Palestine, Jewish Israelis continue to feel threatened and unsafe, and it is believed that this population connects these consistent feelings of danger and fears of annihilation to their history of persecution during the Nazi Holocaust (Rakover, 1997). As such, Israeli GHS as well as Israelis at large may feel more of a reverberation of the trauma of the Holocaust than their American Jewish counterparts. Indeed, Lazar (2008) found that both GHS and their age-matched controls perceive the Holocaust as a trauma that affects the Israeli people at large. Thus, this difference in cultural and location between the GHS participants in the previous studies and those in the present study may explain the lack of significant findings in the present study.

The second difference between the past studies examining OHS-GHS dyads (Letzter-Pouw et al., 2014; Palgi et al, 2015) pertains to the variables that were examined in these studies. These two past Israel-based studies both examined the outcome variable in GHS of their level of Holocaust salience, which is defined as “the extent to which the Holocaust is present in everyday thoughts, feelings, and behaviors” (Letzter-Pouw et al., 2014, p. 421). Letzter-Pouw’s (2014) study hypothesized that OHS perception of parental burden would significantly predict GHS Holocaust salience, while Palgi’s (2015) study hypothesized that OHS perception of family involvement (e.g., how much they worried about their Holocaust survivor parents’ suffering) would significantly predict GHS Holocaust salience.

Both of these past studies found that various aspects of family dynamics between OHS and GHS, specifically how burdened GHS felt by their family's Holocaust experiences, and how pressured GHS felt to ensure their parents' happiness, contributed to higher levels of Holocaust salience (defined above) in GHS. When thinking about why these past studies found significant impacts on GHS while the present study did not, it is important to note that the variable of GHS Holocaust salience is much narrower and more Holocaust-specific compared to the two outcome variables of the present study (i.e., differentiation of self and interpersonal problems). As such, examining these results together suggests that perhaps the difficulties experienced by GHS due to the intergenerational transmission of trauma are more subtle and may better be captured by more nuanced measures, such as the measure of Holocaust salience used in the past studies. Additionally, as previously discussed, since these past studies participants were in Israel, it makes sense that these GHS participants would endorse high levels of Holocaust salience for the reasons discussed above.

Another important finding of the present study relates to the impact of the Victim style of parental communication (as opposed to the Numb style discussed above). The present study found that the Victim style also was significantly correlated with lower differentiation of self and greater interpersonal problems, just as was the Numb style.

The Victim style is defined by Danieli (2015) as including "sadness, worry, mistrust, fear of the outside world and symbiotic clinging within the family" (p. 168). In a way, Holocaust survivors whose adaptation style is consistent with the victim style reacted in the complete opposite way from those whose adaptational style was consistent with the numb style. The victim style subscale consists of items such as, "my

mother/father reacted in a catastrophic way to even minor changes,” “my mother/father often screamed in order to be heard,” and “The Holocaust was always present in the house.” These items describe someone who is regularly outwardly demonstrating to their family that they are in pain, in contrast with the numb style in which the Holocaust survivor is suppressing their emotions and not communicating their pain. As such, the findings from the present study suggest that both too little and too much communication about trauma and emotional expression on the part of the survivor have detrimental impacts on their OHS children.

### **Theoretical and Clinical Implications**

The findings from the present study have several important implications, both theoretically for the understanding of the intergenerational transmission of trauma as well as clinically for therapists working with these patients. First, the replicated finding—that Holocaust survivor parent level of numbness predicts OHS interpersonal problems—strengthens the theoretical understanding that laid the foundation for this project. Clinicians and researchers alike have described the impact of the intergenerational trauma that occurs in families of Holocaust survivors as presenting more often in the form of problems in relationships and interpersonal functioning as opposed to increased levels of psychopathology (e.g., Solkoff, 1992; Wiseman & Barber, 2008). This phenomenon has been observed clinically as well, with Trachtenberg (1978), a clinician who led workshops for OHS children, noting that the children of parents who openly shared about their Holocaust experiences “seemed to have less difficulty dealing with the parent-child relationship” (p. 299). As such, the present study’s findings provide additional evidence for this phenomenon that has been observed and described throughout the clinical and

theoretical literature. Additionally, the findings of this study provide further support for the more general theoretical understanding about how silence about trauma on the part of parents is detrimental in children due to the fact that when the trauma is not spoken about, it nonetheless will reverberate non-verbally throughout the home, alerting the children to the fact that their parents are in pain and not knowing why due to the silence (e.g., Ancharoff et al., 1998; Dalgaard, 2019; Nagata, 1998).

Additionally, the fact that numbness is predictive of the increase in interpersonal problems corresponds to the theoretical underpinnings of the present study. Many clinical and research experts on trauma have agreed that the silence maintained by some survivors of traumatic experiences, in the attempt to forget their painful pasts and move on, has the opposite effect, in that remaining silent about one's trauma "further diminishes the significance of life after the trauma, and thus perpetuates the central role of the trauma" (van der Kolk, 2003, p. 3). Similarly, several trauma scholars have asserted that when survivors of trauma attempt to hide their painful past experiences from their families to protect their children, the opposite actually occurs, and their children become highly attuned to and worried about their parents' emotional pain (e.g., Dalgaard & Montgomery, 2016; Kats, 2003; Shmotkin et al., 2011). As such, this finding from the present study provides additional empirical support, building upon past research (Wiseman et al. 2002) for the theoretical understanding that the conspiracy of silence communication pattern is detrimental for children of trauma survivors.

This finding has implications for clinicians working with the children of trauma survivors. The understanding that silence and numbness exhibited by Holocaust survivors is detrimental to the functioning of their OHS children in several areas can inform



therapists' work with the children of trauma survivors. Specifically, this finding suggests that an important area for psychotherapeutic intervention for therapists working with this group may be to promote emotional expressiveness and insight in these individuals regarding how they experienced their parents' silence and emotional barrenness.

Importantly, Danieli's (1984) research on psychotherapy for Holocaust survivors and their children found that just as the conspiracy of silence occurs in these families, psychotherapists are likely to unintentionally participate in a conspiracy of silence with these patients. This conspiracy of silence in therapy dyads occurs when topics related to the trauma of the Holocaust may be avoided by both therapist and patient due to strong countertransference reactions in therapists including feelings of anger and guilt related to the atrocities committed by the Nazis. Danieli's observations regarding the silence that may occur in therapy dyads has important implications that are underscored by the findings of the present study.

Based on these observations, Danieli (1984) recommended that therapists working with families of Holocaust survivors must not only educate themselves on the Holocaust and its impacts on survivors and their families, but continuously monitor their countertransference reactions to ensure that these reactions are not contributing to a conspiracy of silence in the treatment. The findings from the present study provide further support for this treatment recommendation. The present study's findings support the idea that silence, or a lack of verbal communication and emotional expression, is responsible for many of the difficulties faced by OHS. As such, therapists working with this group must work to address the conspiracy of silence and to provide a space for painful topics to be discussed verbally.

The finding that differentiation of self—or one’s ability to separate and individuate from others—was also impacted by parental silence and numbness, has important theoretical and clinical implications as well. Additionally, the finding that these problems in differentiation of self partially explain the problems in interpersonal functioning has significant implications both clinically and theoretically. These results provide empirical support for past clinical observations and theoretical writings regarding the intergenerational transmission of trauma that served as the basis for the present study. Wiseman and Barber’s (2008) book, *Echoes of the Trauma*, outlined their findings from their research using the CCRT method to study relational themes in OHS. In looking at their findings, Wiseman and Barber (2008) found a common theme in the interpersonal functioning of OHS adults. Specifically, these adults described a lifelong conflict between the desire to please and protect their Holocaust survivor parents and their desire to gain independence and form meaningful relationships with other people. As such, the present study’s findings support these clinical observations in terms of the pattern of OHS interpersonal problems being related and partially caused by their problems in separating and differentiating from others including their survivor parents. In other words, just as Wiseman and Barber (2008) observed in the narratives provided by OHS, the findings from the present study provide empirical support for the understanding that OHS difficulties interpersonally are related to difficulties separating and individuating from their families of origin, likely due to feelings of guilt and concern over their parents’ wellbeing.

Additionally, this finding has important clinical implications: when clinicians are working with children of Holocaust survivors, the therapist must be particularly attuned

to the difficulties these patients may face in their interpersonal relationships and should observe how these interpersonal difficulties may be related to issues with separating and individuation from the family of origin. One way that therapists can address these difficulties with separation and individuation with OHS is through family therapy. Family therapy has been recommended as an important treatment for families of Holocaust survivors in order to address the family dynamics and communication patterns that may lead to difficulties with separation and individuation in these families (Fossion et al., 2003).

The significant and unique finding of the present study that the Victim style (i.e., “too much” communication about one’s trauma) had the same detrimental impacts on OHS functioning as did the lack of communication also has important theoretical and clinical implications. This finding alludes to the idea that just as too little open communication and emotional expression (i.e., the numb style) is determinantal for OHS, too much of these same family dynamics (i.e., the victim style) can also be harmful. While the theoretical basis for this study centers around previous writings that emphasize the detrimental effects of silence in families of trauma survivors, past research and clinical observations also provide evidence for this idea that too much discussion of the trauma can be detrimental for children of survivors as well. For example, in their research, Dalgaard and Montgomery (2015) have discussed how a “modulated disclosure” of family trauma may be most emotionally beneficial for children. They define a “modulated disclosure” as a disclosure by parents to their children in which the timing and the manner of the disclosure are carefully considered in terms of the child’s psychological wellbeing, and in which the child’s reaction and emotional needs are

viewed by the parent as more important than the content of what is being disclosed. In contrast, according to Dalgaard and Montgomery, too much disclosure *or* too much silence about one's trauma may be detrimental to the next generation. These findings are directly in line with those of the present study.

Additionally, Trossman (1968), a clinician who treated many OHS in psychotherapy at a college counseling center, concluded that more regular communication about the Holocaust in these children's families during their childhoods had led to an increase in depressive symptomology in OHS during their college years. Similarly, Greenblatt (1978) compared five OHS children who were in therapy to five who were not, and concluded that those requiring therapy as children not only had poorer relationships with their families, but also reported hearing about their parents' Holocaust experiences more frequently, in greater detail, and at an earlier age than those who were not receiving psychotherapy. Additionally, Robinson (1980) observed that OHS children experienced more emotional difficulties if they had parents who spoke about their Holocaust experiences more regularly and with greater intensity than those whose parents did not speak about their experiences as frequently. Regarding past research, Lichtman (1983) found that in addition to a lack of open communication on the part of the Holocaust survivor parent being detrimental to their OHS child's functioning, guilt inducing communication (i.e., parent making comments such as "for this I survived Auschwitz/Hitler" in response to the child saying something that upset them) was significantly related to several negative outcomes in OHS, including paranoia, hypochondriasis, and low ego strength.

These past clinical observations and research findings, coupled with the finding from the present study that the victim style is detrimental to OHS, suggest that both too little and too much communication and emotional expression about the Holocaust by the survivor in their family can be detrimental to the second generation. The notion that parents speaking too much about their trauma to their children is detrimental may be related to the fact that when a parent frequently speaks about their trauma at home, it is likely due to the fact that the parent is experiencing a level of emotional dysregulation and is being flooded by memories of their trauma history. As such, there no modulation occurring in the telling of the trauma on the part of the parent, and the child is being placed in a position of experiencing vicarious trauma due to the parent's repeated discussion of their pain in an unmodulated way (e.g., Dalgaard & Montgomery, 2015).

### **Limitations**

There were several limitations to the present study that need to be addressed in terms of how the results are interpreted. The first limitation relates to the self-selected sampling bias in data collection for both the OHS and GHS samples. Regarding the OHS sample, participants were recruited primarily through Facebook groups for OHS, as well as email announcements and listservs for various Jewish and Holocaust-related organizations. As such, the OHS who learned about this study and opted to participate were people who had already expressed interest in their Jewish and/or OHS identity, as evidenced by their decision to join relevant Facebook groups and other organizations. This sort of selection bias is prevalent in research on OHS, and has been cited by previous researchers as a limitation that may prevent findings from being generalizable to OHS as a whole (e.g., Sorscher & Cohen, 1997). While it is impossible to know the effect

of the sample being comprised of people who have sought out communities based on their OHS identity, one can surmise that these people have in common an understanding that trauma their parents' trauma was important and they are interested in connecting with others who have similar experiences. On a related note, for the present study, the researcher neglected to ask the question as to how the participant learned about the study and/or why they decided to participate. Without this information, it is impossible to gain insight into the impact that different methods of recruitment may have had on any of the study variables.

Similarly, the recruitment method for the GHS participants included sampling bias. In order for a GHS to be able to participate, their OHS parent must first have opted to participate and chosen to provide their email address to receive a follow-up email that they could then forward to their GHS child. Any OHS who did not feel comfortable providing their email address would have opted out from doing so, despite knowing that their child may have wanted to participate if asked. Additionally, any OHS who did not have a positive relationship with their child may have opted out due to a desire to not bother their child with this email about participating in a study. Thus, there may have been a bias in which those OHS whose GHS children chose to participate tended to be GHS with more positive relationships with their parents. This could have skewed the results leading to the GHS who participated in the study having better interpersonal functioning and stronger abilities to separate and individuate.

The many steps required to obtain GHS participation likely explain the low rates of GHS participation compared that of their OHS parents. Out of the 412 OHS participants whose data was included in analyses, 225 provided an email address to

receive the email to forward to their GHS child requesting that their child participates. Of these 225 OHS participants who received this email, only 83 of their GHS children clicked the link to participate in the study. Of these 83 GHS who clicked the link, only 71 completed the study to the extent that their data could be used in analyses. Clearly, the GHS who participated were those who were highly motivated to do so and whose parents were highly motivated to forward the email to their child. As such, the findings may have been different if GHS had been able to opt in to participating prior to their parents' participation, and this sampling bias must be taken into consideration when interpreting the results. For example, perhaps the GHS who decided *not* to participate are those with more difficulties in their functioning. Finally, as mentioned above, the fact that there was no control group of age-matched peers without any direct ancestor in the Holocaust is a limitation. The means from the present study were compared to means from normative samples from other studies, allowing the researchers to observe that all of the scores in the present study were within one standard deviation from the mean of norms. However, having a control group would have allowed for direct differences between OHS/GHS and others who were matched on demographics such as age to be understood.

Additionally, there are other variables that may have contributed to the findings that were not included in the present study. For example, the present study neglected to ask OHS and GHS participants about any past or present participation in psychotherapy. As psychotherapy was more stigmatized in the past among Holocaust survivors and their children as it is today (Danieli, 1985), it is likely that GHS have been more likely to receive psychotherapeutic treatment than their OHS parents. For GHS, processing their family's trauma and its detrimental effects in psychotherapy may have been reparative,

leading to less problems in functioning in the third generation, which could explain the findings of the present study.

Finally, the highly educated nature of this sample appears to have served as a protective factor. Specifically, the participants in the present study included over 50% of OHS and GHS having a masters or doctorate degree. Post-hoc analyses were conducted to examine the relationships between OHS and GHS level of education and other study variables (see Appendix E), and education did indeed serve as a significant buffer against several of the outcome variables in OHS, while not in GHS. This is reflected in the literature more generally: lower levels of education have been found to be associated with higher levels of PTSD in various groups, including women who have experienced pregnancy loss (Engelhard et al., 2006) and first responders after September 11<sup>th</sup> (Whealin et al., 2022), suggesting that level of education may play a role in how trauma affects individuals differently. Thus, future research in this area should more aim to more thoroughly examine how level of education may impact the transmission of trauma.

### **Future Directions**

It is important for future research to address several of the limitations discussed in the previous section, as well as to answer several of the questions raised by the findings of the present study. Regarding GHS, several changes can be made to future research projects to better understand the intergenerational transmission of trauma to the third generation. First, future research on GHS should collect data both from GHS in Israel and in the United States and compare findings between the two groups, in order to understand if geographical location and socio-political climate may explain the different findings between past research and the present study. Second, there are different ways that future



research could examine the idea that perhaps by the third generation, the impacts of the intergenerational trauma are more subtle and nuanced. One way to do so would be to conduct qualitative research with GHS. As previously discussed, Wiseman's (2008) use of RAP interviews which were coded using the CCRT method provided a rich understanding of themes that emerge for the OHS generation in terms of their struggles and experiences. The same methodology could be used with a sample of GHS in order to gain a better understanding of the difficulties faced by this group that may not be so easily captured using quantitative research measures.

### **Conclusions**

Overall, this project made a number of important contributions to the literature. First, this study was the first study to examine the impacts of family communication style about the Holocaust specifically as it pertains to the outcome variables of differentiation of self and interpersonal functioning. As hypothesized, both of these variables were impacted by parental numbness, or a lack of open communication about the Holocaust and emotional expression. While previous research had found impairments in these two areas among OHS compared to controls, this study was the first to explain that these difficulties are impacted, to some extent, by parental numbness on the part of the Holocaust survivor during the OHS' upbringing. This finding makes an important and unique contribution to the literature and also has important clinical implications. Clinically, the awareness that speaking about trauma as opposed to keeping it silent is beneficial for future generations, can help therapists to encourage a healthy and open communication about trauma within families.

Additionally, the finding that the relationship between OHS-rated parental numbness and OHS interpersonal problems is mediated by OHS differentiation of self provides an important and unique contribution to the literature. While previous research (Wiseman et al., 2002) has found that interpersonal functioning is one area in which OHS struggle, the present study was the first to propose a mechanism for this increase in interpersonal problems, through deficits in one's ability to separate and individuate from others. This finding also has important clinical implications. Therapists working with both children of trauma survivors as well as with families should work to encourage appropriate separation and individuation so that the child can develop a healthy level of self-differentiation.

Finally, the finding that none of these effects carried over to the GHS generation is important, as it suggests that the legacy of the trauma of the Holocaust wains across generations. This finding provides hope that perhaps, the impacts of trauma do end as time passes. This provides optimism and encouragement to those whose ancestors have experienced trauma, that hopefully the atrocities from the past will not continue to reverberate.

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## Appendix A

### Recruitment Postings Text

Hello!

My name is Sara Kaplan, and I am currently a 5<sup>th</sup> year Ph.D. candidate in clinical psychology at Long Island University, Brooklyn Campus. I am inviting you to be a participant in my research project, which examines attitudes, feelings, and daily functioning among **children** and **grandchildren** of Holocaust survivors (defined for this study as anyone whose life was significantly impacted by the Nazi occupation of Europe). Specifically, I am hoping to study children and grandchildren of Holocaust survivors who are part of the same family (i.e., parents and children). Through this research I hope to better understand how children and grandchildren of survivors have been impacted by their family members' Holocaust experiences.

You are eligible to participate in this study if (1) you have a parent who survived the Holocaust (defined for this study as anyone whose life was significantly impacted by the Nazi occupation of Europe) or (2) if you have a grandparent who survived the Holocaust **after** your 2G parent participates first. In other words, **children of Holocaust survivors (2Gs) are eligible to participate regardless of if they have their own children who participate, but grandchildren of Holocaust survivors (3Gs) can only participate in conjunction with their parents' participation.** This **confidential** study consists of an online survey and will take approximately 30-40 minutes of your time. In order to participate in the online survey, **if you are a 2G, please click the link below, which will take you to the online study:**

-  
[https://survey.co1.qualtrics.com/jfe/form/SV\\_9NNV2hfTxppMPPv](https://survey.co1.qualtrics.com/jfe/form/SV_9NNV2hfTxppMPPv)

**If you are a 3G, please forward this message to your 2G parent, as they will need to complete their portion of the study before you can participate. Once they have done so, your parent will be sent an email that they can forward you so that you can participate.**

-  
 If you choose to participate in this study, you can choose to be entered into a raffle to win one of **eight** \$50 Amazon gift certificates. All participants are eligible for the raffle (i.e., both children and grandchildren of Holocaust survivors). Four 2Gs and four 3Gs will win the raffle prizes. The raffle will be completed when I have finished data collection, and if you win the raffle, your gift certificate will be sent to your email address.

If you have any questions, comments, or concerns, please feel free to contact me at [2G3Gstudy@gmail.com](mailto:2G3Gstudy@gmail.com).

Your participation would be greatly appreciated-thank you very much!

Finally, if you know of any other children or grandchildren of survivors who you think may be interested, I would greatly appreciate if you would forward this email or let them know that they can contact me at [2G3Gstudy@gmail.com](mailto:2G3Gstudy@gmail.com) for more information.

Thank you again!

## Appendix B

## Informed Consent Form

**LONG ISLAND UNIVERSITY—BROOKLYN****Informed Consent Form for Human Research Subjects**

You are being asked to volunteer to participate in the doctoral dissertation study: “Emotions, Attitudes, and Daily Functioning of Children and Grandchildren of Holocaust Survivors.” This project will be conducted by Sara Kaplan and supervised by Lisa Samstag, PhD within Long Island University in Brooklyn’s Psychology Department. The purpose of this research is to gain insight into the functioning of children and grandchildren of people who survived the Nazi Holocaust in order to better understand the impact of the Holocaust on subsequent generations. In order to participate in the study, **we ask that you meet the following participant criteria: having at least one parent or grandparent whose life was significantly affected by the actions of the Nazis during their occupation of Europe.**

As a participant, you will be asked to complete a number of online surveys, all of which should take approximately 45 minutes to complete.

While there is no direct benefit for your participation in the study, it is reasonable to expect that the results may provide valuable information for the field of psychology. Additionally, you may experience a range of feelings while responding to the questions in this protocol. While it is unlikely that you will experience any emotional distress, should this occur, we encourage you to reach out for support by contacting the national mental health support hotline: 1-800-622-HELP. You may also contact the principal investigator at [2G3Gstudy@gmail.com](mailto:2G3Gstudy@gmail.com) for additional resources.

Your participation in this research is voluntary. Refusal to participate (or discontinuing participation) will involve no penalty or loss of benefits to which you are otherwise entitled. You may withdraw from the study at any time by navigating away from the online survey website and you can have your data deleted at any time by contacting [2G3Gstudy@gmail.com](mailto:2G3Gstudy@gmail.com). Further, if you have questions about the research or are interested in seeing the results, you may contact [2G3Gstudy@gmail.com](mailto:2G3Gstudy@gmail.com). If you have questions concerning your rights as a subject, you may contact the Institutional Review Board Administrator Dr. Lacey Sischo at (516) 299-3591.

Your electronic signature below indicates that you have fully read the above text, you meet the participant criteria (described above), and that you have been provided contact information so that you could ask questions about the purposes and procedures of this study. Your signature also acknowledges that you understand that you may print this consent form, and that you are willing to participate in this study. Finally, by participating in this study you have the chance to be entered in a raffle for one of eight chances to win a \$50 Amazon gift card. If you do not wish to be entered in the raffle please write "NA" in the email space provided below.

- Electronic Acknowledgement of Consent by Participant

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Email Address for Amazon Gift Card Raffle

## Appendix C

## Text of Self-Report Measures

## Danieli Inventory of Multigenerational Legacies of Trauma, Part I: Posttrauma Adaptational Style (Danieli, Norris, Lindert, Paisner, Engdahl, &amp; Richter, 2015)

Please answer each question as it pertains to your experiences during childhood. Please pick one parent to focus on for all of the questions.

Please answer each item on the 5-point scale: strongly disagree = 1, disagree = 2, neither way = 3, agree = 4, strongly agree = 5.

1. Privacy was not allowed.  
1    2    3    4    5
2. Weakness was not tolerated in our home.  
1    2    3    4    5
3. Other than with family members, we socialized almost entirely with other survivors from my parent's original community.  
1    2    3    4    5
4. The Holocaust was always present in the house.  
1    2    3    4    5
5. Affection and open expression of love were rare in our home.  
1    2    3    4    5
6. My parents' house was always stocked with food.  
1    2    3    4    5
7. Our social life included only immediate family.  
1    2    3    4    5
8. Closeness was rare.  
1    2    3    4    5
9. I was taught to honor and remember the history of my/our people.  
1    2    3    4    5
10. My mother/father wanted to know where I was at all times.  
1    2    3    4    5
11. Compared to other mothers/fathers, my mother/father seemed older than he/she actually was.  
1    2    3    4    5
12. My mother/father avoided watching/reading/listening to anything related her/his traumatic experience.  
1    2    3    4    5
13. In our family, feelings of distress were not to be admitted.  
1    2    3    4    5
14. My mother/father often screamed in order to feel heard.  
1    2    3    4    5
15. My mother/father used shame to control my behavior.  
1    2    3    4    5
16. My mother/father often told me how important I was to her/him/them.  
1    2    3    4    5

17. Family members were overly protective of one another.  
1      2      3      4      5
18. My parents often seemed disappointed in each other.  
1      2      3      4      5
19. My parents did not feel that justice for their suffering was really done.  
1      2      3      4      5
20. My mother/father always ate very quickly as though the food would disappear.  
1      2      3      4      5
21. I was expected to achieve career and financial success.  
1      2      3      4      5
22. My mother/father seemed frozen in time.  
1      2      3      4      5
23. In our family, the Holocaust was never mentioned.  
1      2      3      4      5
24. My mother/father often woke up screaming from nightmares in the middle of the night.  
1      2      3      4      5
25. My mother/father might erupt in violent outbursts, then weep with regret.  
1      2      3      4      5
26. My mother/father never discussed her/his Holocaust experiences.  
1      2      3      4      5
27. Open communication seemed not to exist in our home.  
1      2      3      4      5
28. Listening to our traditional music made my mother/father sad.  
1      2      3      4      5
29. My mother/father often told me she/he loved me.  
1      2      3      4      5
30. My parents' marriage was primarily based on factors other than love.  
1      2      3      4      5
31. My mother/father did not believe in G-d<sup>b</sup> after the Holocaust.  
1      2      3      4      5
32. Our home was devoid of emotions.  
1      2      3      4      5
33. My mother/father's behavior sometimes terrified me.  
1      2      3      4      5
34. It felt dangerous to express emotions at home.  
1      2      3      4      5
35. At times, my mother/father would suddenly look as if she/he were far away.  
1      2      3      4      5
36. My mother/father reacted in a catastrophic way to even minor changes.  
1      2      3      4      5
37. My mother/father repeated her/his Holocaust stories over and over again.  
1      2      3      4      5
38. I was taught to fight against injustice.  
1      2      3      4      5
39. My mother/father seemed strange when compared to other mother/fathers.  
1      2      3      4      5
40. The continued safety of Israel is a major concern of our family.

- 1      2      3      4      5  
 41. Independence was highly valued in our household.  
 1      2      3      4      5
42. My mother/father worried about everything.  
 1      2      3      4      5
43. I never knew which of my questions/comments would upset my mother/father so I  
 chose to not speak my mind.  
 1      2      3      4      5
44. Our home was full of sadness.  
 1      2      3      4      5
45. In our home, even the smallest decision had to be carefully considered.  
 1      2      3      4      5
46. My mother/father taught me to be ready for anything that might happen in life.  
 1      2      3      4      5
47. Self-pity was considered a weakness.  
 1      2      3      4      5
48. I was taught to mistrust authority.  
 1      2      3      4      5
49. I was taught to stand up for authority.  
 1      2      3      4      5
50. My mother/father did not give me any guidance.  
 1      2      3      4      5
51. It was very difficult for my mother/father to provide reasonable limits.  
 1      2      3      4      5
52. Humor was present even when things were difficult.  
 1      2      3      4      5
53. My mother/father viewed marrying outside the faith as a betrayal.  
 1      2      3      4      5
54. Family members were overly involved in each other's lives.  
 1      2      3      4      5
55. My mother/father was uncomfortable when interacting with others outside the family.  
 1      2      3      4      5
56. My mother/father wouldn't buy German goods.  
 1      2      3      4      5
57. I was taught that people should never forget crimes committed against humanity.  
 1      2      3      4      5
58. My mother/father felt down on ethnic/religious holidays.  
 1      2      3      4      5
59. While we were praised for achievements, there was little sense of intimacy in the  
 family.  
 1      2      3      4      5
60. My mother/father used guilt to control my behavior.  
 1      2      3      4      5

Differentiation of Self Inventory – Short Form (DSI-SF; Drake, Murdock, Marszalek, & Barber, 2015).

These are questions concerning your thoughts and feelings about yourself and relationships with others. Please read each statement carefully and decide how much the statement is generally true of you on a 1 (not at all) to 6 (very) scale. If you believe that an item does not pertain to you (e.g., you are not currently married or in a committed relationship, or one or both of your parents are deceased), please answer the item according to your best guess about what your thoughts and feelings would be in that situation. Be sure to answer every item and try to be as honest and accurate as possible in your responses.

1. I tend to remain pretty calm even under stress.  
1      2      3      4      5      6
2. I usually need a lot of encouragement from others when starting a big job or task.  
1      2      3      4      5      6
3. No matter what happens in my life, I know that I'll never lose my sense of who I am.  
1      2      3      4      5      6
4. I tend to distance myself when people get too close to me.  
1      2      3      4      5      6
5. When my spouse/partner criticizes me, it bothers me for days.  
1      2      3      4      5      6
6. At times my feelings get the best of me and I have trouble thinking clearly.  
1      2      3      4      5      6
7. I'm often uncomfortable when people get too close to me.  
1      2      3      4      5      6
8. I feel a need for approval from virtually everyone in my life.  
1      2      3      4      5      6
9. At times, I feel as if I'm riding an emotional roller-coaster.  
1      2      3      4      5      6
10. There's no point in getting upset about things I cannot change  
1      2      3      4      5      6
11. I'm overly sensitive to criticism.  
1      2      3      4      5      6
12. I'm fairly self-accepting.  
1      2      3      4      5      6
13. I often agree with others just to appease them.  
1      2      3      4      5      6
14. If I have had an argument with my spouse/partner, I tend to think about it all day.  
1      2      3      4      5      6
15. When one of my relationships becomes very intense, I feel the urge to run away from it.  
1      2      3      4      5      6
16. If someone is upset with me, I can't seem to let it go easily.  
1      2      3      4      5      6
17. I often feel unsure when others are not around to help me make a decision.  
1      2      3      4      5      6
18. I'm very sensitive to being hurt by others.  
1      2      3      4      5      6
19. My self-esteem really depends on how others think of me.  
1      2      3      4      5      6
20. I tend to feel pretty stable under stress.

Inventory of Interpersonal Problems – Short Circumplex (IIP-SC; Soldz, Budman,  
Demby, & Merry, 1995)

Please rate each of the following items using the following scale:

0 = not at all	1 = somewhat	2 = moderately	3 = very	4 = extremely	
1. It is hard for me to understand another person's point of view	0	1	2	3	4
2. It is hard for me to be supportive of another person's goals in life	0	1	2	3	4
3. It is hard for me to show affection to people	0	1	2	3	4
4. It is hard for me to join in on groups	0	1	2	3	4
5. It is hard for me to tell another person to stop bothering me	0	1	2	3	4
6. It is hard for me to let other people know when I am angry	0	1	2	3	4
7. It is hard for me to attend to my own welfare when someone else is needy	0	1	2	3	4
8. It is hard for me to keep things private from other people	0	1	2	3	4
9. I am too aggressive toward other people	0	1	2	3	4
10. It is hard for me to feel good about another person's happiness	0	1	2	3	4
11. It is hard for me to experience a feeling of love for another person	0	1	2	3	4
12. It is hard for me to introduce myself to new people	0	1	2	3	4
13. It is hard for me to confront people with problems that come up	0	1	2	3	4
14. It is hard for me to be assertive without worrying about hurting the other person's feelings	0	1	2	3	4
15. I try to please other people too much	0	1	2	3	4
16. I open up to people too much	0	1	2	3	4
17. I try to control other people too much	0	1	2	3	4
18. I am too suspicious of other people	0	1	2	3	4
19. It is hard for me to feel close to other people	0	1	2	3	4
20. It is hard for me to socialize with other people	0	1	2	3	4
21. It is hard for me to be assertive with another person	0	1	2	3	4
22. I am too easily persuaded by other people	0	1	2	3	4
23. I put other people's needs before my own too much	0	1	2	3	4
24. I want to be noticed too much	0	1	2	3	4
25. I argue with other people too much	0	1	2	3	4
26. I want to get revenge against people too much	0	1	2	3	4
27. I keep other people at a distance too much	0	1	2	3	4
28. It is hard for me to ask other people to get together socially with me	0	1	2	3	4
29. It is hard for me to be firm when I need to be	0	1	2	3	4
30. I let other people take advantage of me too much	0	1	2	3	4
31. I am affected by another person's misery too much	0	1	2	3	4
32. I tell personal things to other people too much	0	1	2	3	4

## Central Relationship Questionnaire (CRQ; McCarthy, Gibbons, & Barber, 2008)

This questionnaire is about your feelings about your romantic partner. There are no right or wrong answers. Some items may not apply to you at all. If so, please give them a 1 instead of omitting them. Please answer all of the questions, even though some may look similar. Please try to be as honest as possible and respond how you feel – not how you think you should feel or how others think you should feel.

A romantic partner is a person you have been romantically and sexually involved with for at least 3 months in the past three years and who is, or has been, important in your life. Refer to a previous partner if you do not currently have a partner.

Now we would like you to consider this relationship in terms of **YOUR OWN RESPONSE TO YOUR ROMANTIC PARTNER**. Other people can deny your desires or meet your desires in responding to you. Below is a list of different ways that you might react when your romantic partner denies or meets your desires. We would like you to rate how typical these reactions are or were for you in this relationship **WHEN IT IS/WAS AT ITS WORST**. Use the following scale (and please try to use a range of ratings):

- 1=Never true of me
- 2=Rarely
- 3=Occasionally
- 4=Sometimes
- 5=Often
- 6=Very often
- 7=Always true of me

### IN MY RELATIONSHIP WITH MY ROMANTIC PARTNER:

1.	I feel respected by my partner	1	2	3	4	5	6	7
2.	I encourage my partner	1	2	3	4	5	6	7
3.	I achieve at work or school	1	2	3	4	5	6	7
4.	I feel unsure about our relationship	1	2	3	4	5	6	7
5.	I avoid difficulties with my partner	1	2	3	4	5	6	7
6.	I have power over my partner	1	2	3	4	5	6	7
7.	I feel rejected	1	2	3	4	5	6	7
8.	I am independent	1	2	3	4	5	6	7
9.	I accomplish my goals	1	2	3	4	5	6	7
10.	I do not open up	1	2	3	4	5	6	7
11.	I desire my partner sexually	1	2	3	4	5	6	7
12.	I feel disliked	1	2	3	4	5	6	7
13.	I am submissive	1	2	3	4	5	6	7
14.	I feel my partner is important to me	1	2	3	4	5	6	7



15. I distance myself	1	2	3	4	5	6	7
16. I am dominated	1	2	3	4	5	6	7
17. I feel torn about my relationship with my partner	1	2	3	4	5	6	7
18. I give to my partner	1	2	3	4	5	6	7
19. I avoid getting into conflicts with my partner	1	2	3	4	5	6	7
20. I share my feelings	1	2	3	4	5	6	7
21. I am confused by my relationship with my partner	1	2	3	4	5	6	7
22. I am my own person	1	2	3	4	5	6	7
23. I feel mistreated	1	2	3	4	5	6	7
24. I act maturely	1	2	3	4	5	6	7
25. I feel competent	1	2	3	4	5	6	7
26. I avoid problems with my partner	1	2	3	4	5	6	7
27. I feel held in high esteem by my partner	1	2	3	4	5	6	7
28. I feel accepted by my partner	1	2	3	4	5	6	7
29. I feel uncomfortable	1	2	3	4	5	6	7
30. I control my partner	1	2	3	4	5	6	7
31. I dominate my partner	1	2	3	4	5	6	7
32. I am not emotionally close	1	2	3	4	5	6	7
33. I connect with my partner	1	2	3	4	5	6	7
34. I express my thoughts, feelings, 7	1	2	3	4	5	6	7 and wishes
35. I am self-sufficient	1	2	3	4	5	6	7
36. I am controlled by my partner	1	2	3	4	5	6	7
37. I am nervous	1	2	3	4	5	6	7
38. I am sexually excited by my partner	1	2	3	4	5	6	7

Family Communication Scale (FCS; Olson, Gorall, & Tiesel, 2004)

Please answer the following questions as they pertain to your family of origin throughout your upbringing.

Rating scale from 1 to 5: 1=does not describe our family at all, 2=slightly describes our family, 3=somewhat describes our family, 4=generally describes our family. 5=very well describes our family

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. Family members are satisfied with how they communicate with each other.   | 1 | 2 | 3 | 4 | 5 |
| 2. Family members are very good listeners.                                   | 1 | 2 | 3 | 4 | 5 |
| 3. Family members express affection to each other.                           | 1 | 2 | 3 | 4 | 5 |
| 4. Family members are able to ask each other for what they want.             | 1 | 2 | 3 | 4 | 5 |
| 5. Family members can calmly discuss problems with each other.               | 1 | 2 | 3 | 4 | 5 |
| 6. Family members discuss their ideas and beliefs with each other.           | 1 | 2 | 3 | 4 | 5 |
| 7. When family members ask questions of each other, they get honest answers. | 1 | 2 | 3 | 4 | 5 |
| 8. Family members try to understand each other's feelings                    | 1 | 2 | 3 | 4 | 5 |
| 9. When angry, family members seldom say negative things about each other.   | 1 | 2 | 3 | 4 | 5 |
| 10. Family members express their true feelings to each other.                | 1 | 2 | 3 | 4 | 5 |

## Appendix D

## Debriefing Form

Thank you very much for your time and participation in “The Effects of the Holocaust on the Functioning of Children and Grandchildren of Holocaust Survivors.” The aim of this project was to study how the traumatic experiences of the Holocaust affect future generations of survivors in their relationships and functioning. Your participation has been a great help, and will contribute to a better understanding of this important topic. For any questions about this study, you can contact Sara Kaplan at 2G3Gstudy@gmail.com.

Additionally, sometimes research participants may have an emotional reaction to the study material. If this is the case for you and you feel a need to connect with someone, you can consider the following confidential resources:

- <https://locator.apa.org/> (to find a psychologist in your area)
- <http://www.suicidepreventionlifeline.org> OR 1800-273-TALK (24/7 Crisis Hotline)
- New York Samaritans: 212-673-3000
- New York Help Line: 212-532-2400
- NYC WELL: 1888-NYC-WELL
- 1800-LIFENET is a suicide prevention hotline and referral service that can help you find a therapist in your area.

Finally, if you are interested in receiving information about the results of this study once it is completed, or have any additional thoughts/concerns/questions, please feel free to contact Sara Kaplan at 2G3Gstudy@gmail.com. Thank you again for your participation!

## Appendix E

### Supplemental Statistical Analyses

#### **Number of Survivor Parents**

Post hoc analyses were conducted to examine the potential impact of having one Holocaust survivor parents versus two Holocaust survivor parents on both OHS and GHS outcomes. For all OHS and GHS study variables, independent samples *t*-tests were conducted to compare participants with one versus two survivor parents (Table 20).

For OHS, differences between those with one versus two survivor parents were examined for the independent variable of parental numbness as well as for the dependent variables of differentiation of self, interpersonal problems, and a response of self of independence. For OHS, there were no significant differences for any of these variables between those with one and two survivor parents.

Differences between OHS with one versus two survivor parents were also examined for the exploratory variables of parental victim style and parental fighter style. For both of these variables, there were significant differences in mean scores between those OHS with one survivor parent and those with two. For both the parental victim style and parental fighter style, mean scores were statistically significantly higher for OHS with two survivor parents than for those with one survivor parent.

For GHS, differences between those with one survivor versus two survivor grandparents were examined for the independent variable of family communication and the dependent variables of differentiation of self and interpersonal problems. For GHS, there were no significant differences for any of these variables between those with one and two survivor grandparents.

**Table 20***Difference in Variables Based on Number of Survivor Parents*

Variable	One Survivor Parent ( <i>N</i> = 162)		Two Survivor Parents ( <i>N</i> = 250)		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )			
OHS Numb	2.57	(0.77)	2.63	(0.74)	-0.72	410	.47
OHS Fighter	3.48	(0.47)	3.65	(0.45)	-3.55	410	<.001**
OHS Victim	2.56	(0.70)	2.76	(0.64)	-3.05	410	.001**
OHS DSI-SF	3.86	(0.92)	3.90	(0.92)	-0.39	397	.70
OHS IIP-SC	1.11	(0.53)	1.08	(0.63)	0.53	392	.60
OHS RS Independence	5.80	(1.15)	5.67	(1.24)	0.96	365	.34
GHS FCS	34.00	(9.67)	33.46	(8.06)	0.25	69	.80
GHS DSI-SF	3.57	(1.04)	3.65	(0.73)	-0.37	69	.71
GHS IIP-SC	1.29	(0.48)	1.15	(0.47)	1.23	69	.22

*Note.* OHS = Offspring of Holocaust Survivors; GHS = Grandchildren of Holocaust Survivors; DSI-SF = Differentiation of Self Inventory-Short Form; IIP-SC = Inventory of Interpersonal Problems-Short Circumplex; CRQ = Central Relationship Questionnaire; RS = Response of Self.

\**p* < .05. \*\**p* < .01.

### **Level of Education**

Post hoc analyses were conducted to examine the potential impact of level of education of both OHS and GHS on all study variables due the observation that this sample was highly educated. For all OHS and GHS study variables, Pearson's  $r$  correlations were conducted to examine the correlations between level of education and all other variables. These correlations are shown in Table 21.

For OHS, level of education was significantly correlated with OHS differentiation of self, such that higher levels of education were significantly related to higher levels of differentiation of self. Higher levels of education were also significantly related to lower levels of OHS interpersonal problems. Additionally, higher levels of education in OHS were significantly related to OHS-rated parental numbness, such that those OHS with higher levels of education rated their survivor parents significantly lower in numbness. Similarly, higher levels of education in OHS were significantly related to OHS-rated parental victim style, such that those OHS with higher levels of education rated their survivor parents significantly lower in the victim style.

For GHS, level of education was not significantly related to any of the other variables, including family communication, differentiation of self, or interpersonal problems.

**Table 21***Pearson's r Correlation Matrix for Level of Education and Study Variables*

Variable	Level of Education	Danieli Numb	Danieli Victim	Danieli Fighter	OHS DSI-SF	OHS IIP-SC	OHS CRQ: RS Ind	GHS FCS	GHS DSI-SF	GHS IIP-SC
Level of Education		-.14**	-.13**	.06	.11*	-.11*	.04	-.05	-.12	.07
Danieli Numb			.54**	-.12*	-.41**	.38**	-.10	-.13	-.14	.09
Danieli Victim				.16**	-.38**	.33**	-.05	-.02	-.03	.09
Danieli Fighter					-.02	.01	.03	-.05	-.11	.13
OHS DSI-SF						-.72**	.26**	.19	.14	-.06
OHS IIP-SC							-.16**	-.26*	-.07	.15
OHS CRQ: RS Ind								.19	.14	-.01
GHS FCS									-.02	.10
GHS DSI-SF										-.67**
GHS IIP-SC										

*Note.* OHS = Offspring of Holocaust Survivors; GHS = Grandchildren of Holocaust Survivors; Danieli = Danieli Inventory of Multigenerational Legacies of Trauma-Part I: Posttrauma Adaptational Styles (Danieli et al., 2015); Numb = Numb style subscale (of Danieli measure); Victim = Victim style subscale (of Danieli measure); Fighter = Fighter style subscale (of Danieli measure); DSI-SF = Differentiation of Self Inventory-Short Form (Drake et al., 2015); IIP-SC = Inventory of Interpersonal Problems-Short Circumplex Soldz et al., 1995); CRQ = Central Relationship Questionnaire (Barber et al., 1998); RS Ind= Response of Self of Independence; FCS = Family Communication Scale (Olson et al., 2004).

\* $p < .05$ ; \*\* $p < .01$ .