

7-26-2016

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Janae Raquel Sones

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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

EXPLORATION OF INTERGENERATIONAL AMBIVALENCE,
PARENTING PRACTICES, AND THE IMPACT
ON GRANDPARENTHOOD DIMENSIONS

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

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College of Education and Behavioral Sciences
Department of Applied Psychology and Counselor Education
Counseling Psychology

July 2016

This Dissertation by: Janae Raquel Sones

Entitled: *Exploration of Intergenerational Ambivalence, Parenting Practices, and the Impact on Grandparenthood Dimensions*

has been approved as meeting the requirement for the Degree of Doctor of Philosophy in College of Education and Behavioral Sciences in School of Applied Psychology and Counselor Education, Program of Counseling Psychology

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ABSTRACT

Sones, Janae. *Exploration of Intergenerational Ambivalence, Parenting Practices, and the Impact on Grandparenthood Dimensions*. Published Doctor of Philosophy dissertation, University of Northern Colorado, 2016.

Changing population demographics have important implications for intergenerational relationships. While research abounds on certain family relationships, less attention has been given to the relationship between an aging parent and her or his adult child. Two theoretical constructs that have consistently been useful for examining these relationships include intergenerational ambivalence (IGA) and, to a lesser degree, dimensions of grandparenthood. Thus, the purpose of this study was to suggest new measurement strategies for these constructs, expand on the correlates of IGA and a grandparent's perceived ambivalence regarding her or his adult child's parenting practices, and bring new perspectives to the experience of grandparenting. Using data from 210 grandparents, exploratory factor analyses and regression analyses were conducted. Results provided support for these new measurement strategies, and indicated that ambivalence related to parenting practices significantly accounts for overall IGA. Moreover, IGA accounted for a significant portion of a participant's cognitive experience of grandparenting. This study has implications for the measurement of IGA and grandparenting, as well as clinical work with adults in transition and grandparents who are raising their grandchildren.

Keywords: Intergenerational Ambivalence, IGA, Intergenerational Relationships, Parenting, Grandparenting, Grandparenthood Dimensions

ACKNOWLEDGMENTS

I wish to thank my incredibly supportive advisor, Brian Johnson, who provided me with the encouragement, guidance, and humor that I needed to complete this dissertation and move towards my goals. When I questioned myself, you were there believing that I could do it. Thank you.

I also am greatly appreciative to my committee, Jeff Rings, Robyn Hess, and Angie Henderson. For your time and thoughtful consideration of my work, I thank you. To all the faculty and staff, including M.S. O'Halloran, Basilia Softas-Nall, and Stephen Wright, your mentorship, wisdom, and support made my graduate school experience a challenging and rewarding time of professional and personal growth. Thank you.

To my doctoral cohort, Dylan Firsick, Jason Kacmarski, Blair Nyline, and Tanya Watson: We are truly a great team. I cherish all of the memories full of challenge, accomplishment, coffee runs, and laughter. Looking forward to many more! To all of you in Bozeman, especially Laura Santa Thum and Sandy Newton: Your support and encouragement kept me moving forward. Thank you.

And finally, to all of my extraordinary family and friends. Thank you for all of the instrumental and emotional support throughout my education, and especially during my doctoral studies. You always believed in me, gave me energy for this whirlwind that is graduate school, and helped me to keep sight of all parts of "me" through this time. Special thanks to my life adventure partner, Bryan Gray, for the sacrifices you make as I pursue my dreams. I couldn't do it without you.

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CHAPTER I

INTRODUCTION

United States population structure is reaching an important shift as life expectancies increase, birth rates decrease, and the number of those living into later life remaining healthy and active increases. While population age distribution data from the early 20th century formed a “triangle”, with many more young individuals or children than older adults, this structure is changing as we move into the 21st century. Population distributions are expected to take more of a “beanpole” structure by 2030 where each generation has relatively equal amounts of people (Antonucci, Jackson, & Biggs, 2007, p. 683). Consequently, grandparenting is an identity on the rise. Of those born in 1900, 24% had four grandparents alive; in 2004, that number skyrocketed to 68% (Mabry, Giarrusso, & Bengtson, 2004).

Changing population demographics and the role of grandparents have important implications for families as developmental milestones are met, role transitions occur, and intergenerational relationships, or relationships across generations, have more time to develop and foster. While research abounds on the relationship between a parent and young child, and the grandparent-grandchild relationship, substantially less attention has been given to the relationship between an aging parent and her or his adult child. Similarly, there is a vast research base on grandparenting, yet little theoretically consistent research that informs our knowledge of how the experiences of grandparenting are impacted by relationships with other generations. Given changing population

demographics and thus increasing opportunities for long-term intergenerational relationships, understanding grandparenting within the context of intergenerational relationships is a timely and relevant area for research.

Theoretical Framework

Overall, research on parents and their adult children follow an intergenerational framework (Lüscher & Pillemer, 1998). Simply, an intergenerational view, sometimes called a transgenerational or multigenerational view, holds that individuals influence and are influenced by the generations around them (Antonucci et al., 2007). As more of society can expect to live well into older adulthood, intergenerational relationships between adults in a family become more intricate. One theory that captures the complexity of parent-adult child relationships that has been used consistently in the literature since 1998 to frame empirical investigations is the intergenerational ambivalence framework (Lüscher & Pillemer). Intergenerational ambivalence provides a realistic approach to studying family relationships and refers to the simultaneous experience of both positivity and negativity between a parent and adult child that cannot be reconciled (Lüscher & Pillemer). Recommended by Bates and Taylor (2013) as a novel lens with which to study grandparenting, intergenerational ambivalence (IGA) seems to be the most appropriate construct to explore parent-adult child relationships, and how dynamics in these relationships can influence how the older parent experiences another intergenerational role, that of grandparent.

Research on grandparenting has been incredibly theoretically inconsistent; in the past 25 years, 55 different theories across 209 studies have been used to study grandparenting (Bates & Taylor, 2013). Thus, using an established lens like IGA to study

grandparenting could bring uniformity to the field. A theory that has spurred recent research and explains the grandparenting role from various dimensions is Hurme's (1991) theory on grandparenting dimensions. Similar to Heiss' (1990) definition of social roles, Hurme's model posits that the grandparent role is multidimensional and thus must be understood through four dimensions: attitudinal/cognitive, affective, behavioral, and symbolic. These four dimensions correspond to varying aspects of grandparenting and thus are important for comprehensively assessing the role. In order to frame the current study, the theoretical foundation will be established by describing IGA and dimensions of grandparenting.

Intergenerational Ambivalence

Intergenerational ambivalence (IGA), originally introduced by Lüscher and Pillemer (1998), provides a comprehensive way to conceptualize and evaluate intergenerational relationships. Prior to its development, intergenerational relationships were viewed through two mutually exclusive lenses: either intergenerational relationships were characterized by solidarity and mutual collaboration between generations, or they were relationships riddled with conflict and maladaptive patterns (Antonucci et al., 2007). Bengtson and Roberts' (1991) intergenerational solidarity framework is the theory most often critiqued for having too narrow a view of intergenerational relationships. Pillemer and Suitor (2004) describe this approach as the "Tinkerbell Phenomenon" (p. 21) because Tinkerbell from the beloved story *Peter Pan* was only able to feel one emotion at a time. When a theory assumes a family can be wholly encompassing of only one, distinct characteristic (e.g., "all good" or "all bad"), it can be said to exhibit a Tinkerbell Phenomenon. Critically, this is evident quite often when studying older adults and aging

families (see Marshall, Matthews, & Rosenthal, 1993 for a review). Perhaps, researchers have been a little too much like Tinkerbell, striving to find only the positive or negative, unable to recognize the duality inherent in any system including aging families.

Lüscher and Pillemer (1998) provided an alternative view:

... “intergenerational ambivalence” [is used] to designate contradictions in relationships between parents and adult offspring that cannot be reconciled. The concept has two dimensions: (a) contradictions at the level of social structure, evidenced in institutional resources and requirements, such as statuses, roles, and norms and (b) contradictions at the subjective level, in terms of cognitions, emotions, and motivations. (p. 416)

This definition is the most helpful description of IGA and will subsequently be used in the current study. Under the IGA framework, researchers can study the fluidity of solidarity and conflict inherent in family relationships. It can help capture the complexity of relationships by acknowledging a spectrum of positive, negative, and neutral reactions.

Generally speaking, ambivalence is defined as “...simultaneous and contradictory attitudes or feelings toward an object, person, or action” (“ambivalence,” 2014). It can be used generally to describe relationship dynamics, or more specifically when referring to specific attitudes or roles. For example, a parent may feel ambivalent in her or his relationship with an adult child, or the parent may experience ambivalence towards specific actions of the adult child, such as their practices as a parent. Lüscher and Pillemer (1998) apply this term generally to the ambivalent attitudes, emotions and motivations that can develop intergenerationally between a parent and her or his adult child. However, ambivalence in the context of intergenerational relationships is not new in the psychological literature. In fact, it is a core concept in some early psychological writings. For instance, Freud’s theory of psychosexual development rests largely on the assumption that there is a strong love and equally strong hate relationship with the

parental figure (Freud, 1953). However, before 1997 there were a very limited number of published articles looking at parent-child relationships and ambivalence (Pillemer & Lüscher, 2004; Pillemer & Sutor, 2004). Since its formal re-introduction into psychology, IGA has been one of the leading theoretical frameworks used to study the aging family, and especially parent-child relationships in adulthood (Fingerman, Sechrist, & Birditt, 2013).

Ambivalence can be a confusing construct in the context of relationships, so it is important to understand what ambivalence in families is *not* just as much as what it is. Lettke and Klein (2004) identified that ambivalence is not wholly represented by conflict, inconsistent behavior, or differences in time spent together. Note that these variables are often studied when using other relational paradigms and focus more attention on negative aspects of the relationships. Ambivalence is not simply negative as it can also have positive valences. Nevertheless, it is not uncommon to see misapplications of the term in the literature. For example, Cooney and Dykstra (2013) grouped conflict and ambivalence together when explaining how the two are evidenced in relationships without any clear distinction between them.

Additionally, Lüscher and Pillemer (1998) differentiate ambivalence from ambiguity. Ambiguity in parent-child relationships indicates a lack of clarity or some unknown or unpredictable factor, perhaps illustrating unclear boundaries in child-rearing like when a grandparent does not know if she or he has her/his adult child's "permission" to discipline a grandchild. Perhaps, "...ambiguity contributes to ambivalence, but it does not necessarily imply opposed perceptions or emotions" (Lüscher & Pillemer, 1998, p. 416-417). Instead of assessing behavior, it is more helpful to consider ambivalence on the

dimensions of “emotionality, agreement, and social norms” (Lettke & Klein, 2004, p. 87). On any of these dimensions, ambivalence can be created when opposites exist simultaneously. For example, Figure 1 depicts ambivalence in terms of emotionality.

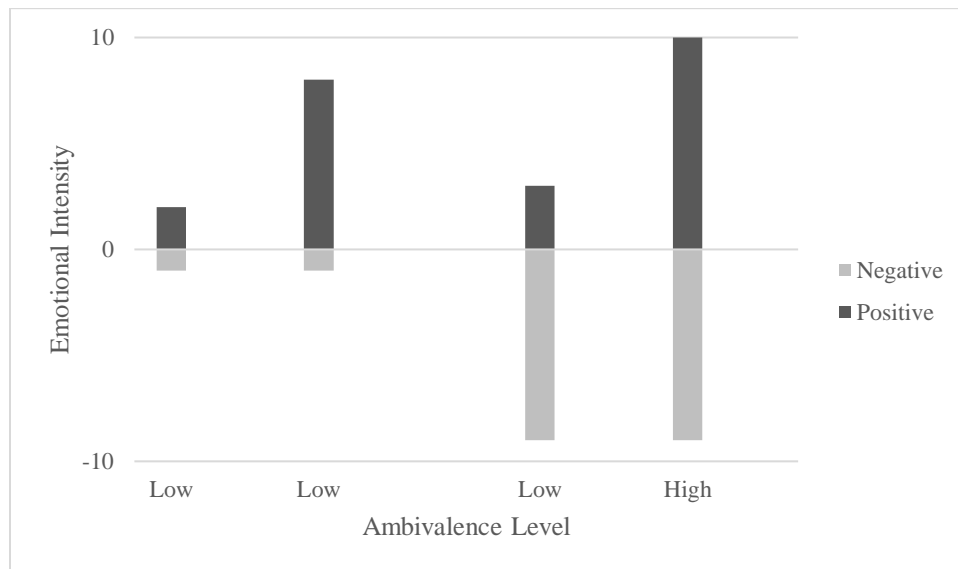


Figure 1. Ambivalence represented on an emotionality continuum

With the most positive emotional experience represented as 10 and the most negative as a -10, we can see in Figure 1 that low ambivalence exists when there is little overall emotionality, such as in the first case. The next two cases illustrate additional examples of low ambivalence, when high emotionality exists in only one direction. The solidarity framework would be most represented by the first of these two, where high positive emotionality exists with an absence of negative emotion. The conflict perspectives is best represented by the third case. The final case shows high ambivalence in a “love-hate” relationship where equally positive and negative feelings exist simultaneously. Besides emotionality, perceiving irreconcilable expectations can create ambivalence because it becomes impossible to successfully live up to the family’s norms.

Although a more thorough review of the empirical literature related to intergenerational ambivalence will be described in Chapter II, it is important here to note some of the general circumstances where intergenerational ambivalence may arise.

Lüscher and Pillemer (1998) identify three theoretical possibilities creating ambivalence:

(a) dependence vs. autonomy in describing the level of support exchanged across the generations; (b) conflicting norms regarding relationships such as when the caregiving role shifts to an adult child caring for an ill parent; and (c) solidarity as demonstrated through cohabitation, frequent contact, etc. Subsequent empirical investigations that will be discussed in Chapter II provide strong support for each of these possibilities.

Since the introduction of this definition, there has been a more consistent discussion in the literature of the value of IGA to study the aging family (see Fingerman et al., 2013; Lendon, Silverstein, & Giarrusso, 2014; Pillemer & Suito, 2004). There is less agreement, however, on how to measure IGA. Quantitatively, it is measured through self-report question sets that either directly or indirectly assess the perceived levels of ambivalence. Direct methods use questions such as: “To what degree do you have very mixed feelings toward your parent/the child?” (e.g., Pillemer et al., 2007). Conversely, indirect methods ask questions that assess both positive and negative relationship characteristics, and then use an algorithm to obtain an estimate of one’s ambivalence score (see Birditt, Fingerman, & Zarit, 2010). Examples of indirect questions include: “How much does he/she make you feel loved and cared for?” and “How much does he/she criticize you?” (e.g., Fingerman, Pitzer, Lefkowitz, & Mroczek, 2008). Lendon et al. (2014) evaluated the recent status of this debate, and concluded that studying ambivalence using both direct and indirect methods provided distinct yet related

information on parent-adult child relationship ambivalence. Thus, they concluded that both methods should be used to determine ambivalence, but to date, only three other studies were found that employed both methods (Lüscher & Lettke, 2004; Pillemer & Suito, 2004; Suito, Gilligan, & Pillemer, 2011).

Research is growing on what personal aspects or situations relate to higher levels of ambivalence in relationships. Pillemer and Suito (2002) offered one of the first investigations of correlates of ambivalence and concluded that an adult child's inability to achieve and maintain adult statuses (e.g., financial independence, getting married) was related to higher levels of ambivalence in older parents. An interesting study examining differences between mothers and fathers in perceived levels of ambivalence found that fathers tend to have higher levels of ambivalence than mothers (Pillemer, Munsch, Fuller-Rowell, Riffin, & Suito, 2012). Moreover, some research shows that ambivalence is felt more strongly towards children of the same sex (e.g., fathers feel more ambivalence towards sons than daughters) (Pillemer et al., 2012). Yet, little other research has been completed that helps explain IGA.

Fingerman, Sechrist, and Birditt (2013) described multiple limitations of IGA. First, the operationalization and quantitative evaluation of attitudes and social norms, which help to define ambivalence, provides its own set of challenges because they are often vague and ever-changing (Fingerman et al., 2013). Second, they point out that some researchers define ambivalence by melding factors indirectly associated with it (e.g., contradictory norms for fathers about being masculine and being a nurturing parent), without actually measuring the experience of ambivalence itself. Thus, ambivalence may actually be misattributed in some studies to related factors. The most concerning criticism

suggests that ambivalence research, like other frameworks before it, has been guilty of the Tinkerbell Phenomenon by simply measuring the variability in negativity experienced in relationships rather than accounting for both positive and negative characteristics. This is the same critique that Bengtson and Roberts' (1991) solidarity framework received from, among others, Lüscher and Pillemer in 1998. Fingerman et al. argued that studies assume parent-adult child relationships display more positivity and use the positive characteristics as a starting point with deviations away from that common point as ambivalence. Instead, research could assume ambivalence functions similarly to how it is represented in Figure 1: a base level of ambivalence, with greater deviations representing more ambivalence (equally intense positive and negative emotions) or less ambivalence (either an over-representation of one relationship trait or indifference/detachment from the relationship). Regardless, these limitations can be mitigated with sound research items, careful operationalization of constructs, and clear adherence to a mutually agreed upon definition of ambivalence as an encompassing term for the complexity of relationships.

Dimensions of Grandparenthood

Research on grandparenting in the past 25 years has been very diverse and multidisciplinary. Bates and Tayler (2013) completed a comprehensive review of 209 grandparenting research articles published from 1991 to 2010 to assess their content and use of theory. They found over 55 different theories were used, and over 40% of the articles failed to identify any theory at all. Moreover, they concluded that theory building is limited in the past 20 years and recommended future grandparenthood researchers should "...consider more carefully theory utilization" (Bates & Taylor, p. 65) Taking into

account the plethora of grandparenting theories used in the literature, the present study examined the recent scholarly literature on grandparenting to determine what theories were informative to other researchers and stimulating applicable research. One such theory was Hurme's (1991) theory of grandparenthood dimensions which was recently successfully operationalized and used (e.g., Findler, 2014; Findler, Taubman – Ben-Ari, Nuttman-Shwartz, & Lazar, 2013).

Rather than positing one style or a unidimensional grandparenting role, Hurme (1991) described four grandparenting dimensions. Her intent was to "...abolish the myth of a monolithic conception of grandparenthood" (p. 19), a similar intent to Lüscher and Pillemer (1998) with IGA. Hurme's four dimensions represent important aspects of most roles found across social settings. These dimensions include attitudinal/cognitive, behavioral, affective, and symbolic aspects of social roles. Whereas other theories assume a grandparent is just one "type", Hurme's dimensions are less prescriptive and can account for changes during different phases of grandparenthood. Each dimension captures an important and distinct aspect of the grandparenting role.

The *attitudinal/cognitive* dimension concerns one's perceived obligations or normative expectations of grandparenthood (Hurme, 1991). Grandparents, parents, and grandchildren all have expectations for and attitudes associated with what the grandparent role should be. Recent research shows grandfathers expect to be involved with their grandchildren despite distance, hope to have a less formal relationship with their grandchildren than they did with their children, and share fun activities with their grandchildren (e.g., going to sporting events together; Sorensen & Cooper, 2010). Furthermore, an adult child likely wants autonomy in young adulthood, but may expect

her/his parent to become more involved later in life in the role of grandparent (Breheny, Stephens, & Spilsbury, 2013).

Hurme's (1991) second dimension refers to the distinctive *behaviors* or activities in the grandparenthood role. Thiele and Whelan (2008) identify child care as a key instrumental behavior of grandparents. Numbers indicate that 70 to 80% of grandparents report they are either currently or have in the past provided child care for their grandchildren either on a primary basis or a form of back-up when primary care falls through; reasons given for wanting to provide childcare were to help out their adult child and to spend more time with their grandchildren (National Association of Child Care Resource and Referral Agencies [NACCRRA], 2008). Other behaviors include providing financial assistance (e.g., Yorgason, Padilla-Walker, & Jackson, 2011) and mentoring (Uhlenberg & Cheuk, 2010).

The third aspect in Hurme's (1991) model is the *affective experiences* in the grandparent role, typically referred to as satisfaction (e.g., Reitzes & Mutran, 2004). Grandparenthood, largely an unchosen role, has been described as "either a gift or a curse..." (Troll, 1985, p. 135). As a gift, research indicates grandparents who are highly involved with or are in close contact with their grandchildren, but are not solely responsible for parenting, are the most satisfied in the grandparenting role (Bowers & Myers, 1999; Peterson, 1999). Gender and socio-economic status are inconsistent predictors of grandparenthood satisfaction in the existing research (Thiele & Whelan, 2008). In terms of larger family dynamics, Attar-Schwartz, Tan, and Buchanan (2009) found that the middle generation, or adult children, consistently regulate the grandparent-grandchild relationship. Thus, the relationship between the grandparent and her or his

sons or daughters may impact the level of satisfaction one has with the grandparenting role.

Finally, the *symbolic dimension* is the personal meaning attributed to the role by a grandparent (Szinovacz, 1998). For the present study, the concept of symbolic meaning is particularly important. Extant research suggests that both IGA with an adult child and grandchild care may change what grandparenthood means to an individual (e.g., Mueller & Elder, 2003). This aspect of Hurme's model has been difficult to operationalize and Hurme herself was unable to strongly support it through factor analysis in her original exploration despite qualitative support for the dimension (Hurme, 1988). However, recent research with new instruments have been successful at measuring this dimension of grandparenting (see Findler et al., 2013)

Hurme's (1991) model of grandparenthood dimensions may be the most appropriate grandparenting theory for exploring ambivalence because, like the theory of IGA, it does not assume duality. It places significance on the complexity of human experiences by comprehensively exploring multiple aspects of the same construct, in this case IGA. Furthermore, Hurme (1991) does not simplify grandparenting to a set of behaviors or observable phenomenon. This is particularly important for studying IGA since ambivalence concerns norms, attitudes, and emotions, not just behaviors (Lettke & Klein, 2004).

Statement of the Problem

Scholarly work on the grandparent-adult child relationship and its influence on individual roles (e.g., the grandparenting role) is limited in several ways. First, a theoretical lens that is useful for understanding the aging family, IGA, is limited because

there are no established measures to study this construct (Pillemer et al., 2007). Instead, researchers rely on sets of questions to either directly or indirectly assess an individual's perceived level of ambivalence. More recently, Lendon et al. (2014) separately utilized both the direct and indirect approach to compare them and concluded that each measurement type needs to be used in future investigations to holistically understand ambivalence since each method may be capturing different aspects of the construct. At this point, it would be difficult for researchers to follow their recommendation since no single research measure is available to uniformly measure IGA.

A second limitation in the study of IGA is how little we know about the sources of ambivalence or specific contexts related to greater levels of ambivalence. The field has focused primarily on establishing that ambivalence exists, and only recently moved to looking at what individual factors (e.g., gender, age, employment status) may increase IGA. Nonetheless, Lettke and Klein (2004) state that the research on IGA is limited because there are few ways to determine specific relationship dynamics that account for the overall feeling of ambivalence. In other words, researchers understand that IGA is a whole made up of different parts (e.g., more specific dynamics or factors that elicit ambivalence), but they do not fully understand the parts. For example, an older parent may report high levels of ambivalence in the relationship with her or his child, but it is unknown whether that ambivalence is primarily accounted for by the adult child's continued financial dependence on her/his parent or divergent political views, as two examples.

One area that has been mentioned as a possible source of ambivalence, but has not been specifically addressed, is an older parent's ambivalence regarding her/his adult

child's parenting practices. An adult child's parenting practices have several implications for older parents who may: (a) see their child's parenting as a reflection of their own parenting; (b) view their grandchild(ren)'s successes and failures as a reflection on their own level of success as a parent; or (c) feel compelled to care for their grandchildren should they determine that their adult child is incapable of parenting (Fingerman, 1998). A qualitative study completed by Peters, Hooker, and Zvonkovic (2006) was the only published study found that examined IGA and the parent's perceptions of their adult child's parenting practices. Many participants described the differing parenting views and also their unwillingness to communicate this different view to their adult child. Although the findings are very limited, the researchers stated: "We suspect that parenting is an area fraught with ambivalent perceptions for older parents/grandparents who do not co-reside with their grandkids and have only occasional visits" (Peters et al., p. 549). Clearly, this is an area that could greatly increase our understanding of IGA and the specific sources that contribute to ambivalence in the relationship.

Finally, a third problem with the study of IGA is that very few studies consider how IGA between an older parent and her or his adult child impacts either person's experience of other familial roles or relationships in their family. Birditt, Tighe, Fingerman, and Zarit (2012), in one of the only studies to examine this impact, found that a grandparent's reported relationship quality with her/his adult child positively predicts the relationship quality between a grandchild and adult child. Thus, there is some evidence to suggest the quality of a relationship between two generations is likely similar to relationships between other generations within the same family. Moreover, Mueller and Elder (2003) found that "tension" between an older parent and adult child was

associated with different styles of grandparenting, yet relationships with increased tension still were described as “close.” The existence of both negative and positive emotions imply that ambivalence exists *and* that the adult child’s parenting is somehow related to the grandparent’s ambivalent feelings. Therefore, research suggests that IGA between a parent and adult child impacts the grandparenting role, but has yet to be more fully explored

Rationale for the Study

Considering the popularity of using IGA as an empirical lens to study the aging family, it is incredibly problematic that a uniform measure is not available. A single method uniting direct and indirect assessments of ambivalence would contribute to the study of IGA by providing one comprehensive instrument to further theory development and empirical understanding of ambivalence as it relates to families. Furthermore, measures are clearly needed to assess specific sources of and contexts surrounding IGA, such as the grandparent’s perceived ambivalence regarding her/his adult child’s parenting practices (Lettke & Klein, 2004). Providing a novel and parsimonious model for how sources of IGA are measured and studied could greatly contribute to the literature and advance the field into the next generation of research on ambivalence.

While many studies have looked at the level of ambivalence between a parent and adult child (e.g., Neuberger & Haberkern, 2014; Peters et al., 2006) and the relationship of ambivalence with individual characteristics such as physical health and wealth (e.g., Fingerman et al., 2008; Guo, Chi, & Silverstein, 2013; Pillemer & Sutor, 2002), limited studies include relational characteristics in their evaluations of IGA and the impact that it may have on the grandparenting role (Connidis, 2015). Researchers have alluded to

relational characteristics; for example, the physical health of a parent may dictate the caregiving behaviors of adult children and thus influence their level of ambivalence (e.g., Lang, 2004). Conversely, the current study hoped to understand how levels of IGA are related to specific relational and social aspects, parenting practices, and various dimensions of grandparenthood. Connidis and McMullin (2000, as cited in Connidis, 2010) stated: “The study of intergenerational relations must address the tensions and contradictions between social structural forces and individual interests that family members must work out in their encounters with one another” (p. 119). Connidis (2015) continued advocating for this level of study in her recent review on ambivalence in intergenerational relationships. Grandparenthood, a social role across generations, represents the sort of complex interaction of individual and relational aspects missing in the literature on intergenerational ambivalence.

A qualitative study by Peters et al. (2006) provides evidence that ambivalence can exist for an older parent concerning the adult child’s parenting practices. This is an important area to explore considering changing family structures where parenting responsibilities may be allocated differently and the increasing reliance on grandparents for child care (Livingston & Parker, 2010). If ambivalence does exist between a parent and adult child concerning parenting, then grandchildren could receive inconsistent or confusing care. Moreover, ambivalence towards an adult child’s parenting practices may shed light on how ambivalence develops since a grandparent likely would not have mixed feelings about her/his adult child’s parenting if it mimicked her/his own successful parenting practices. This knowledge would be particularly useful when grandparents may

be forced to fluidly shift between the grandparent and parent role, such as in providing permanent care to their grandchildren.

Following their recent illumination of the inconsistent use of theory, Bates and Taylor (2013) provided several guiding questions and suggestions for researchers to be more intentional when developing theoretically-informed research questions regarding grandparenting. One suggestion was to use IGA to study grandparents due to its thorough development in previous scholarly literature. Thus, this study contributed to a more consistent and comprehensible vein of research in grandparenting because of its use of IGA. Furthermore, Hurme's (1991) grandparenting dimensions have informed recent research and received new attention with the development of the Multidimensional Experiences of Grandparenthood inventories (Findler et al., 2013).

Specifically to counseling psychology, the present study informs clinical work with adult families who are trying to negotiate a changing parent-adult child relationship and the development of a three generation relationship structure. These dynamics could be particularly relevant when grandchildren are entering higher education and seek therapeutic services in university counseling centers, a popular setting for counseling psychologists to work. With the increasing acuity of mental health concerns on university campuses, it is important for counseling psychologists to have a broader understanding of parenting and family dynamics for conceptualization and developing effective treatment recommendations. Additionally, counseling psychology is particularly sensitive to social justice issues. Many family structures that experience oppression, like single-parent families and grandparents raising grandchildren, likely experience IGA differently. Since this study used nascent methodology and instrumentation, it informed novel and pertinent

research methodology with these families, thereby increasing psychology's awareness of unique dynamics and ways to empower these systems.

Purpose

The purpose of this study was to bring greater understanding to the parent-adult child relationship using well-established frameworks of IGA and grandparenting dimensions. Moreover, the study hoped to bring new perspectives to the under-documented experience of being a grandparent observing her or his adult child raising their grandchildren. Specifically, there were three goals related to the study. The first goal was to provide a concise measure of IGA that unites the direct and indirect question sets. Frequently, studies employ only one method in measuring ambivalence (e.g., Fingerman, Chen, Hay, Cichy, & Lefkowitz, 2006; Pillemer & Sutor, 2002) despite new research showing that both methods provide related, but different information (see Lendon et al., 2014). Thus, this is one of the only known studies that included both direct and indirect measures of ambivalence. Providing psychometric information on the combined measure for future research is a critical contribution to a growing literature base that currently has no standard quantitative measure.

A second goal was to expand the literature on how IGA develops in the grandparent-adult child relationships by assessing previously researched correlates of IGA for older parents and by specifically examining the grandparent's perceived ambivalence regarding her or his adult child's parenting practices. Ambivalence has been attributed to larger normative differences in the relationship between a grandparent and an adult child; this study observed if an additional type of difference, differences regarding parenting practices, contributes significantly to ambivalence. The final goals of

this study were to provide additional information on the psychometric properties of the Multidimensional Experiences of Grandparenthood inventories and determine how levels of IGA towards an adult child relate to various dimensions of grandparenthood.

Research Questions

Q1 What are the factor structures and psychometric qualities (e.g., adequate internal consistency reliability) of a unitary scale of intergenerational ambivalence as measured by the Intergenerational Ambivalence Scale (IAS), a scale assessing a specific source of ambivalence as measured by the Ambivalence Regarding Parenting Practices Scale (ARPPS), and the Multidimensional Experiences of Grandparenthood inventories (MEG) when the dimensional scores are utilized?

There was no hypothesis as this was an exploratory question since the IAS and ARPPS were recently created and the MEG's dimensional scores have never been calculated or used.

Q2 What parent-adult child characteristics as reported in the demographic questionnaire account for the most variance in overall intergenerational ambivalence perceived by the parent as measured by the Intergenerational Ambivalence Scale (IAS)?

H1 Parents whose adult children have successfully obtained adult status or reached adult developmental milestones will experience lower levels of ambivalence.

H2 Parents who have an adult child with problems perceived as “voluntary” (e.g., drinking or drug problems, problems with the law, and problems with relationships) are expected to report higher levels of ambivalence.

H3 Geographic proximity (how close a parent and adult child live) is expected to be negatively related to IGA while contact frequency (how often the two are in contact) is expected to be positively related to IGA as experienced by the parent.

Q3 How much variance in the total level of intergenerational ambivalence perceived by the grandparent can be attributed to ambivalence regarding the adult child's parenting practices as measured by the Ambivalence Regarding Parenting Practices Scale (ARPPS)?

H1 Ambivalence related to the adult child's parenting practices as measured by the ARPPS will account for a significant portion of variation in the

grandparent's reported level of general intergenerational ambivalence as measured by the IAS.

- Q4 How does the level of IGA and ambivalence regarding parenting practices relate to each grandparenting dimension as measured by the Multidimensional Experiences of Grandparenthood inventories (MEG)?
- H1 Grandparents who experience higher levels of IGA with their adult child will express less investment to the grandparenting role as measured by lower scores on the attitudinal/cognitive, affective, and behavioral scales of the MEG.
- H2 Grandparents who experience higher levels of IGA with their adult child will give lower symbolic meaning to her or his role as a grandparent as measured by lower scores on the symbolic scale of the MEG.

Limitations of the Study

The current study was limited in several ways. Primarily, research on intergenerational relationships is hindered by the field's lack of theoretical and empirical consistency. To solidly ground the study in established theoretical bases, this work used the well-articulated theory of intergenerational ambivalence and Hurme's (1991) grandparenting dimensions. In terms of empirical consistency, the study used the recent recommendation of Lendon et al. (2014) to use both direct and indirect measures as each method seems to extract different and related information. This study employed both measurement types, and was one of the few empirical studies to do so. Yet, due to this limitation and accepted recommendation, the measures used have limited information regarding their psychometric acceptability.

Lettke and Klein (2004) recommended collecting perspectives of more than one individual when assessing intergenerational relationships. Unfortunately, this study only collected the perspectives of the grandparents due to constraints in time and resources. Yet, this study examined multiple novel research questions with intergenerational

ambivalence and grandparenting, and thus informs future research that includes more than one perspective. Fourth, norms and realities of intergenerational relationships are diverse across region, country, culture, age, etc. Thus, generalization of this study's findings to populations with different demographics than the demographics of the study's sample should be done with caution. Finally, all measures utilized in this study required individuals to honestly reflect on and report her or his own experiences. Nonetheless, the study still provides important findings that inform future research and applied work concerning grandparents, their adult children, and their grandchildren.

Definition of Terms

Adult child. Adult child refers to the generation between their own parent and their own child. The adult child is the primary caregiver for their child.

Ambivalence. The "...simultaneous and contradictory attitudes or feelings toward an object, person, or action" (Merriam-Webster, 2014).

Ambivalence Regarding Parenting Practices. Refers to the portion of IGA that is attributed to the grandparent's perceived ambivalence regarding the adult's child parenting practices.

Parent/Grandparent. Refers to an individual whose biological or legally adopted adult child has at least one child. The current study also uses the wording "older parent" to refer to this generation.

Grandparenting dimensions: Based on Hurme's (1991) conceptualization of grandparenthood as a social role, grandparenting is understood through four dimensions.

Attitudinal: This dimension refers to the perceived privileges, rights and obligations of a grandparent. Included in this dimension is an individual's commitment to

the grandparenting role. As measured by the Multidimensional Experiences of Grandparenthood (MEG), this dimension is called *cognitive*.

Behavioral: This dimension refers to the acts and activities of a grandparent with and for their grandchildren and extended family.

Affective: This dimension mainly refers to the expressed satisfaction with the grandparent role, but also incorporates the feelings awakened by grandparenting.

Symbolic Meaning: This dimension refers to the meaning or significance an individual attributes to their role as grandparent. As measured by the MEG, the symbolic dimension is comprised of four factors: meaning, perceived compensation for parenthood, continuity, and burden.

Intergenerational ambivalence. Refers to the simultaneous experience of both positivity and negativity in the parent-adult child relationship at the socio-cultural (i.e. norms, roles) and individual levels (i.e. cognitions, emotions) that cannot be reconciled (Lüscher & Pillemer, 1998).

Intergenerational framework. Refers to a perspective that considers relationships across and involving multiple generations.

Parenting practices. Refers to a parent's expressed behaviors and attitudes when raising a child.

Tinkerbelle Phenomenon. Refers to when a theory or approach assumes a relationship takes on only one distinct characteristic (e.g., "all good") rather than being able to be encompassing of a range of emotions and characteristics (Pillemer & Suito, 2004).

Summary

Through the theoretical framework of IGA and Hurme's dimensions of grandparenting, this study intended to explore the relationship between the reported ambivalence experienced by a parent regarding her or his adult child's parenting practices and how it contributes to the overall level of perceived IGA. In the past two decades, IGA has proven to be a useful framework with which to understand the parent-adult child relationship. However, minimal research addresses the specific sources of ambivalence, especially from the older parent's perspective, and only one study could be found that mentioned an adult child's parenting behaviors as a possible root for ambivalence. Additionally, limited research addresses how the parent-adult child relationship can impact the experience of grandparenting. Thus, this study highlights how the parent-adult relationship impacts the grandparenting experience and gives a more comprehensive picture of intergenerational relationships than is currently available.

CHAPTER II

REVIEW OF THE LITERATURE

In this chapter, a comprehensive overview of the existing literature relevant to the theoretical and empirical bases for this study will be provided. Further, it provides more context for current gaps in and problems associated with existing knowledge and highlights the rationale for these specific research questions. The first purpose is to provide a context for the study by providing a very brief introduction to culturally distinct family structures and views of grandparents. Next, the review will become more specific by discussing some of the theoretical and empirical research on intergenerational and parent-adult child relationships. An introduction to intergenerational relationships is essential for creating a context for understanding intergenerational ambivalence (IGA), its influence on the parent-adult child relationship, and its impact on various grandparenting dimensions.

Finally, the theoretical constructs and accompanying empirical bases for the present study, intergenerational ambivalence and grandparenting dimensions, will be discussed. The history, development, and measurement of intergenerational ambivalence will be detailed. This will include a discussion of relevant empirical research describing the correlates of IGA, with careful attention given to how parenting practices may influence levels of ambivalence in a parent-adult child relationship. Following this discussion, an examination of grandparenting as a unique role is provided, including how

this role develops, the role expectations, and various theories postulating common styles. Specifically, Hurme's theory of grandparenting dimensions and subsequent research will be thoroughly detailed. The chapter will end with a summary of the reviewed literature with emphasis given to the necessary elements for the current study, a discussion of the limitations and implications of the present research, and directions for future consideration. This review attempts to provide a holistic review of the scholarly literature related to IGA and grandparenting dimensions.

Family Structures

Understanding family, and similarities or differences in what family connotes, is the first step in understanding intergenerational relationships, IGA, and grandparenting. While even a brief introduction to this topic is beyond the scope of this chapter, it is important to provide a short discussion on differences in family structure and the role of grandparents cross-culturally. Culture defines individual and group goals, identities, values, behavior norms, gender, and group organizations (Hennon & Wilson, 2008). Thus, families and their relational dynamics or roles are distinct by culture.

Family structures are incredibly diverse. For example, in Sweden, most families are nuclear families, with husband, wife and children living together (Trost, 2008). A grandchild usually grows up knowing all four grandparents, and even great-grandparents, but rarely will extended families ever cohabit (Trost). Also, older parents do not play an instrumental role in their adult child(ren)'s lives. Conversely, Aghajanian (2008) describes Iranian family structure as more collective than what is seen in Sweden. The events of the last 50 years (e.g., modernization, war, and economic development) influenced family structure, but religious tradition still largely dictates family

composition. Although the nuclear family is the most common formation (83% in urban areas), extended families usually live in very close proximity, sometimes even within the same property for shared economic benefit. However, extended families do not usually live under one roof until an older woman becomes a widow, at which point most widows will move in with an adult son and his family. Thus, the grandmother holds a very instrumental role in the family once widowed (Aghajanian, 2008).

A third example from Cuba shows family concept is distinct in that it remains largely unaffected by marriage; genetic similarity ('blood' relatives) determines family composition (Estrada & Danals, 2008). In fact, Cuban individuals will identify their spouse as family less than 25% of the time (Vera, 2004, as cited in Estrada & Danals, 2008). Extended family members remain financially intertwined: nearly \$5 billion is sent annually from Cuban emigrants in the United States to relatives in Cuba who are caring for their children. Often, the relatives are grandparents caring for their grandchildren (Estrada & Danals, 2008). In many traditional Native American societies, all older women regardless of biological relation are considered a "grandmother." This is a sign of respect and of their honorable status in society as a teacher and caregiver (Schweitzer, 1999). Gianturco (2012) documented the role of grandmothers across the globe. Through her work, we see grandmothers raising communities of children orphaned by AIDS (Swaziland), engaging in community advocacy work as "Ragin Grannies" (United States), and even teaching parenting classes in communities often plagued by child physical and sexual abuse (Guatemala). As is common in the grandparenting literature, little information is available on the specific role of grandfathers cross-culturally.

Grandparents serve in various roles cross-culturally, but inarguably are an important part of any community.

In the United States, Murdock (1960) classically described family as "...a social group characterized by common residence, economic cooperation, and reproduction" (as cited in Cheal, 2008, p.1). This definition would fit for the often sought-after nuclear American family, outfitted with a husband, wife, two children, two cars in the driveway and a white picket fence. Yet, Cheal (2008) argues this definition misses what the concept of "family" largely looks like in the United States. Same-sex couples, single-parent households, and grandparents raising grandchildren are still fighting for the legitimacy of their families within the dominant, nuclear family culture (Beauregard, Ozbilgin, & Bell, 2009). Moreover, it discounts the influence of extended family, like grandparents.

Fortunately, Murdock's definition has been updated by many to describe family as bonds between individuals based on mutual love, cooperation, obligation, or need (e.g., Bengtson, 2001; Riley & Riley, 1993; Rothausen, 1999). Regardless of specific composition, family is still the organizing unit of a society (Cheal, 2008). Within these units, norms concerning gender, division of labor, child-rearing, and intergenerational interaction are instructed and reinforced. Yet, these norms may change or need to adapt as we see an increase in non-traditional families, such as single parent, same-sex, multi-generational, or grandparent-headed households (Crawford & Bhattacharya, 2014). In fact, the nuclear family, led by two heterosexual parents, is no longer the most common family structure in industrialized countries (Beauregard et al., 2009). Instead, there is a greater diversity with no clear dominant family structure.

Perhaps what is being seen is the true structure of family in the United States. Hansen's (2005) research with working class, middle class, professional middle class, and upper class illustrates how all segments of society value kinship ties and rely on them for help in childcare, despite the ideological belief in independence. Moreover, she purposely selected only Caucasian families to expose how the "not-so-nuclear" family is not just an ethnic minority phenomenon. Again, this point is particularly relevant for studying intergenerational relationships because norms may endure for a family structure that no longer exists, causing tension in that unit.

Additionally, this shift highlights what sociologists like Fischer (2000, 2001, as cited in Hansen, 2005) argue is the normative acceptance of interdependence between the members of a family unit despite the overtly independent American culture. Yet, this approved interdependence becomes stigmatized once it is displayed outside the family's private sphere. Importantly for the current study, IGA between a parent and adult child may develop when their mutual interdependence (e.g., for financial support, help around the house, childcare) is displayed on a public stage. Also important is the fact that the use of or *dependence on* kinship networks for childcare, of adult children using the help provided by their parents to help raise or care for grandchildren, need not be stigmatized. The fact that grandparents help with childcare is stigmatized and deemed normatively unacceptable means that it likely creates tension between the older parent and adult child, even though families in all segments of society depend on this type of connection (Hansen).

Finally, changing population structures and demographics greatly influence the family. By 2040, the proportion of the population over 65 and over 85 is expected to

increase 160% and 233% (Kinsella & Ha, 2009 as cited in Birditt & Fingerman, 2013).

As more of society can expect to live well into older adulthood with rising life expectancies, there is also a simultaneous decline in fertility rates (Lowenstein & Katz, 2010). Thus, there are more older adults (i.e. grandparents, older parents) and fewer young family members for them to care for and receive care from in older age.

Researchers are unsure how this trend may impact the family long-term on a larger societal level, considering families that once would have cared for an older grandparent are now faced with caring for older parents, grandparents, and even great-grandparents (Lowenstein & Katz). Moreover, families that at one point could have expected to be a three-generation family for a short time may now be a four-generation family for a decade or more. Adults have more time to build, foster, and navigate intergenerational relationships than at any other point in history, and these relationships are becoming increasingly more important to family functioning (Bengtson, 2001). Given the changing family dynamics, it will be important for researchers to understand how families adapt, cope, and interact across generations. One of the most influential of these intergenerational relationships, the parent-adult child relationship, will be thoroughly explored in the next section.

Intergenerational and Parent-Adult Child Relationships

Overall, research on parents and their adult children follow an intergenerational framework, meaning there is an assumption that individuals influence and are influenced by their own generations and the generations around them (Lüscher & Pillemer, 1998). With the population changes mentioned above, a parent and child may now expect to have a relationship for sixty or more years, almost the entirety of each person's lifespan

(Bengtson, 2001). The parent-child relationship in adulthood is likely the longest, and therefore perhaps the most complex, relationship someone will have in their life. In addition to the larger societal changes impacting families, other changes specifically impacting this relationship include the rise in “stepkin”, the individuals that become family due to remarriage and blending families, and increased mobility of adult children (Bengtson, 2001; Wolf & Ballal, 2006). Changing marriage and divorce rates mean parent-adult child relationships will likely develop within stepfamilies, making these relationships even more complex as children have to navigate relationships with more than two parents, and stepparents navigate the complex role of “stepparent.” Mobility impacts the relationship because historically parents and children have lived in relatively close proximity (Uhlenberg & Cheuk, 2010) and thus had opportunities for frequent contact. Now, geographic proximity does not necessarily dictate the level of contact due to technology (Hurme, Westerback, & Quadrello, 2010). Nevertheless, these aspects are sure to change relationship development in upcoming decades.

Although this relationship receives considerably less attention than other family relationships, the available research strongly shows that parents and adult children rely on each other for instrumental (e.g., helping with errands or childcare) and emotional (e.g., expressing love, offering advice) support. Moreover, “...emotional qualities of these relationships also tend to remain intense” despite changing family structure (Birditt & Fingerman, 2013, p. 72). Much of the research on parent-adult child relationships address the emotional quality of the relationship. Solidarity theory, conflict perspectives, and intergenerational ambivalence (IGA) all address the emotional connection between parent and adult child, with considerable research devoted to each framework. Thus,

researchers in the field are curious about how the parent-child relationship develops over time (e.g., Bengtson & Roberts, 1991; Saxbe, Rodriguez, & Margolin, 2013; Fingerman et al., 2008; Lüscher & Pillemer, 1998). Importantly, the emotional connection between parent and adult child has important implications for both members in terms of psychological well-being, physical health, their other intergenerational relationships and overall quality of life (Birditt et al., 2012; Fingerman, et al., 2008; Neuberger & Haberkern, 2014). One of the most well-established frameworks to examine the parent-adult child relationship used in the past 15 years is intergenerational ambivalence (IGA). The next section will go into greater detail on the definition, development, and measurement of IGA, which was described by Bates and Taylor (2013) as "...an understudied...perspective...[that] could yield fruitful future research" (p. 64).

Intergenerational Ambivalence

IGA is defined as the "...contradictions...that cannot be reconciled" in the relationship between an older parent and her or his adult child (Lüscher & Pillemer, 1998, p. 416). It rests on the belief that there are irreconcilable differences between each in terms of both normative social expectations (e.g. social status, relationship expectations, appropriate roles, etc.) and subjective individual differences (e.g. motivation for behavior, emotions, etc.). Simply stated, their guiding principle is that "...intergenerational relations generate ambivalences" (Lüscher & Pillemer, p. 414). Ambivalences can exist on multiple levels. First, ambivalence can be attributed to the overall relationship to explain how it is structured and functions. On the other hand, only specific aspects or interactions in the relationship could be considered ambivalent.

Before further exploring IGA or outlining the history, development, and measurement of IGA, a case study may help illustrate the concept: Herb (74) and Maria (73) have been married for nearly 50 years and have two adult children, Danielle (48) and Jeffrey (41). They live in a tight knit, Italian-American community where multiple generations often live close together or in the same home, and intergenerational help for childcare is a norm. Herb and Maria have little contact with Danielle because she has lived overseas for the past ten years due to her job. Danielle has never been married, much to her parent's disappointment, but they are still quite proud of her career accomplishments. Danielle usually visits her parents only during the holidays, but will call a few times a month and often sends them lavish gifts from around the world.

Conversely, Jeffrey and his wife Michelle live only three city blocks from Herb and Maria with their three children, Gabrielle (18), Joe (15) and Nick (13). Jeffrey and Michelle come from the same community and, after Danielle's decision to focus on her career, Herb and Maria were quite pleased when Jeffrey told them of his intention to be engaged to Michelle. However, from this point the relationship between generations has been characterized by ambivalence. Jeffrey and Michelle have had difficulty maintaining jobs that provide the financial resources to support their family, so they have often depended on Herb and Maria for financial help with mortgage payments, car loans, and even food. Herb and Maria love their son and feel it is their obligation to help him, but have often questioned his choices since he has been unable to support his family as they believe he should. Moreover, Herb and Maria have often felt torn about Jeffrey and Michelle's parenting of the three grandchildren, but have felt reluctant to express this opinion as they do not want to come off as overly critical or pestering.

The story of Herb, Maria, Danielle, Jeffrey, Michelle and the three grandchildren illustrates the common themes that emerge from the research on intergenerational ambivalence. The relationship between parent and adult child is marked by ambivalence as perceived by the parent when the adult children are unable to achieve and maintain adult statuses and independence (Birditt et al., 2010; Guo et al., 2013). Danielle has achieved financial stability and perhaps increased social status due to her career, yet does not meet her parents' normative expectations of getting married and raising a family. In this way, Herb and Maria feel ambivalence in their relationship towards Danielle: they feel positively towards her for securing a comfortable life for herself, yet also feel disappointment that she has not married or stayed within their community.

A similarly ambivalent dynamic likely develops between the parents and Jeffrey, yet for opposite reasons: he fulfills the norms by marrying someone in his community, Michelle, and raising a family, but the reliance on Herb and Maria for childcare and finances simultaneously creates tension. Regardless of the source, ambivalence towards both children is marked by mixed or conflicted feelings for Herb and Maria. The piece that cannot yet be explained through this framework is Herb and Marias' role as a grandparent and their discrepant views over the raising of their grandchildren. Little to no research is available to understand how the ambivalent dynamic between parent and adult child impacts the older parent's experience of other intergenerational roles, such as being a grandparent. With changing family structures, this intergenerational dynamic is crucial to research as grandparents continue to be a key source of parenting to grandchildren, and also a more formal source of support in other ways (e.g., paying mortgage payments), in addition to their role as grandparent. Moreover, social norms for appropriate careers and

life choices are changing for men and women, which could be a key source of ambivalence between generations, as evidenced by Danielle being unmarried and devoted to her career. Finally, multiple generations spend more of their lives negotiating these relationships, thus making these relationships more intricate.

An Illustration of Ambivalence

The above case study illustrates the contradictory and at times irreconcilable nature of ambivalence. It also demonstrates how ambivalence can define a whole relationship (i.e., the overall relationship between Herb and Maria with both children) and just specific aspects of a relationship (i.e., Herb and Maria's ambivalence towards the raising of their grandchildren). Finally, it illustrates how IGA is not evident primarily through behavior. Behavioral differences in families are to be expected, especially across different generations. For example, a mother may talk to her daughter away at college more than her son, but this does not necessarily mean she feels more ambivalence in the relationship with her son. Thus, IGA cannot be reduced to behavior, but instead can be understood on the intergenerational dimensions of "emotionality, agreement, and social norms" (Lettke & Klein, 2004, p. 87). A classic example of IGA on the emotional dimension is when a person says she or he has a "love-hate" relationship. IGA is said to be present when, like in this case, emotions on either side of the continuum (e.g., love-hate, acceptance-disgust) are experienced in equal amounts at the same time. Secondly, IGA can be understood in terms of the level of agreement. Inherent in its definition, IGA is characterized by irreconcilability. When a parent and adult child do not agree, they may experience IGA because they are unsure of a solution; they are unsure if there can be a solution. This may arise when deciding which extended family to spend holidays with,

a career path for the adult child, or on parenting of grandchild. Finally, the dimension of social norms taps into the more cultural, structural part of IGA that includes roles and relationship expectations. IGA is evident through this dimension when, for example, an adult child's peer group and parents hold divergent normative expectations, making it impossible to fulfill all expectations in those relationships.

Figure 1 introduced in Chapter I provides a representation of how ambivalence is expressed on a continuum of these three dimensions, using the continuum of emotionality as an example. IGA develops when both positive and negative emotions are moderately to strongly experienced. Low ambivalence is experienced when both emotions are weakly felt, or when one emotion is more strongly felt than the other. Importantly, IGA is understood along continuums of emotionality, agreement, and social norms (Lettke & Klein, 2004).

Beginnings of Ambivalence in Family Relationships

The first use of the word 'ambivalence' is often credited to Eugen Bleuler, an early 20th century Swiss psychiatrist. He further articulated the concept when he characterized it as one of the core components of schizophrenia, but went on to describe it as something experienced in everyday life and intergenerational relationships (Lüscher, 2002). Ambivalence continued to be a core concept in some of the early psychological writing in the context of intergenerational relationships. For instance, Freud's theory of psychosexual development rests largely on the assumption that there is a strong love and equally strong hate relationship with the parental figure (Freud, 1953). Parker (1995, 1997) provides a review of ambivalence in psychoanalytic thought. Ambivalence from child to parent (usually the mother) is considered a normal stage in development, and

often indicates psychological growth. Yet, it is not a lasting stage, with the “hate” or negative emotions often being repressed. However, it is less normative and even a “...source of shame or object of disbelief...” for a parent to experience ambivalence toward a child (Parker, 1997 p. 17).

Yet, until the 1990s, ambivalence was more of a sociological concept. In fact, before 1997 there were no published articles looking at parent-adult child relationships and ambivalence in psychology (Pillemer & Lüscher, 2004; Pillemer & Sutor, 2004). Instead, sociologists such as Coser (1964) and Merton (1976) developed ambivalence as a social construct. This is precisely where the difficulty in defining ambivalence lies because scholarly literature utilizes a psychological *and* a sociological definition of ambivalence. Sociologically, Connidis and McMullin (2002) explain ambivalence as the paradoxical demands of the larger society on the resources of a family unit, such as financial strain requiring a husband and wife to both work while also encouraging a woman to stay home to care for her children. For the current study, this sociological definition is difficult to apply to smaller intrafamily relationships. Lüscher and Pillemer (1998) cite multiple sociological definitions from Merton (1976)) and Coser (1964) that describe ambivalence as the paradoxical demands on norms, status, and behaviors created by a larger system and experienced within specific roles. For example, Coser describes the “schizophrenogenic” mother not as a collection of psychological traits, but rather a result of the “...role structure of the modern American middle-class family” (p. 371). Merton describes ambivalence as “...built into the structure of social statuses and roles” (p. 5). Although Coser and Merton may have different ideas on how ambivalence develops, both illustrate how sociologically IGA is not an individual experience, but a

relational and societal phenomenon based on the expectations and structures of social roles.

Traditional Perspectives on Intergenerational Relationships

The construct of IGA as we know it today was originally introduced by Lüscher and Pillemer (1998) as a response to the long tradition in the psychological and family theories of framing intergenerational relationships in one of two disparate ways: solidarity and positive emotions, or conflict and negative aspects. The former is most often captured using Bengtson's (2001; Bengtson & Roberts, 1991) intergenerational solidarity theory, and somewhat less so using the intergenerational stake hypothesis (Bengtson & Kuypers, 1971). Solidarity between older parents and adult children is defined as, "...intergenerational cohesion after children reach adulthood and establish careers and families of their own" (Bengtson & Roberts, p. 856) and represented through six aspects as shown in Table 1. From this theoretical lens, the parent-adult child relationship quality changes in the level of positive emotions; there is no mention of or direct consideration given to negative emotional dynamics.

Table 1

Six Aspects of Parent-Child Relationships in Solidarity Theory

Aspect	Definition	Example
Affectual	Type and degree of loving, positive emotional bonds	A mutual sense of understanding and care between parent and child
Associational	Type and frequency of contact; level of interaction	How many times per month parent and child interact face-to-face vs. via phone
Consensual	Level of agreement on values and family beliefs	Shared religious beliefs that inform family values
Functional	Level of reciprocal support	Helping with child care
Normative	Familial norms, roles, and obligations	Similar pattern of gender norms in relationships across generations
Structural	How the system is structured, including geographic proximity and number of members	Parents live within 10 miles of both adult children, who each have 2 children.

Sources. Adapted from Bengtson & Roberts, 1991; Birditt & Fingerman, 2013.

The other commonly used theory positively framing family interactions, the generational stake hypothesis, is an extension of the solidarity framework that postulates parents and adult children may be different in the affective dimension because parents are more invested than adult children in the parent-child relationship (Birditt & Fingerman, 2013). Because of being more invested, parents may report a more positive relationship with their adult children than vice-versa, and also experience increased wellbeing at the success of their children since adult children are reflections of their parents. Solidarity theory, and to some extent the generational stake hypothesis, has been incredibly successful at stimulating empirical investigations. In the recent decade, studies have shown that increased parent-adult child solidarity increases parent quality of life (Lowenstein, 2007) and that parental well-being was positively related to adult child's level of support and affection (Ryan & Willits, 2007).

The other side of the continuum, parent-adult child relationships explained in terms of conflict and negative emotions, has few theoretical explanations. The developmental schism hypothesis (Fingerman, 1996) is one of the few articulated theories on family conflict as related to the parent-adult child dyad. It posits that conflict arises when older parents and adult children have different developmental needs, but usually focuses primarily on the pressure experienced by adult children around caregiving for aging parents (Connidis & McMullin, 2002). Older parents transitioning into retirement and grandparenthood may desire to spend meaningful time with their offspring, while simultaneously adult children work to juggle raising children, maintaining a household, and perhaps being successful in a career. Their relational needs from the parent-adult child relationship are very different and may lead to tension around time spent together, type of contact, frequency of contact, etc.

Despite the lack of theoretical explanations, the conflictual view of aging families is illustrated through increasing research on topics like caregiver stress or isolation in older adulthood (Lüscher & Pillemer, 1998). Interestingly, parents tend to report less conflict than their adult children (Fingerman, 1996), and both sides report conflict over different topics. Birditt, Miller, Fingerman, and Lefkowitz (2009) found that adult children are more likely to report tension about the relationship dynamics with their parent, and specifically around the parent providing unwanted advice to the adult child. This finding is particularly relevant to the current study when unwanted advice around parenting is perceived from the adult child, and thus the adult child feels negatively towards her or his parent. In this situation, the older parent perhaps feels ambivalent

towards her or his child, wanting to nurture and mentor the adult child and also perceiving the negativity coming from the adult child.

In their original article positing IGA, Lüscher and Pillemer (1998) were respectfully critical of both views on intergenerational relationships. They argued that if research was isolated to these two perspectives, the overly positive view or overly negative view, then findings would miss the true nature of families which include both supportive and conflictual characteristics. For either of these approaches, identifying positive or negative aspects does not provide a foundation for researchers to "...build on...for furthering our understanding of the family process" (Connidis & McMullin, 2002, p. 560). Assuming family relationships are ambivalent allows the "...study of parent-child relations in later life...to move beyond this 'love-hate relationship' (Lüscher & Pillemer, p. 414) and instead embrace the complexity of intergenerational relationships. Ambivalence as a theoretical foundation provides a richer and perhaps more accurate view of family relationships, and thus a more appropriate foundation for research intended to guide clinical intervention and practical implementation.

Development of Intergenerational Ambivalence

Since Lüscher and Pillemer's (1998) introduction of the intergenerational ambivalence, research using and developing the concept has increased exponentially. This definition synthesizes the sociological and psychological definitions of ambivalence, and operationalizes IGA for research purposes. IGA has become one of the leading theoretical frameworks with which to study the aging family so much so that researchers focused on other related relational dynamics and roles have called for its use in expanding their own field (Bates & Taylor, 2013; Fingerman et al, 2013). Over the past

fifteen years, researchers have further specified what IGA is, what it is not, and how to study it. Following Lüscher and Pillemer's (1998) article, the *Journal of Marriage and Family* hosted a Special Collection in August 2002 on IGA with some of the most influential family relations and IGA theorists providing comment: Ingrid Connidis, Julie McMullin, Lars Bengtson, Kurt Lüscher, Karl Pillemer, and Jill Suitor. This was a major contribution to the field of IGA and set the stage for one of the only books devoted solely to the study of IGA.

First, Connidis and McMullin (2002) furthered the concept of ambivalence as a way to characterize relationships and also provided some critical questions for Lüscher and Pillemer (1998). Calling their conceptualization 'sociological ambivalence' and casting it as a different concept than IGA, one of their primary contributions in understanding ambivalence was the description of how competing social norms restrict or dictate individual behavior in social interactions. Previous explorations of sociological ambivalence does not inform our understanding of *behavior* or *action* resulting from the ambivalence, a critical component for researching the family *relationships*. Although little else from their argument made its way into the research on IGA, this contribution is critical for understanding the function of IGA in relationships, to understand how parents navigate the IGA experienced towards their adult children in their role as grandparents.

Another response to Lüscher and Pillemer (1998) came from Bengtson, Giarrusso, Mabry, and Silverstein (2002), the researchers promoting solidarity theory. Responding to the call for multidimensional theories to explain the family, they attempt to cast the solidarity model in this light by explaining the dimensions as dialectical, a distinction never previously made. For example, the *affectual* domain became a domain

characterized by an intimacy-distance continuum. Instead of strengthening the solidarity model, it seemed they were superficially reacting to a new wave of researchers who desired a more holistic theoretical approach. Moreover, Bengtson et al. challenged IGA's neutrality, stating it is really a problem-focused approach because ambivalence "...requires negotiation and resolution, creates discomfort and stems from conflicting...needs and demands". This criticism was largely stifled by Lüscher (2002).

Lüscher (2002) responded to Connidis and McMullin (2002) and Bengtson et al. (2002) with a more specific explanation on ambivalence, including more on its historical contexts. Lüscher stressed the differences between ambivalence and conflict, a distinction often misinterpreted even in more recent literature (e.g., Cooney & Dykstra, 2013; Lettke & Klein, 2004). A main difference is that ambivalence often evokes a feeling of irreconcilability or belief that no solutions exist, whereas conflicts often appear to have clear solutions. Furthermore, whereas the word 'conflict' elicits a negative image or description, ambivalence is more a comment on how a relationship is structured and functions. Thus, from this discussion, IGA developed in three ways: (1) IGA influences and directs social behavior; (2) IGA is distinct from conflict and solidarity; and (3) IGA can be conceptualized as a comment on relationship structure or functionality, rather than a positive or negative description.

The next major step in developing IGA was Pillemer and Lüscher's (2004) edited volume, *Intergenerational ambivalences: New perspectives on parent-child relations in later life*. This publication not only presented the history and definitions of IGA, but developed two primary veins of research: (1) how to measure IGA; and (2) the correlates of IGA developed for parents and adult children. First, Lüscher and Lettke (2004) and

Pillemer (2004), both conducted shortly after the seminal 1998 article, proposed measurement strategies incorporating direct and indirect ways to assess IGA. In addition, Lettke and Klein (2004) provided challenges and opportunities in the future of IGA measurement. Second, the beginning research on the correlates of IGA was presented, with articles focusing on caregiving, well-being, and other family characteristics. Ultimately, the latter vein of research has spurred more exploration, although a recent interest in measurement seems to have emerged recently. The next few sections will provide a summary of both discussions and present the most recent findings available for IGA.

Measurement of Intergenerational Ambivalence

Since its creation, there has been a consistent discussion of how to measure IGA in the scholarly literature (see Fingerman et al., 2013; Lendon et al., 2014; Pillemer & Suito, 2004). Quantitatively, ambivalence has been measured one of two ways through self-report question sets: by directly inquiring about the level of mixed feelings toward and object or person; or by indirectly assessing ambivalence by separately asking about positive and negative experiences toward an object/person and then mathematically combining the scores into one ambivalence score (Birditt et al., 2010; Lettke & Klein, 2004).

Direct measurement. Pillemer and Suito (2002) were two of the first researchers to develop a direct way to measure intergenerational ambivalence. After completing interviews and focus groups with older parents, they developed a set of items to pilot test with a group of older adults. From this exploration, five questions directly assessing ambivalence were created. Questions ask participants to rate on a four-point Likert-type

scale how strongly they experience feelings of ambivalence. Direct assessment of ambivalence use questions such as: “To what degree do you have very mixed feeling toward your parent/the child?” (e.g., Pillemer et al., 2007). However, their exploration provided no psychometric data on the questions, and in analyses, each question was individually analyzed against a number of predictors.

Indirect measurement. Ambivalence has historically been measured using indirect methods with the belief that indirect questions may capture more ambivalence because it does not require the participant to have awareness of her or his ambivalence (See Pillemer, 2004 for a brief review). Moreover, it corresponded well with the solidarity model of intergenerational relationships by contrasting relationships on a positive-negative continuum (Lendon, et al., 2014). By asking a participant about her or his positive and negative relationship experiences, ambivalence can be inferred through combining the two evaluations. For example, a participant may be asked questions like: “How much does [child] make you feel loved and cared for?” and “How much does [child] criticize you?” (e.g., Fingerman et al, 2006). Answering on a four- or five-point Likert-type scale, the positive and negative questions are added to obtain a positive and negative score. Then, using a formula like the Griffin’s Similarity and Intensity of Components (the most commonly used in the IGA literature), an ambivalence index is obtained (Thompson, Zanna, & Griffin, 1995). The formula is:

$$\frac{(Positive+Negative)}{2} - |Positive - Negative| + 1.5 = \text{Ambivalence}$$

A thorough explanation of how this formula works will be provided in Chapter III.

Early measurement methods. In 2004, a number of new methods for directly and indirectly measuring ambivalence were presented. First, Pillemer (2004) presented

his methodology for the Ithaca study which combined both methods. Using the direct items from Pillemer and Suito (2002), he also assessed ambivalence with older mothers (N=189) using two additional indirect questions, for a total of seven questions regarding IGA. Internal consistency for the five direct questions ranged $\alpha = .68-.79$ (he assessed IGA between three children), but he provided no reliability information for all seven questions. However, correlation between the direct and indirect ambivalence scores were moderate (.337-.528), suggesting that these methods are related, but likely "...tap different dimensions of the phenomenon" (Pillemer, 2004, p. 120). Only 10% of mothers reported that they never felt ambivalence towards any of their children, whereas 70.8% reported ambivalence "now and then" or "very often".

Additionally, Lüscher and Lettke (2004) presented results from their exploratory Konstanz study that also utilized direct and indirect assessments of IGA. Through a structured interview, they assessed IGA between parent-adult children dyads (n = 52 adult children, 72 parents) using a parent- or child-specific protocol that followed the same order. Only 20% of the dyads reported never experiencing ambivalence, and 31% of daughters reported feeling ambivalence very often, compared with 12 to 13% of fathers, mothers, and sons. Although this interview method provided interesting results, no study could be found that has subsequently used this approach, perhaps because of the time needed to administer it and its considerable length. Nonetheless, both of these studies are critical to the study of IGA because they highlight the importance of utilizing both direct and indirect measures of ambivalence.

Popular measurement methods. In the subsequent decade, most studies have either used just a direct or just an indirect measure of IGA. While combinations of

Pillemer and Suito's (2002) five questions measuring direct ambivalence have been used very consistently to measure direct ambivalence (e.g., Pillemer et al., 2007; Suito et al., 2011), the questions used to measure indirect ambivalence have varied. Often, researchers combined two positive and two negative questions using the Griffin's formula (e.g., Birditt, et al. 2010; Fingerman et al., 2006; Fingerman et al., 2008), although some newer research used three direct and three indirect questions (e.g., Suito et al., 2011). Usually, the type of measurement was chosen due to research questions or the particular strengths of method. The strengths and limitations of each method are summarized in Table 2.

Table 2

Strengths and Limitations of Direct and Indirect IGA Measurement

Type	Strengths	Limitations
Direct	<ul style="list-style-type: none"> ▪ Easy to develop and interpret ▪ Useful for understanding IGA frequency ▪ May provide more accurate measure of IGA for adult sons ▪ May more reliably predict IGA across gender and generations ▪ Demonstrated high reliability when IGA was directed towards a specific person. 	<ul style="list-style-type: none"> ▪ Requires a clear definition of IGA, which is difficult to translate into everyday language ▪ Requires participants to have awareness of their ambivalence
Indirect	<ul style="list-style-type: none"> ▪ Useful for assessing IGA that a participant is not fully aware of; i.e. for inferring IGA in a relationship ▪ More variance explained for indirect than direct IGA for children and parents 	<ul style="list-style-type: none"> ▪ Difficult to ensure both paradoxical aspects are equally represented ▪ Debate over the appropriate mathematical method to find an ambivalence index score ▪ Requires reporting of intense emotional experience to capture IGA ▪ Less sensitive to IGA for parents

Sources. Lendon, et al., 2014; Lettke & Klein, 2004; Pillemer, 2004; Suito, et al., 2011.

The call to use both measurement methods. Despite the popularity of only using one approach, many researchers recommend including both methods to measure IGA. Pillemer (2004) and Lüscher and Lettke (2004) conducted some of the first studies to use both methods, and found that both methods uncovered related but distinct aspects of IGA. Since then, only two studies could be found that utilized both methods. Sutor et al. (2011) compared direct and indirect questions to assess IGA in mother-adult son dyads. Direct and indirect methods were strongly related ($r = .61$) for mothers, but less so for sons ($r = .26$). They concluded direct and indirect methods were not interchangeable, but were still assessing the same construct for mothers. Moreover, Lendon et al. (2014) utilized both methods to provide new information for this discussion and concluded that studying ambivalence using both direct and indirect methods provided distinct yet related information on parent-adult child relationship ambivalence. Thus, they concluded both methods should be used to determine ambivalence. In a recent review, Connidis (2015) outlines the differences of each measurement type, and argues that indirect measures have been more useful in furthering the study of IGA by, “capturing coexisting contradictory emotions, attitudes, and behaviors” (p. 91).

Evidence of psychometric acceptability is limited in all studies, largely because so few items are used to measure IGA in each study. Table 3 provides a summary of the internal consistency reliability estimates (Cronbach’s alpha coefficients) reported in the studies on IGA.

Table 3

Range of Cronbach's Alpha Coefficients for Various Question Combinations

Direct Questions	α	Indirect Questions	α
1. How often do you feel torn in two directions/conflicted about the child?	.59- .76	1. How much does he/she make you feel loved and cared for? ¹	1: .40 to .79
2. How often do you have very mixed feelings about the child?		2. How much does he/she understand you? ¹	
		3. How much does he/she criticize? ²	2: .37
		4. How much does he/she make demands on you? ²	to .74
1. How often do feel torn in two directions/conflicted about your study child at this point in your life?	.58- .72	1. How close do you feel toward this child? ¹	1: .95
2. I have mixed feelings about this daughter or son.		2. How much do you feel that this child would be willing to listen when you need to talk about your worries and problems? ¹	2: .67
3. My study child and I often get on each other's nerves, but nevertheless feel close.		3. Overall, how well do you and this child get along together? ¹	
		4. How often do you have tense and strained feelings with this child? ²	
		5. How often do you think this child makes too many demands on your for help and support? ²	
		6. How often do you feel that this child is critical of you or what you do? ²	
1. How often do you feel torn in two directions/conflicted about the child?	.68- .79	1. How close do you feel is the relationship between you and your child? ¹	1: .85
2. How often do you have very mixed feelings about the child?		2. How good is communication between you and your child? ¹	2: .65
3. We often get on each other's nerves, but nevertheless feel very close.		3. How well do you get along with your child? ¹	
4. My relationship to [child] is very intimate, but that also makes it restrictive.		4. How much conflict do you feel there is between you and your child? ²	
5. Although I love [child] very much, I am sometimes indifferent toward him/her.		5. How much does your child argue with you? ²	
		6. How much do you feel your child is critical of you or what you do? ²	
		1. What number would you use to describe the relationship between you and your child nowadays? ¹	1: .67 to .76
		2. How often does your child make you feel loved or cared for? ¹	2: .61 to .67
		3. Being with your child makes you feel happy. ¹	
		4. What number would you use to describe how tense and strained the relationship between you and your child is nowadays?	
		5. How often would you say the two of you typically have disagreements or conflict?	
		6. Does your child make too many demands on you very often?	

Sources. Birditt et al., 2012; Fingerman et al., 2008; Guo et al., 2013; Lendon et al., 2014; Pillemer, 2004; Pillemer et al., 2012; Suitor et al., 2011; Willson, Shuey, Elder, & Wickrama, 2006

As evidenced in Table 3, reliability is relatively consistent, although internal consistency is higher for indirect methods that include more questions. In addition, Pillemer (2004) noted: “Established measures of ambivalence in intergenerational relations do not exist” (p. 117). Over ten years later, this is still true as evidenced by the variety of methods and different question combinations. While it is clear accepted methods (i.e. direct and indirect) have been adopted to assess IGA, clearly no uniform measure exists for future research to use both methods simultaneously. As the popularity of IGA increases, researchers need one measure to assess it in a holistic way in order to follow suggestions from Lendon et al. (2014) and others.

Theoretical Correlates of Intergenerational Ambivalence

The second vein of research has been on the correlates of IGA. Prior to any empirical investigations Lüscher and Pillemer (1998) offered three theoretical possibilities for which IGA would present: (1) dependence vs. autonomy; (2) conflicting norms regarding relationships; and (3) solidarity. *Dependence vs. autonomy* refers to the exchange of support between generations. For older parents, IGA may develop when their adult children continue to rely on them for financial support well into adulthood; from an adult child’s perspective, they may feel ambivalent towards an older parent who they depend on for general parenting advice, but do not want her or his parent to intrude on her or his parenting practices. *Conflicting norms* can occur at any point in the parent-adult child relationship, but one particularly poignant transition may be when a parent becomes chronically ill. At this point, the adult child may feel ambivalent about caring for her/his parent, their own caregiver, and a parent may feel ambivalent about receiving

that care. Additionally, it is quite easy to see this situation in terms of dependence vs. autonomy as these aspects overlap and intertwine.

Third, *solidarity* here refers to how close the family is, either through living together, or in terms of contact frequency (Lüscher & Pillemer, 1998). This possibility is less clear than the other two, but when thinking of IGA's definition (contradictory, yet equally strong feelings), then increased solidarity or closeness may also indicate equally strong negative feelings. Perhaps this is best illustrated with an example outside of the parent-adult child relationship: the college roommate. At times, a new college student will love her or his roommate and spend much time with them; and, there will be things about the roommate (e.g., getting up too early, leaving dishes in the sink) that make them feel annoyed even though many of her or his friends are the same way. The amount of time spent together and in close proximity, the solidarity, makes the relationship ambivalent (Willson et al., 2006). Although these three possibilities were theoretical in 1998, subsequent empirical investigations provide strong support for each of them.

Empirical Correlates of Intergenerational Ambivalence

Before this discussion, it is important to acknowledge how difficult, maybe nearly impossible, it is for a parent to fully admit that they may have strong ambivalent feelings towards a child (Parker, 1997). Describing ambivalence felt by a mother, yet equally as applicable to fathers, Parker (1997) states:

Only in the context of humor can [ambivalence] be safely acknowledged. In novels, women's magazines, and national newspapers, column after column is devoted to comic accounts of maternal ambivalence. Safely cloaking their 'confessions' in laughter, mothers admit to being forever enraged, entranced, embattled, wounded and delighted by their children (p. 17).

In everyday life, this relational experience is seen in popular comics like *Zits* and *Baby Blues*; comedies like *Failure to Launch*; and popular TV shows like *Modern Family*. It seems society is still reluctant to acknowledge the common experience of IGA. These experiences seem less stigmatizing for adult children, unless they are caring for a chronically ill older parent (Lorenz-Meyer, 2004; Rappoport & Lowenstein, 2007). Perhaps, children are expected to feel ambivalent towards their parents, especially as they develop a sense of independence and individuality, whereas parents are not expected to feel ambivalence towards children.

The literature on correlates of IGA is becoming extensive; thus, Table 4 provides a summary of this research, separated into correlates of increased parent and adult child ambivalence.

Table 4

Correlates and Contexts Related to Higher Levels of IGA

Increased Parent IGA	Increased Child IGA
<ul style="list-style-type: none"> ▪ Being a father ▪ Poorer psychological/physical well-being ▪ Poorer physical health of child (for fathers; not for mothers) ▪ Child being unmarried/unsuccessful in relationships (more for fathers²) ▪ Child having less education (more for fathers) ▪ Less perceived value similarity with child (more for mothers) ▪ Child same gender as parent^{1, 2} ▪ Child being a son¹ ▪ Child Lower SES ▪ Closer geographic proximity/contact frequency with child² ▪ Child's reliance for financial support ▪ Disagreement over grandchild care 	<ul style="list-style-type: none"> ▪ Poorer psychological/physical well-being ▪ Poorer physical health of mother ▪ Low self-esteem ▪ More frequent contact with parents ▪ Less perceived value similarity with parent ▪ Providing instrumental support to parent ▪ Financial difficulty ▪ Being an adult child: adult children experience more IGA than parents ▪ Being a daughter ▪ Parent is same gender as child

Sources. Birditt, et al., 2010; Fingerman, et al., 2008; Guo, et al., 2013; Lendon, et al., 2014; Lüscher & Lettke, 2004; Mueller & Elder, 2003; Peters et al., 2006; Pillemer, et al., 2012; Willson, et al., 2006.

¹There is some evidence that gender differences in ambivalence may be related to cultural variables. ²Findings are inconsistent across two or more studies

As illustrated in Table 4, research abounds on the correlates of IGA for parents and children. Typically, the level of IGA changes with different gender interactions, changes in physical or mental health status, or differences in values. Pillemer (2004) suggested researching IGA in specific instances since both parties may not consider their overall relationship as ambivalent, but experience IGA within specific contexts. Yet, there is little research addressing how specific transitions are likely to increase IGA. One of these times for an older parent that has been vaguely implicated, yet has up to this point been very minimally addressed, regards her or his adult child's parenting.

Ambivalence Regarding Parenting Practices

The adult child's parenting practices have several implications for increasing ambivalence for older parents who may: (1) see their child's parenting as a reflection of their own parenting (Holden & Buck, 2002); (2) view their grandchild(ren)'s successes and failures as a reflection on their own level of success as a parent; or (3) feel compelled to care for their grandchildren should they determine their adult child are incapable of parenting (Fingerman, 1998). Moreover, older parents whose children are in adulthood likely feel some efficacy in their parent role. The grandparenthood role is unique in that "...a grandparent has already been a parent, and can fulfill that role" (Kornhaber, 1985, p. 164). Thus, seeing their adult children as new parents trying to figure out what it means to parent children could evoke a range of emotions and responses, including IGA. In addition, caring for children is a normative expectation in many cultures for grandparents. For example, in some Native American cultures, *grandmother* is a person who "...raise[s] children; they tell stories in the winter and teach children the skills they need for survival" (Schweitzer, 1999, p. 1). If an older parent expects to be an integral person in parenting her or his grandchildren, and then are excluded or limited by her/his adult children, there will likely be IGA in the parent-adult child relationship because the parenting norms of each party strongly contradict.

A qualitative study completed by Peters et al. (2006) was the only published study found that examined IGA and the parent's perceptions of her/his adult child's parenting practices. Many participants described the differing parenting views and also an unwillingness to communicate this different view to their adult child. Although the findings are very limited, the researchers concluded: "We suspect that parenting is an

area fraught with ambivalent perceptions for older parents/grandparents who do not co-reside with their grandkids and have only occasional visits” (Peters et al., p. 549).

Clearly, this is an area that could greatly increase our understanding of IGA and the specific sources that contribute to ambivalence in the parent-adult child relationship.

Grandparenthood

As previously outlined, grandparenthood is a family role found in every society, but differs considerably based on culture, personal expectations of the role, and family expectations. Perhaps more so than other family roles, the grandparent role, its meaning and significance is “socially constructed” and is evolving as society changes (Uhlenberg & Cheuk, 2010). Despite its ubiquity, the formal history of grandparenting in the Western world is quite limited: rising life expectancies allow grandparents to play a more meaningful role in the life of their grandchildren than ever before (Stelle, Fruhauf, Orel, & Landry-Meyer, 2010). Additionally, this also means that our understanding of grandparenthood is rapidly developing.

Who are grandparents?

Typically the image of ‘grandparent’ is someone with graying and/or thinning hair, wearing traditional or old-fashioned clothing, with some indication of illness (Crawford & Bhattacharya, 2014). In other words, the image of a grandparent is someone who is “old”. However, more than half of those aged 54-64 and nearly 80% of those over 65 are grandparents (Pew Research Center, 2009). In fact, grandparenthood is not a role tied to age, so adults ranging in age from late 30’s through late life could be defined as a grandparent. Although seen as an ‘older person’s role’, the grandparent role is salient for many who are in middle adulthood. Grandparents also represent a growing segment of

the population. In 2010, there were 65 million grandparents in the United States, a number expected to grow to 80 million by 2020 (Francese, 2011). If this expectation is met, grandparents will represent a third of all adults in 2020. Moreover, one must not generalize too extensively when discussing grandparenthood: grandparents are perhaps the most heterogeneous segment of the population as they span various generations (Stelle et al., 2010). In 2010, 20% of grandparents in the United States were from non-European backgrounds, a percentage expected to increase in the future (Francese).

The Unique Nature of the Grandparenting Role

Grandparenthood is unique in that it is a role not chosen. As Troll (1985) put it, “grandparenthood can be either a gift or a curse...” (p. 135). Moreover, it is often considered a nebulous role, with some even calling it the “roleless role” (Clavan, 1978, p. 351). There are limited prescribed behaviors or norms, and no sanctioned rights. Stelle et al. (2010) provide a list of terms used to describe the grandparent role synthesized over 30 years in the scholarly literature, illustrating roles as divergent as protector to caregiver to advice-giver. Nevertheless, research consistently indicates that grandparents, the adult children in the middle generation, and grandchildren all hold expectations for how a grandparents ‘should be’, evidencing that grandparenthood is not ‘roleless’, but perhaps flexible, multifaceted and at times convoluted. For example, grandparents have historically filled important roles in families, often taking care of orphaned grandchildren following disease or war and also stepping in to help their widowed adult children (Toledo & Brown, 2013).

How do grandparents come to understand their identity and role within a family? Unfortunately, the research available on grandparenting does not follow a consistent

theoretical tradition (Bates & Taylor, 2013; Smith & Drew, 2002; Thiele & Whelan, 2006). A 2013 review found 55 different theories over 209 studies used when researching the grandparenting role; however, over 40% of studies failed to specify any theoretical foundation (Bates & Taylor). Thus, the following sections will highlight a history of the work on grandparenting and a more detailed description of the grandparenting role, including the one used for the present study, Hurme's (1991) theory on grandparenthood dimensions.

Historical Perspectives on Grandparent Identity

Research on grandparenting extends to the 1930s and 1940s. The beginning work painted the grandparenting role in a negative, disparaging light with titles like "The Grandmother: A Problem in Child Rearing" (Smith & Drew, 2002). However, the 1950s and 1960s pulled away from this viewpoint. Neugarten and Weinstein (1964) provided one of the first conceptualizations of the grandparent role as being comprised of three main aspects: comfort in the role; the role's personal significance; and the style or behaviors associated with the role. The term 'comfort' has been explained by more recent authors as 'satisfaction' with the role (e.g. Reitzes & Mutran, 2004; Thomas, 1990).

A lack of responsibility has also been attributed historically to the grandparent role. In perhaps one of the very first studies involving grandparents, Albrecht (1954) found that grandparents felt they held no responsibility for their grandchildren's behavior, attitudes, or relationships and were thus able to have more lenient and fun-loving relationships with their grandchildren. Thus, since a grandparent does not need to be the primary caregiver, they are more able to embody alternative identities. This finding is similar to other applied models of grandparenthood (e.g., Kivnick, 1982), yet more recent

research suggests that grandparents do feel investment in their grandchild(ren)'s success (Fingerman, 1998).

Finally, Kahana and Kahana (1971) posited a framework for understanding grandparenthood that included the intrapersonal aspects from earlier research and also contextual aspects in the interaction with grandchildren and a family system. Their framework provides the foundation for the more recently used models of grandparenthood, including Hurme's grandparenting dimensions. The next sections describe how someone develops into a grandparent, the styles of interacting with grandchildren, and the various dimensions of the grandparenting role. Although grandparenthood development and grandparenting styles are not specifically addressed in the current study due to the difficulty in measuring these constructs, they do provide a comprehensive understanding of the grandparenting role and context for grandparenting dimensions.

Grandparent Development

Kornhaber (1996) provides a model to understand how someone develops into a grandparent by incorporating Eric Erikson's (1968) psychosocial stage model of personality development. Fully formulated in the mid-1990s, this theory has stimulated little research despite its foundation in Erikson's well-established model. It postulates that grandparent's progress through three stages while becoming grandparents: generativity, integrity, and continuity. Research indicates that generativity is experienced through a grandparent-grandchild relationship by positive attachment to the children and a feeling of success with family life (Swihart, 1985 as cited in Kornhaber, 1985). However, generativity is multi-faceted and can refer to biological, parental or social aspects. Thiele

and Whelan (2006) argue that social generativity, or taking responsibility of and action towards the better generations, is most applicable for grandparents. Continuity, Kornhaber's (1996) addition to Erikson's model, is reached through connection with younger generations (e.g. grandchildren). It refers to "...complete[ing] a full circle in life's journey and leav[ing] a bit of their 'selves' in the minds and hearts of others" (Kornhaber, 1996, p. 58). Grandparents want to leave a psychological and emotional legacy.

Further, Kornhaber (1996) adds that creating a grandparenting identity is a life-long process through one's own experiences with grandparents and expectations for what it means to be a grandparent. Individuals learn the social norms dictating how to be 'good grandparents' in her/his specific culture by observing her or his own grandparents and parents. Many factors influence this development, including: positively identifying with one's own grandparent; observing positive behaviors of grandparents in other families; and positively experiencing one's own parent as a grandparent (Kornhaber, 1996). Individuals may cherish their own grandparents, and thus incorporate their salient traits into our future grandparent identity; or, they may loath their grandparents and vow to never be like them (Connidis, 2010). In other words, how a grandparent understands their role and themselves is based on a lifetime of observation and social learning.

A final aspect of the grandparenting identity development model is what Kornhaber (1996) calls the "grandparent drive", a genetic instinct motivating grandparenting behaviors. In qualitative studies, grandparents have described this drive as an internal, natural need that is the primary 'engine' motivating their role as a grandparent (Kornhaber, 1996). Typically, expressed love and a felt attachment are the

two ways this drive is expressed. At this point, no data could be found to support this drive, but research on attachment within the grandparent-grandchild relationship is present (e.g., Connor, 2006; Poehlmann, 2003). In other words, grandparenting is not just a socially desired identity, but a biologically motivated role.

Grandparenthood, by definition, is a role that spans three generations. On a psychological level, it starts when grandparents celebrate two transitions at the birth of a grandchild: their own transition to a grandparenting role and their adult child's transition to a parent. However, a grandparent does not relinquish their parenting role. Research suggests the "parent identity" continues to be a very salient identity for older adults (e.g., Reitzes & Mutran, 2004). Reitzes and Mutran explored the connection of the grandparent identity and other social identities, including the parent identity, for older adults. For both men and women, the grandparent and parent identity meanings were similar in importance, and higher than any other social identity (including spouse). Thus, when an adult becomes a grandparent, she or he is not only invested in her/his grandparent role and relationship with her or his grandchild, but she/he is still invested as a parent to her or his adult child.

Understanding the social norms and expectations that develop for the grandparenting role informs work on IGA. If a grandparent spends her or his whole life creating expectations for her/his role as a grandparent and older parent, and then cannot fulfill these expectations due to the actions of her/his older children or grandchildren, it is quite possible they will experience ambivalence. Kornhaber's (1996) developmental model provides perspective on how strong these normative expectations are, and thus how conflicting it could be for an individual not to be able to meet those expectations.

Moreover, this model provides clues on how the four dimensions of grandparenthood are uniquely developed, and thus experienced differently by each individual.

Grandparenting Styles

Grandparenting styles are typologies of different interactional or behavioral patterns with grandchildren (Smith & Drew, 2002). However, unlike the parenting styles literature, the literature on grandparenting identifies around ten different styles with little to no empirical research supporting these typologies (Connidis, 2010; Mueller & Elder, 2003). Table 5 provides an overview of ten grandparenting styles.

Table 5

Grandparenting Styles

Style Name	Definition
Authoritative	Provides greater support to parents by giving parenting advice and directly caring for grandchildren; may be the style most salient when intergenerational family is more involved in child-care.
Authority-oriented	Perceive their primary role for their grandchildren as disciplinarian, often live far away from their grandchildren, and are younger. Mueller and Elder (2003) found that tension with their adult child regarding care of their grandchild was evident in grandparents with this style. Yet, these grandparents also reported having the closest relationship with their adult child. Mueller and Elder could not be explain the relationship dynamics between grandparent and adult child, yet these results make sense through the lens of IGA.
Companionate	Relationship with grandchild is similar to a friendship (Roberto & Stroes, 1995). A 2000 AARP study found that over half of grandparents feel like companions, advice-givers, and confidantes to their grandchildren (Connidis, 2010).
Detached	Similar to the remote style, but with a perception of closeness so grandparents do nothing to strengthen the relationship with their grandchildren (Mueller & Elder, 2003). Connidis (2010) posits this style may be reflective of IGA in the older parent-adult child relationship.
Influential	Characterized by a close relationship with their grandchildren. Additionally, this style is also characterized by authority, or being a disciplinarian; this style likely reflects that the grandparent is a "...highly significant figure" (Mueller & Elder, 2003) to their grandchildren.
Involved	Assume the primary caregiving responsibilities for their grandchildren (Connidis, 2010). These are the grandparents raising their grandchildren.
Passive	Display little discipline, decision-making, or influence in the grandchild's life (Mueller& Elder).
Remote	Characterized by a distant relationship with grandchild (Roberto & Stroes, 1995).
Supportive	Similar to the influential style, except the grandparent's relationship with their grandchildren is likely not as strong and they display no disciplinary responsibility. In addition, grandparents with this style may experience IGA towards their adult child over their grandchild(ren)'s care. Thus, the grandparents may be more emotionally distant because they have reservations about the way their grandchildren are being raised.

The similarities between the *companionate*, *supportive* and *influential* styles are quite clear: all report close relationships with grandchildren without overemphasizing authority or taking on parental roles, and are the most common styles reported by grandparents. Interestingly, grandparents were more than twice as likely to have a

supportive or influential style if they knew their own maternal grandparents (Mueller & Elder, 2003). Thus, we see the development of *grand cultures*, or “identifiable ways of interacting between grandparents and grandchildren that are consistent within and across generations” (Kemp, 2007, p. 864); essentially, the multigenerational transmission of grandparent-grandchild relationships dynamics.

Importantly for the current study, the grandparenting styles literature suggests IGA with the adult child may be a factor in determining grandparenting behaviors and attitudes toward their role. *Authority-oriented*, *detached* and *supportive* grandparents all describe some IGA in the relationship with their adult children. The *authority-oriented* grandparents seem to be replicating the conflicted relationship dynamic with their adult child into the relationship with their grandchild. However, what is likely IGA between a parent and adult child seems to create distance in the grandparent-grandchild relationship for the *detached* and *supportive* styles.

While grandparenting styles do highlight some important characteristics of intergenerational relationships, there is very limited empirical research addressing styles. Few measures exist that address grandparenting styles, and no measures exist that combine all of the styles addressed in Table 5. Moreover, just assessing grandparenting styles restricts our understanding of grandparenting by just assessing behaviors and, to a limited extent, attitudes. A social role, defined as a “...set of expectations in the sense that it is what one *should* do” (Heiss, 1990, p. 95) is more than just behaviors; it also include attitudes, emotions, and the symbolic meaning of that role (Heiss). Thus, the grandparenting styles literature can illuminate important aspects related to IGA, but the field also needs another paradigm to fully understand the grandparenting role.

Dimensions of Grandparenthood

Hurme's (1991) grandparenting dimensions is an ideal paradigm for studying grandparenthood and IGA because it considers attitudes, behaviors, affective outcomes, and the symbolic meaning associated with the grandparenting role to an individual. The model's primary strength is that it does not assume the grandparent role is unidimensional. Like any role, grandparents will have opinions about their role, behaviors related to their role, and emotions related to being a grandparent. Researchers who use this model purport that assuming all of these experiences can be reduced and explained by one general "style" is too simple (e.g., Findler et al., 2013).

Attitudinal/Cognitive. Hurme's first dimension is attitudinal, sometimes referred to as cognitive, and includes the expectations and attitudes displayed in the grandparenting role (e.g. Findler, et al., 2013). Although the grandparent role is quite nebulous, research is clear that grandparents, parents, and grandchildren all have expectations for the grandparent role (Szinovacz, 1998). Recent research shows grandfathers: expect to be involved with their grandchildren despite distance; hope to have a less formal relationship with their grandchildren than their children; and share fun activities with their grandchildren (i.e., going to sporting events together) (Sorensen & Cooper, 2010). Furthermore, an adult child may expect her or his parents to become more involved in her/his life, after a time of young adulthood independence, once they become grandparents (Breheny et al., 2013).

Behavioral. Secondly, grandparents display distinctive behaviors. Hurme (1991) described this dimension as: "...the activities that grandparents undertake both with and for their grandchildren" (p. 19). Research on grandparenting behaviors often identifies

child care as a key instrumental behavior of grandparents (Thiele & Whelan, 2008; Uhlenberg & Cheuk, 2010). Numbers indicate that 70 to 80% of grandparents report that they are either currently or have in the past provided child care for their grandchildren either on a primary basis or a form of back-up when primary care falls through; reasons given for wanting to provide childcare were to help out her or his adult child and to spend more time with her/his grandchildren (NACCRRRA, 2008). Other behaviors often associated with grandparenthood include: mentoring; hosting family events; cooking or baking; gift-giving; playing games; and story-telling (Smith & Drew, 2002; Uhlenberg & Cheuk)

Affective. The third aspect in Hurme's (1991) model is affective experience, commonly understood as satisfaction in the role (e.g., Reitzes & Mutran, 2004). One key aspect that impacts satisfaction in the grandparenting role is the level of involvement with grandchildren (Peterson, 1999). Specifically, research indicates grandparents who provide part-time care for grandchildren, therefore having increased interaction with the child but not sole parenting responsibility, are the most satisfied in the grandparenting role (Bowers & Myers, 1999). Satisfaction with the role may also depend on the grandchild's personality; Fingerman (1998) found that grandparents tend to express more satisfaction in the relationship with a "special grandchild", usually identified based on the grandchild's personal characteristics. Gender, age and socio-economic status are inconsistent predictors of grandparenthood satisfaction in the existing research (Smith & Drew, 2002; Thiele & Whelan, 2008). Satisfaction with the grandparent role is often related to overall well-being (Reitzes & Mutran, 2004).

Symbolic. Fourth, the symbolic meaning of the grandparent role is different from behaviors, attitudes or satisfaction in that it is the personal meaning attributed to the role the specific individual (Szinovacz, 1998). For the present study, the concept of symbolic meaning is particularly important and an aspect seen in other theories. For example, Kivnick's (1982) research on grandparenting shows multiple possible meanings for the grandparenthood experience, including: centrality; valued elder; immortality; reinvolvement with personal past; and indulgence.

Measurement. Although Hurme's (1991) symbolic meaning dimension is not as developed Kivnick's (1982), and has been difficult to operationalize (Hurme, 1988), recent research with new instruments have been successful at measuring this dimension of grandparenting (see Findler et al., 2013). Furthermore, the strength of her model is its multidimensionality, a trait that other theories, including Kivnick's, does not have.

Related to the present study, extant research suggests that the meaning of grandparenthood can change if IGA is evident in the older parent-adult child relationship. Attar-Schwartz et al. (2009) found that the middle generation or adult children, consistently regulate the grandparent-grandchild relationship.

Although its multidimensionality has made it difficult to study, Hurme's (1991) model has emerged from the saturated grandparenting theories literature as a useful theory for furthering research. Findler et al. (2013) utilized Hurme's four grandparenting dimensions to create a set of inventories, the Multidimensional Experiences of Grandparenthood (MEG). Their purpose was to address two weaknesses in the grandparenting literature, the first being the use of unidimensional theories and measures that do not adequately capture the complexity of the grandparenting role. Second,

although there are quite a few self-report measures related to the grandparent role, they observed that many display limited reliability and represent limited samples (i.e. only grandmothers) (Findler et al., 2013). The result is a comprehensive set of inventories with adequate reliability estimates that can be used with diverse samples and a variety of research questions.

Multidimensional Experiences of Grandparenthood Set of Inventories. The MEG, developed by Findler et al. (2013), is a set of four inventories assessing each dimension of grandparenting as postulated by Hurme (1991): cognitive (attitudinal Hurme's original model), behavioral, affective, and symbolic. Moreover, each dimension is further divided into smaller factors. Due to its nascent nature, it has only been assessed in two studies (Findler et al., 2013; Findler, 2014), but shows promising usefulness for the grandparenting literature because of its theoretical foundation in Hurme's work. Table 6 summarizes the dimensions, factors, and internal consistency reliability estimates from both studies.

Table 6

MEG Factor Structure for each dimension and Internal Consistency

Cognitive		Behavioral		Affective		Symbolic	
Factor	α	Factor	α	Factor	α	Factor	α
Personal Investment	.91, .89	Emotional Support	.88, .85	Positive emotion	.90, .85	Meaning	.84, .84
Personal Cost	.81, .79	Contribution to upbringing	.84, .85	Negative emotion	.77, .91	Compensation for parenthood	.82, .83
		Instrumental Support	.79, .81			Continuity	.68, .78
						Burden	.67, .52

Sources. Findler et al., 2013; Findler, 2014

As evidenced by Table 6, the MEG displays appropriate internal consistency reliability and provides detailed information about the experiences of grandparenthood. Given its multidimensional nature, the MEG was used for the current study to assess the experience of grandparenting for older parents who perceived varying levels of IGA in their relationships with their adult children. However, the MEG has not been used as a general measure of each dimension; both published studies using the MEG calculate scores for each of the factors, not the dimensions. The current study utilized the MEG in a novel way by evaluating the total scores for each dimension.

Conclusions and Support for Research

As population structure and family composition changes, the need for pertinent and representative research on grandparenting and the family becomes critical, and at the center of these investigations are intergenerational relationships. How will mobility impact families? What impact will increasing life spans have on family relationships? How will families adapt to spending more time melding the roles of grandmother, child, and grandchild? With 15 million more grandparents expected between 2010 and 2020 (Francese, 2011), these are all questions requiring novel approaches and cutting-edge methodology.

IGA has not only strongly resonated with researchers as a fitting theoretical lens for intergenerational relationships (e.g., Bates & Taylor, 2013), but has also produced findings that realistically illustrate the complexity of parent-child relationships in adulthood (e.g., Birditt et al., 2010; Fingerman et al., 2008; Pillemer, 2004). However, the field is limited by its lack of a uniform way to assess IGA (e.g., Connidis, 2015). Measuring IGA through direct questions and indirect questions as presented in Table 3

has produced fruitful results, including differences in IGA between parents and adult children, and factors associated with increased levels of IGA. Nevertheless, with recent research illustrating that direct and indirect approaches produce correlated but distinct findings (Lendon et al., 2014; Suito et al., 2011), it is no longer appropriate for the IGA research to use these approaches interchangeably. A unitary measure of IGA employing indirect and direct questions, like the IAS, would be a timely and significant contribution to the research on intergenerational relationships.

Additionally, Table 4 highlights the characteristics related to higher levels of IGA for parents and adult children. Gender, physical and psychological wellness, proximity, contact frequency, and social status have all been correlated with increased IGA (e.g., Birditt, et al., 2010; Fingerman et al., 2008; Guo, et al., 2013; Lüscher & Lettke, 2004; Mueller & Elder, 2003; Peters et al., 2006; Pillemer, et al., 2012; Willson, et al., 2006). Yet, there is little evidence for what contexts or specific relational aspects increase IGA. The chapter started with a case study of Herb, Maria, Danielle and Jeffrey. Herb's and Maria's ambivalence concerning both their children was evident, with some indication of IGA towards Jeffrey's parenting practices, a context overlooked in the current literature. IGA within a parenting context is particularly important for the study of intergenerational relationships considering it connects three generations, yet as is seen with IGA, there are no measures to assess ambivalence in a specific context. In fact, no studies could be found that even modelled how a researcher would go about studying ambivalence regarding a specific aspect like parenting practices. Thus, the novel approach as demonstrated with the Ambivalences Regarding Parenting Practices Scale (ARPPS) proposed in the current study begins to fill the gap by addressing specific ambivalences

between parents and their adult children and provide a way to research specific ambivalences in the future.

Finally, although the research on IGA is extensive, there is very limited research on how IGA within a parent-adult child relationship will impact other social roles, like wife, spouse, and grandparent, and other relationships (Connidis, 2015). Grandparenting is a particularly relevant role to consider because, like parenting practices, it by definition includes multiple generations. While there has been extensive research on grandparenting, including the development of a grandparenting identity (e.g., Kornhaber 1996) and grandparenting styles, (e.g., Mueller & Elder, 2003), the research has been theoretically inconsistent and difficult to operationalize. Moreover, there are few theories which fully capture the complexity of the grandparenting role. Thus, Hurme's (1991) grandparenting dimensions is an ideal framework for researchers because it accounts for the complexity inherent in social roles and has been operationalized in the MEG by Findler et al. (2013). By exploring the grandparenting role, this study furthered the literature by considering how IGA influences more than just the parent-child relationship.

IGA, specific ambivalences, and the impact on grandparenting have critical implications for future research. First, it further informs the research on families with non-traditional child care arrangements. As outlined earlier in this chapter, many normative expectations for families rest on the concept of the nuclear family and commitment to individualism. However, it is also evident how families from all social strata rely on kinship networks for child care and, due to changing demographic trends, are navigating these relationships for more of their lives. It is imperative to understand how a parent-adult child relationship impacts the relationship with a younger generation,

the grandchildren, as these kinship networks take on more responsibility for the care of grandchildren. An extreme example of this would be when grandparents need to assume parental responsibility for their grandchildren. Furthermore, this study is clinically applicable, especially in systems work, where ambivalence may be a focus of treatment under a different name. For example, transgenerational theory's conceptualization of diffuse or enmeshed boundaries may be related to the concept of IGA. However, systemic models are often difficult to operationalize, so using a theoretically-sound principle like IGA to inform these models is an important implication from this study.

Summary

This chapter offered a comprehensive literature review of the theories, constructs, and measures related to the present study. Findings from the reviewed literature were synthesized and organized to introduce family structure, intergenerational relationships and the parent-adult child relationship, IGA, and the status of the grandparenting literature. Specifically, cultural differences of intergenerational relationships and the impact of changing population structures were described to provide a context for the current study. IGA as defined by Lüscher & Pillemer (1998) was described, including a brief history on the concept of ambivalence, its subsequent development as psychological construct and the two measurement approaches used for IGA, direct and indirect questioning. The various personal characteristics related to higher levels of IGA were delineated, and the area of parenting practices as an area for future research was identified. Next, the grandparenting role was thoroughly explained, with particular emphasis given to Hurme's (1991) dimensions of grandparenting as an inclusive way to understand and research grandparenthood. In summation, the potential influence of IGA

and ambivalences regarding parenting practices on grandparenting dimensions was explored, and the need of research on this relationships was explained. The following chapter will describe the methodology for this study, including descriptions of the recruitment and participation procedures, the instrumentation, and the statistical analyses to address each research question.

CHAPTER III

METHODOLOGY

This chapter presents the methods and procedures used to explore the relationship between intergenerational ambivalence (IGA) toward an adult child, ambivalence towards an adult child's parenting practices, and various dimensions of grandparenting from an older parent's (i.e., grandparent's) perspective. The purpose of the investigation was three-fold. First, it provided psychometric properties on three instruments. The first two instruments measured IGA using both direct and indirect questions, and measured IGA in a specific context, relating to the parenting practices of the adult child. The third measure evaluated grandparenting dimensions. Psychometric information and factor analyses results were reported for these measures. Secondly, using these instruments, the relationship between overall IGA and ambivalence regarding an adult's child parenting practices as perceived by the older parent is assessed. Finally, the relationship between the two types of measures for ambivalence and four dimensions (attitudinal/cognitive, behavioral, affective, and symbolic) of grandparenting (Hurme, 1991) is examined. The next section describes: (a) the participants and sample population; (b) procedures for recruitment and data collection; (c) the instruments; and (d) the research questions and data analyses.

Participants and Sample Population

The participants were 210 grandparents who: (a) had sufficient English literacy to complete the measures; and (b) who had at least one grandchild between the ages of eighteen months to twenty four years old to provide adequate time for the grandparent to see her or his adult child's parenting practices and be introduced to the grandparenting role. Participants were recruited through in-person and online convenience and snowball sampling methods from U.S. states in the Rocky Mountain region, the upper Midwest, the West, and the Northeast. The four geographic regions have varied cultural, religious and ethnic make-up, not to mention geographic structure (i.e., urban, suburban, or rural). By combining participants from different geographic regions of the country, it was hoped that the sample would be more representative of the U.S. grandparenting population, thereby increasing the generalizability of this study's findings.

Procedures

Before beginning recruitment and data collection, approval from the host university's Internal Review Board (IRB) was obtained and exempt status was granted (see Appendix A). Following IRB approval, participants were recruited using convenience and snowball sampling methods similar to other studies involving grandparents (e.g., Ben Shlomo & Taubman – Ben-Ari, 2012). The primary investigator approached grandparents that she knew and then asked if those grandparents were aware of other individuals who met the inclusion criteria and may be willing to participate. If they did know of other grandparents, they were provided with a brief form outlining the purpose of the study, inclusion criteria, and survey link or a packet containing a brief document including the study's purpose and inclusion criteria, the informed consent

document, and all of the surveys that they could share with other grandparents (see Appendix B).

The primary researcher also recruited through organizations likely to have grandparent members, such as senior centers. The primary researcher was present at well-attended events (e.g., VOA lunches, activity sign up days) and presented the study to a large group. Then, the researchers intermingled with prospective participants to answer questions about the study, personally invite them to participate, and hand out paper-pencil survey packets. Many older adults opted to take a survey packet home and mail it to the researcher with a prepaid envelope. Also, some senior centers offered to display collection boxes at a front registration desk, and the primary researcher picked up the box a week or so later. It is important to note that there were a relatively equal number of men and women at these events, most of whom were married or coupled. However, when talking with the couple face-to-face, it was not uncommon for only the woman to agree to participate.

Participants were first contacted either in-person or via e-mail (see Appendix B); in both cases, participants were provided with a brief description of the study and the request for their participation should they meet the inclusion criteria. Data were collected with two methods to enable all age cohorts of grandparents could be represented in the study: (a) an online survey using Qualtrics, an online service providing comprehensive data collection services for online research data; and (b) a packet of surveys to be completed by hand. Of the two administration types, 132 participants (62.9%) completed paper-pencil surveys while 78 participants (37.1%) completed online surveys. With the in-person scenario, if participants met the inclusion criteria and desired to continue, they

were given the option to complete the study via an online link or packet of paper-pencil surveys. In the online scenario, they were provided with the brief document outlining the study's purpose and inclusion criteria. If participants met the inclusion criteria and desired to continue, they clicked a web link that directed them to the consent document. For the online method, the instruments described below were uploaded into Qualtrics and disseminated with an online link.

For both collection methods, the informed consent document (Appendix C) was presented first and outlined the general purpose for the study, potential risks and benefits of participation, and a clear statement that participants could end participation at any time without reason and with no penalty. Contact information for the primary investigator, the dissertation research advisor, and the university's IRB officers were included. As an incentive for participation, all participants were notified that upon completion of the study, \$5.00 per participant up to \$150 would be donated to a non-profit organization promoting the importance of grandparents and the grandparenting role.

Participants were not prompted to sign the informed consent document, and were instead notified that their continuation of the study indicated that they consented to continue. For the online version, after reading the consent document, participants clicked a "continue" button which directed them to the study. By not having participants sign an informed consent document, participant anonymity was preserved. Participants in both conditions were prompted to think of the same adult child and grandchild(ren) throughout the study. After completion of the items, participants were provided with a debriefing statement (see Appendix D). This page restated the study's purpose, thanked participants for their time, and provided various online resources for grandparents. All online data

were initially stored on the Qualtrics secure server in the primary researcher's password-protected account; all survey packets were stored in a locked file cabinet in a locked room, McKee Room 201. At the end of the study, all data were downloaded or entered into a spreadsheet and analyzed using statistical software packages, including Statistical Product and Service Solutions (SPSS).

Instruments

Participants were asked to complete: the demographic questionnaire (Appendix E); the Intergenerational Ambivalence Scale (IAS) (Appendix F); the Ambivalence Regarding Parenting Practices Scale (ARPPS) (Appendix G); and the Multidimensional Experiences of Grandparenthood Inventories (MEG: Findler et al., 2013) (Appendix I). The IAS, ARPPS, and demographic questionnaire were created for the present study. Permission to use the MEG was obtained (see Appendix H). The measures were presented in a standardized order: MEG, IAS, ARPPS, and demographic questionnaire. The MEG was considered the least sensitive set of measures, and thus to build rapport, was presented first. Next, the IAS and then ARPPS were presented to ensure the specific directions related to the ARPPS (i.e. to answer regarding the specific ambivalence related to parenting practices) were clearly understood. In addition, McFarland (1981) suggests that with questions of similar content, general questions (i.e., the IAS) should precede specific questions (i.e., the ARPPS) in survey research. Finally, the demographic questionnaire was presented last to account for possible respondent fatigue because it contained the most concrete, and thus least cognitively demanding, questions (Krosnick, 1991).

Multidimensional Experience of Grandparenthood Inventories

The MEG (Appendix I), developed by Findler et al. (2013), is a set of inventories assessing four dimensions of grandparenting as postulated by Hurme (1991): cognitive (attitudinal in Hurme's original model), behavioral, affective, and symbolic. Each measure is self-report and uses a variation of a five point Likert-type scale. The Flesch-Kincaid grade level is 8.0 across all dimensions, indicating the MEG is an accessible measure for any participants with at least an eighth grade reading level. Completion time for all dimensions of the MEG is 10 to 15 minutes. In other studies, a score is provided for each factor within the dimensions by finding a mean score from all the relevant items in the factor. Again, only the factors within each dimension have been used in previous research; scores for each dimension have not been given or used. Like with the research on IGA, the MEG has been used in a piecemeal fashion rather than a complete measure. Thus, for the present study, one score was given for each dimension to establish this as a unitary measure of grandparenting dimensions. For the cognitive, affective, and symbolic dimension, a total score was found by adding up the items on the positive factors and subtracting the items on the negative factors; on the behavioral dimension, a total score was found just by summing all items, indicating frequency.

Each dimension is subsequently made up of various factors. In previous research, Cronbach's α levels were only calculated for each factor; no reliability estimates are available for each overall dimension in the previous literature. Table 6 in Chapter II outlined each dimension, the factors, and alpha levels. On the cognitive dimension (fourteen items), which refers to the level of commitment a grandparent feels toward their role, participants respond to items in terms of their level of agreement, ranging from

strongly disagree (one) to *strongly agree* (five). Examples of items include: “I am highly motivated to fulfill my role as grandparent” and “Being a grandparent sometimes means giving up my free time.” The behavioral dimension includes twenty-three items and asks participants to indicate the frequency of an activity related to grandparenting from *never* (one) to *very often* (five). Examples of questions include: “I am always available to my grandchildren” and “I do things with my grandchildren that help develop their abilities and contribute to their education.” Third, the affective dimension (twenty-one items) asks participants to report on the feelings aroused by being a grandparent (e.g., pride, pleasure, guilt, anger) from *not at all* (one) to *very much* (five). Finally, the symbolic dimension includes nineteen items referring to the significance a participant places on the grandparenting role by indicating their level of agreement, *strongly disagree* (one) to *strongly agree* (five). Examples include: “Being a grandparent gives more purpose to my life” and “I feel I am a better grandparent than I was a parent.” Given its multidimensional nature, the MEG was used for the current study to assess the experience of grandparenting for older parents who perceived varying levels of IGA in their relationships with their adult children.

Using a sample of grandparents ($N = 313$; 181 women, 132 men) with an age range of 46 to 92 ($M = 62.26$, $SD = 8.41$), Finder et al. (2013) examined the construct validity of the MEG by examining its relationship with other common measures, including the Big Five Personality Inventory (John & Srivastava, 1999), the Hierarchy of Roles in Grandparent’s Life (Findler et al., 2013), the Caregiving System Scale (CSS) (Shaver, Mikulincer, & Shemesh-Iron, 2010) and the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964). Modest correlations were found between

MEG factors and personality traits which theoretically could be expected. For example, neuroticism was the only trait negatively correlated with negative emotions in the affective dimension ($r = .26, p < .001$). For the Hierarchy of Roles, correlations were higher between grandparents who ranked their role as more important and their investment with the role ($r = .28, p < .001$), providing more support to their grandchildren ($r = .31, p < .001$), and the more they saw their role as compensation for their own parenting ($r = .15, p < .05$). For the CSS, caregiving hyperactivation, or the tendency to perhaps help more than is desired, was significantly and positively correlated with all factors in the symbolic dimension except burden ($r = .16-.31, p < .01-.001$). Finally, social desirability was considered to ensure grandparents were not responding in a biased way to conform to expectations. Significant positive correlations ($r = .16-.20, p < .01$) were found between social desirability and burden, positive emotions, emotional support, and contribution to upbringing. Thus, the MEG's modest relationship with other theoretically related measures provides evidence of its construct validity.

Measures of Ambivalence

Currently, there are no complete measures of IGA used consistently in the literature, just measurement strategies and commonly used question sets. Previous researchers have used these questions in a piecemeal fashion; Table 3 in Chapter II demonstrates the lack of consistency in measuring ambivalence. Thus, the measures described below are not completely new creations, but rather an attempt to bring consistency and uniformity to the literature through a concise ambivalence measure.

As previously described in Chapter II, overall IGA is typically measured using direct methods (e.g., "How often have you felt torn in two directions or conflicted about

the child?”) or indirect methods (e.g., “How much does he/she understand you?”). However, research shows that direct and indirect methods elicit correlated, but distinct responses (e.g. $r = .49$ to $.59$; Lendon et al., 2014). The Intergenerational Ambivalence Scale (IAS) was a novel way to assess IGA by including both direct and indirect questions. Additionally, ambivalence is usually measured as an encompassing characteristic of the relationship, not as it relates to specific aspects of the relationship. Thus, the Ambivalence Regarding Parenting Practices Scale (ARPPS) was intended to measure ambivalence as it relates to a specific aspect in the parent - adult child relationship, employing both direct and indirect questioning. The IAS was created by merging items used in previous research on IGA (e.g., Birditt et al., 2010; Fingerman et al., 2006; Pillemer & Suito, 2002; Pillemer et al., 2007) and a similar construction process was employed for each measure. Thus, each measure will be described below, and then the combining and creation procedures process will outlined.

Intergenerational Ambivalence Scale. The (IAS) is a nine-item self-report measure of IGA created for this study (See Appendix F) by combining questions used in previous studies and presenting them as one instrument that provides a single score of IGA. Participants respond on either a four-point Likert-type scale ranging from Strongly Disagree (1) to Strongly Agree (4) or a five-point Likert-type scale ranging from Never (1) to Very Often (5), depending on the questions. These are the response formats used in previous research. For example, questions include: “How much does he/she make you feel loved and cared for?” (5-point response) and “My child and I often get on each other’s nerves, but nevertheless we feel very close” (4-point response).

The Flesch-Kincaid reading level was a grade-equivalent score of 5.1, indicating that the IAS is an accessible measure for participants with at least a fifth grade reading level. Fingerman et al. (2008) used the indirect questions with families ($n = 474$), and reported a Cronbach's $\alpha = .69$ for both the positive questions (Items 1 and 2 on the IAS) and negative questions (Items 3 and 4 on the IAS). Pillemer and Suitor (2002) used the indirect questions with a sample of mothers aged 60 and older ($n = 189$) and reported a Cronbach's $\alpha = .68$. Suitor et al. (2011) utilized two of the direct questions (Item 5 and 6) with mothers aged 72 to 82 ($n = 254$) and found modest reliability ($\alpha = .59$). While these internal consistency reliability values may be considered low for research purposes, these values were achieved with very few items and reliability can expect to increase as the number of items increase (e.g., Suitor et al., 2011).

Ambivalence Regarding Parenting Practices Scale. The ARPPS is a ten-item measure of ambivalence regarding parenting practices created for this study and was modeled after the IAS (See Appendix G). It provides a single score of specific ambivalence related to parenting practices perceived by an older parent by combining indirect and direct questions. Participants respond on a Likert-type scale ranging from either Strongly Disagree (1) to Strongly Agree (4) or a five-point scale ranging from Never (1) to Very Often (5), depending on the question. It follows the IAS in a nearly identical format, but with specific focus on parent practices. For example, "How much does he/she criticize you?" becomes "When you offer parenting suggestion for you grandchild(ren), how much does he/she criticize you?" Other sample questions include: "How much does he/she understand your perspectives on caring for your grandchild(ren)?" (5-point response) and "My relationship with my child is very close,

but I sometimes find myself restricting what I saw in regards to her or his parenting of my grandchild(ren)?" (4-point response). The ARRPS includes one additional item than the IAS because the question "How much does he/she make demands on you concerning caring for your grandchildren or providing parenting advice or feedback?" was subsequently divided into two questions: "How much does he/she make demands on you concerning caring for your grandchildren?" and "How much does he/she make demands on you concerning providing parenting advice or feedback?" This was done to more fully capture the types of demands a parent could face from their adult child regarding their grandchild's care. Thus, the ARPPS has three questions that make up the indirect negative score. The Flesch-Kincaid reading level was a grade-equivalent 10.0, indicating the ARPPS is an accessible measure for any participant with at least a tenth grade reading level.

Combining items. Worthington and Whittaker's (2006) recommendations for scale development in counseling psychology were used when applicable. First, the constructs were clearly established using Lüscher and Pillemer's (1998) definition provided in Chapter I. Then, the new items were administered without other measures to a small sample of grandparents in a pilot study. Yet, many of the additional recommendations were not relevant due to process of combining already established items. For example, a large pool of questions were not created and the final items were not submitted for expert review because the questions were selected from extant literature published by the experts in the field of IGA. Worthington and Whittaker's (2006) recommendations also guided the data analysis process.

Procedures. Considering the nearly identical structure of the IAS and ARPPS, procedures are first described for combining the IAS, and then the differences for the ARPPS are expanded upon. First, all items were written into a preliminary draft that included all nine items. An effort was initially made to make the response option (i.e., four-point Likert-type, five-point Likert-type) uniform across all nine items. However, this proved a nearly impossible task since some items ask about time, others frequency, and others attitudes. Thus, all items were left in the form used in previous research. One wording change was made in item eight from “intimate” to “close” relationships, which was believed to better reflect how a parent would describe her or his relationship with a child.

For the ARPPS items to reflect parenting, specific attention was given to making the questions apply to parenting practices broadly. Because ambivalence regarding parenting has never been examined, it was deemed important to remain as broad as possible and not include pieces from various theories, like Baumrind’s (1966, 1978) parenting styles. Reference to specific parenting styles, behaviors, attitudes and attributes, all of which have a significant research base, was beyond the scope of this study.

A concern for the ARPPS was, because of its similarity to the IAS, participants might not distinctly answer questions about parenting practices. To ensure participants understood the different focus of the ARPPS, specific instructions were provided directing participants to think of her or his adult child’s parenting practices. Additionally, questions were written to clearly address parenting practices. For example, “How often have you felt torn in two directions or conflicted about the child?” was transformed into “When thinking about their parenting attitudes, style and behaviors, how often have you

felt torn in two directions or conflicted about your child's actions and opinions towards you grandchild(ren)?" Table 7 shows the original question used in the IAS and the transformation for the ARPPS to reflect parenting.

Table 7

Question transformation from the IAS to the ARPPS

IAS Question	ARPPS Question
1. How much does he/she make you feel loved and cared for? ¹	1. How much does he/she make you feel valued and included as a source of information on parenting? ¹
2. How much does he/she understand you? ¹	2. How much does he/she understand your perspectives on caring for your grandchild(ren)? ¹
3. How much does he/she criticize? ¹	3. When you offer parenting suggestions for your grandchildren, how much does he/she criticize you? ¹
4. How much does he/she make demands on you? ¹	4. How much does he/she make demands on you concerning <u>caring for your grandchildren</u> ? ¹
	5. How much does he/she make demands on you concerning <u>providing parenting advice or feedback</u> ? ¹
5. How often have you felt torn in two directions or conflicted about the child? ¹	6. When thinking about their parenting attitudes, style and behaviors, how often have you felt torn in two directions or conflicted about your child's actions and opinions towards your grandchild(ren)? ¹
6. To what degree do you have very mixed feelings toward the child? ²	7. To what degree do you have very mixed feelings towards the way in which your child parents or is raising your grandchild? ²
7. My child and I often get on each other's nerves, but nevertheless we feel very close. ²	8. My child and I often get on each other's nerves when we discuss care for my grandchild, but nevertheless we feel very close. ²
8. My relationship with my child is very close, but that also makes it restrictive. ²	9. My relationship with my child is very close, which means I sometimes find myself restricting what I say in regards to how he or she parents my grandchild(ren). ²
9. Although I love my child very much, I am sometimes indifferent toward him or her. ²	10. Although I love and support my child very much, I am sometimes indifferent toward him or her in regards to the way he or she parents my grandchild(ren). ²

¹Response is on a 5-point Likert type scale: Never, Rarely, Sometimes, Fairly Often, Very Often.²Response is on a 4-point Likert type scale: Strongly Disagree, Disagree, Agree, Strongly Agree

Scoring Procedures. Next, the scoring procedures were adapted and created.

Because the Griffin's Similarity and Intensity of Components formula is used to calculate indirect but not direct ambivalence, it was decided that to remain as similar to established research as possible, a total composite score be created using a score for indirect (using the Griffin formula) and direct (using the sum of direct items). The Griffin formula has been consistently used in prior research (e.g., Fingerman et al., 2008; Sutor et al., 2011). Creating a composite ambivalence score from a direct and indirect measure of ambivalence has never been done and was a unique contribution of this study.

While the indirect items on the IAS (Items 1 through 4) have been consistently measured on a 5 point Likert-type scale in the research, the direct measures (Items 5 through 9) have been measured on 0 to 3, 1 to 4, and 0 to 4 point Likert-type scales. In an attempt to simplify scoring as much as possible, a 1 to 4 scale was used on Items 6 through 9 and because it was important to offer a 'neutral' response option for Item 5, it was scored on a 1 to 5 point scale. This format easily allowed for a direct score to be achieved. Then, the scales on the remaining direct responses subsequently match and were easily added to obtain a total direct score. A direct score was found by simply adding up the direct items (Items 5 through 9), with higher scores indicating more ambivalence with a range of scores from 5 to 21.

Consistent with previous research (e.g., Fingerman et al., 2008), Griffin's formula was used on the indirect items. Although there is some criticism of this formula, it has been used consistently in the IGA literature and was thus retained for the current study (e.g., Lendon et al., 2014; Sutor, et al., 2011). This formula equally acknowledges both

intense and opposing positive and negative feelings, and also the absence of any feeling.

The formula is:

$$\frac{(Positive+Negative)}{2} - |Positive - Negative| + 1.5 = \text{Indirect Score}$$

where *positive* = Item 1 + Item 2

negative = Item 3 + Item 4

The results of the Griffin's formula provide the indirect score of ambivalence, with greater values indicating greater ambivalence. The possible range of indirect ambivalence scores ranges from -0.5 to 7.5. Next, the total ambivalence score for the IAS was found by summing the direct and indirect scores. Using this method, the range of values is six to 32.5, with higher scores reflecting greater levels of total ambivalence.

A nearly identical scoring process was used on the ARPPS with one minor difference since the indirect negative score has three items. In order to continue using Griffin's formula, the mean score was taken between the two related items (items four and five); the mean score of these two items was then added to the other negative question (item three) to calculate the *negative* score. Thus, the formula is:

$$\frac{(Positive+Negative)}{2} - |Positive - Negative| + 1.5 = \text{Indirect Score}$$

where *positive* = Item 1 + Item 2

negative = Item 3 + $\left(\frac{\text{Item 4} + \text{Item 5}}{2}\right)$

By using the mean score for items four and five, the scoring process and score range remained identical to the IAS.

Demographic Questionnaire

The demographic questionnaire consisted of 23 items gathering information about the participant and her or his adult child (See Appendix E). Participants were prompted to think of the same adult child, who was a biological parent of their grandchild, through the study's entirety. Obtained information for the participant included: age (direct entry); gender (male, female, other); ethnicity/race: (African-American/Black, Asian, Caucasian/White, Hispanic/Latino, Native American, Native Hawaiian/Pacific Islander, Multiracial, Other, Decline to answer); sexual orientation (bisexual, gay/lesbian, heterosexual, other); relationship status (never married; divorced or separated; in a committed dating relationship; married/domestic partnership; widowed); years of education (direct entry); and general physical health status (poor, fair, good, very good, excellent). Obtained information for the participant's adult child was asked similarly to the above and included: age; gender; sexual orientation; relationship status; years of education; and employment status.

The participant was also asked: total number of children (direct entry); child's placement in that group (direct entry); geographic proximity to adult child (same house, same neighborhood, within a 15 minute drive, within a 15 to 30 minute drive, within a 30 to 60 minute drive, over an hour drive); emotional closeness (not at all close, slightly close, somewhat close, moderately close, extremely close); if the adult child was primary guardian of her/his children (yes or no); understanding of child's parenting practices (poorly, fairly, good, very good, excellent); frequency of face-to-face and other contact with adult child and grandchildren (less than once a year or never; once a year; a few times a year; monthly; a few times a month; weekly; a few times a week; daily); type of

other contact with adult child and grandchildren (text message, phone conversations, Facebook/social media, FaceTime/Skype, email, through a third party, snail mail, other); and problems the adult child has had to face more often than the average person (physical health problems; mental health problems; problems with drinking or drugs; problems with the law; problems with relationships; problems parenting their children).

Analyses

The goals of this study were to provide evidence for novel measurement approaches and the psychometric soundness of the IAS, ARPPS, and MEG; to better understand the factors explaining IGA as perceived by older parents; and to assess how IGA towards adult children relates to the experiences of grandparenting. In the following sections, the statistical procedures used to address these goals, exploratory factor analysis and multiple regression analysis, are outlined. Worthington and Whittaker (2006) recommended that EFA be completed at initial stages of scale development, even when strong theoretical evidence suggests a factor structure. In their review of scale development, nearly a third of studies only conducted an EFA (rather than conducting an EFA and confirmatory factor analysis [CFA], or just CFA), a practice that was deemed appropriate by Worthington and Whittaker. Multiple regression analysis is an appropriate statistical technique for "...analyzing collective and separate effects of two or more independent variables on a dependent variable" (Pedhazur, 1997, p. 3). First, statistical treatments of each variable are discussed, including an evaluation of assumptions. Next, procedures used to clean and prepare the data for analysis are outlined. Finally, analyses procedures are described for each research question.

Statistical Treatment

All variables assessed using the demographic form (i.e., age, gender, child's employment status, contact frequency, geographic proximity, etc.) were conceptualized as explanatory variables (i.e., independent variables) throughout the study. Table 8 shows variables used in the primary analyses and whether they were continuous or categorical variables.

Table 8

Categorical and Continuous Explanatory Variables

Categorical	Continuous
<ul style="list-style-type: none"> ▪ Parent gender ▪ Parent Ethnicity ▪ Parent sexual orientation ▪ Child gender ▪ Child sexual orientation ▪ Parent relationship status ▪ Child relationship status ▪ Parent physical health ▪ Child's employment status ▪ Guardianship of grandchildren ▪ Child problems 	<ul style="list-style-type: none"> ▪ Parent age ▪ Child age ▪ Parent education level ▪ Child education level ▪ Geographic proximity ▪ Face-to-face contact frequency with child ▪ Other contact frequency with child ▪ Face-to-face contact frequency with grandchild ▪ Other contact frequency with grandchild ▪ Qualitative Emotional Closeness ▪ Knowledge of Parenting Practices

*Indicates retention in regression analyses based on significant correlation with IGA, $p < .05$

As suggested in Chapter II, research shows that many of the demographic variables in Table 8 are correlated with IGA. The perceived level of ambivalence regarding parenting practices was obtained with the ARPPS total score. This score was an interval variable and acted an explanatory variable (i.e., independent) in all analyses. Only demographic variables that correlated significantly with IGA were included in the regression equation.

Upon looking at the data, it became clear that on many of the demographic variables there was not enough representation at each level to find meaningful differences. Thus, Table 9 shows which variables were collapsed and what new levels were created.

Table 9

Collapsed Categorical Variables

Original Variable	New Levels
Ethnicity/Race	White and Other
Parent's Sexual Orientation	Heterosexual and Other
Parent's Relationship Status	Married and Not Married
Parent's Physical Health Status	Poor/Fair and Good/Very Good/Excellent
Child's Sexual Orientation	Heterosexual and Other
Child's Relationship Status	Married and Not Married
Child's Employment Status	Employed and Not Employed

Child problems was the only categorical variable as identified in Chapter III, Table 8 that was not collapsed into two levels, displayed in Table 9. Next, bivariate correlations were conducted to determine which variables in Table 9 correlated significantly with IGA and thus were to be included in the regression equation. Correlation coefficients are presented in Table 10.

Table 10

Bivariate Correlations Between IGA and Independent Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. IAS	-														
2. Age	.056	-													
3. Gend.	.001	-.026	-												
4. Edu.	.022	.044	-.050	-											
5. E/R	.038	.025	-.069	-.058	-										
6. S.O.	.249¹	.224 ¹	-.069	-.111	.118	-									
7. R Stat	.068	.166*	.196 ¹	-.071	.216 ¹	.138 ²	-								
8. C Age	.164²	.715 ¹	.059	-.007	.081	.039	.167 ²	-							
9. C Gend	.115	-.137	.097	-.023	-.048	.014	.089	.143 ²	-						
10. C R Stat	.074	.004	-.006	-.005	-.055	.172 ²	.865 ¹	.204 ¹	.128	-					
11. C S.O.	.172²	.208 ¹	.021	-.072	.081	.741 ¹	.133	.110	-.026	.112	-				
12. C Employ	.069	.003	-.070	-.090	-.025	.175 ²	.863 ¹	-.1.1	.138 ²	.999 ¹	.120	-			
13. Health	.132	-.038	-.036	-.004	.090	.166 ²	.002	.147 ²	-.033	.233 ¹	-.122	.199 ¹	-		
14. C Edu	.140	.058	-.001	.507 ¹	-.137	.149 ²	.112	.153 ²	-.046	-.061	-.106	.274 ¹	.110	-	
15. Distance	.096	.007	.018	.074	-.044	-.092	.068	.070	-.051	-.087	.156 ²	-.015	.103	.059	-
16. Close	.390¹	.156 ²	.091	-.020	-.031	.157 ²	-.048	.100	.116	.176 ²	-.033	-.123	.208 ¹	.096	.034
17. Know.	.524¹	-.114	.053	.005	.073	-.094	-.100	.096	.137	.211 ¹	-.061	.272 ¹	.331 ¹	.148 ²	.124
18. Guard	.041	.010	.081	-.035	.061	-.033	.037	.074	.174 ²	-.001	-.066	-.012	.050	.049	.101
19. F-F Child	.041	-.110	.021	-.110	.016	.046	-.074	-.087	.162 ²	.072	.138 ²	.097	-.085	.018	.748 ¹
20. Other C	.091	.211 ¹	.121	-.068	-.144	-.010	-.016	.214 ¹	.195 ¹	.058	.041	.122	-.112	.023	.356 ¹
21. F-F GC	.000	.157 ²	-.031	-.103	-.017	.077	-.111	.166 ²	.183 ¹	.029	.124	.125	-.046	.011	.699 ¹
22. OtherGC	.018	-.071	.028	.006	.014	.061	-.082	-.048	.118	.075	.013	.054	-.124	.025	.289 ¹
23. PhyProb.	.160²	.125	.093	-.021	.054	.143 ²	-.071	-.044	.073	-.062	.159 ²	-.060	.154 ²	.228 ¹	.079
24. MHProb	.210¹	-.028	.114	.032	-.087	.044	-.040	.155 ²	.093	-.031	.015	-.031	-.032	.119	.036
25. AODProb	.170²	-.058	-.004	-.114	.115	.026	-.030	-.054	-.125	-.025	.084	-.022	-.018	.187 ¹	.172 ¹
26. LegalProb	.010	-.112	-.012	-.060	-.041	-.041	-.023	.159 ²	-.034	-.010	-.048	-.013	.205 ¹	.110	.091
27. RelProp	.290¹	-.018	.035	-.020	-.028	.119	-.059	.196 ¹	.119	-.042	.070	-.048	.239 ¹	.211 ¹	.086
28. ParentProb	.242¹	.010	.012	-.063	-.034	.026	-.046	-.008	.261 ¹	-.037	-.003	-.030	-.130	.100	.084
29. Other/None	.257¹	-.077	.001	-.048	-.106	.183 ¹	-.103	.098	-.083	.155 ²	.165 ²	.157 ²	.250 ¹	.285 ¹	.118

Note. Bold type indicates inclusion in initial regression analysis.

¹ Significant at the $p < .01$ level. ² Significant at the $p < .05$ level.

Table 10

Bivariate Correlations Between IGA and Independent Variables, Continued

	16	17	18	19	20	21	22	23	24	25	26	27	28	29
16. Close	-													
17. Know.	.504 ¹	-												
18. Guard	.053	-.022	-											
19. F-F Child	.250 ¹	.002	-.068	-										
20. Other C	.425 ¹	.082	-.088	.546 ¹	-									
21. F-F GC	.216 ¹	.034	-.078	.856 ¹	.488 ¹	-								
22. OtherGC	.205 ¹	.056	-.039	.465 ¹	.516 ¹	.536 ¹	-							
23. PhyProb.	.022	-.082	.023	.021	.008	-.034	-.064	-						
24. MHProb	-.101	-.112	.051	-.003	.033	-.014	-.005	.295 ¹	-					
25. AODProb	-.088	-.226 ¹	.029	.110	-.047	.144 ²	-.037	-.004	.196 ¹	-				
26. LegalProb	.006	-.024	.029	.083	.067	.071	-.103	.090	.086	.142 ²	-			
27. RelProp	-.251 ¹	-.226 ¹	-.129	.003	-.003	-.021	.045	.200 ¹	.303 ¹	.167 ²	.131	-		
28. ParentProb	-.044	.112	-.019	.089	.100	.079	.038	.248 ¹	.260 ¹	.091	.192 ¹	.261 ¹	-	
29. Other/None	.033	.170 ²	.041	-.080	.005	-.017	.032	-.633 ¹	-.370 ¹	-.264 ¹	-.174 ²	-.485 ¹	-.372 ¹	-

¹ Significant at the $p < .01$ level. ² Significant at the $p < .05$ level.

Only variables that were significantly correlated with IGA were included in the regression analyses for Research Questions 2-4, which included: Parent sexual orientation, Emotional closeness, Knowledge of parenting practices, Child age, Child sexual orientation, Child physical problems, Child mental health problems, Child drinking and drug problems, Child relationship problems, Child Parenting problems and Child Other/none problems.

The perceived level of IGA was obtained using the IAS total score, an interval variable, and was conceptualized as an outcome variable (i.e., dependent variable) for most of the analyses. However, IAS was conceptualized as an explanatory variable for the final research question examining experiences of grandparenting. All variables regarding the experiences of grandparenting as measured by the MEG were

conceptualized as outcome variables or dependent variables. For each dimension on the MEG, a score was obtained by summing the items from the positive factors and then subtracting the items from the negative factors.

A power analysis was performed using the statistical program G*Power (Faul, Erdfelder, Lang, & Buchner, 2007; Faul, Erdfelder, Buchner, & Lang, 2009) to detect a medium effect size with regression (.15) (Cohen, 1988). Power was set at .80 and the alpha level at .05. Using the number of predictors initially considered for the regression model ($n = 29$) to ensure sample size was adequate, 123 participants were necessary to meet these standards and adequately answer the research questions involving regression. For the exploratory factor analyses, strict minimum sample size recommendations did not exist (Costello & Osborne, 2005; MacCallum, Widaman, Zhang, & Hong, 1999). MacCallum et al. suggest a sample size of 100 to 200 when factors are well-established, which is appropriate for this study considering these measures have a factor structure suggested in the literature. Based on these suggestions, this study recruited a total of 230 participants. For all of the regression analyses used in this study, the overall R^2 , which provides the total percentage of variance explained by the model that cannot be attributed to random error, was calculated. However, since R^2 can be inflated by the number of variables in the model, the adjusted R^2 was also calculated. The adjusted R^2 provides a percentage of the total variance explained while accounting for the number of variables in the model. Changes in R^2 and adjusted R^2 are reported in Chapter IV and illustrated the amount of variance accounted by each explanatory variable in the model.

In order to better generalize inferences based on the study's sample to the general population, assumptions for the exploratory factor analysis and multiple regression

analysis needed to be met. Exploratory factor analysis is particularly sensitive to outliers, so outlier detection procedures were run and all univariate outliers were deleted to ensure the appropriate factor structure was achieved. One univariate value on the IAS Total score, MEG Symbolic and MEG Behavioral were identified as univariate outliers and deleted. Next, assumptions of linearity and normality are assessed by examining scatterplots, and univariate indicators of skewness and kurtosis. If any of these assumptions are violated, transformation of the data should be considered (Tabachnick & Fidell, 2013). Nonlinear relationships were found among some variables, but these relationships did not display any sort of pattern (e.g., curvilinear), so the assumption of linearity was considered met.

For normality, MEG Affective and MEG Behavioral were considered negatively skewed at the .001 level on the Shapiro-Wilks test. However, Tabachnick and Fidell (2013) note that "...with large samples, the significance level of skewness is not as important as its actual size..." (p. 80). Thus, Bulmer's (1979) rule of thumb for skewness was utilized, and both MEG Affect and MEG Behavior were determined to be highly negatively skewed. Similarly, Cramer (1997) offers a formula for determining a rule of thumb cut off for kurtosis. Neither MEG Affect nor MEG Behavioral were shown to display conclusively positive or negative kurtosis. Thus, these two variables were transformed. A reflect square root transformation was used for MEG Affect, with the new variable no longer being significantly negatively skewed. However, no transformation provided significant improvements for MEG Behavioral, so this variable was left as is which will mean "...the solution is degraded, but may still be worthwhile" (Tabachnick & Fidell, p. 618). In other words, the factor solution for MEG Behavioral may not be as

precise. For the current analyses, this is acceptable since the the factor structure of the Behavioral subscale is not being explored, but rather the overall factor structure of the MEG when accounting for all subscales. Finally, a correlation matrix was examined to confirm some correlations of .30 or higher between the items, indicating factor analysis was an appropriate technique (Tabachnick & Fidell).

For multiple regression analyses, the assumption of independence of responses was controlled through appropriate study design (Osborne & Waters, 2002). Outlier detection on the independent variables were run. One univariate value of child's age was identified and deleted. On the dicotomous categorical variables, Tabachinck and Fidell (2013) cite Rummell (1970) to suggest that variables with a 90 to 10 split between categories (e.g., 91% male, 9% female) should be deleted because any cases in the 10% are likely univariate outliers. Thus, Parent's sexual orientation ($n = 204$, 188 (92.7%) heterosexual, 16 (7.8%) not heterosexual), Child mental health problems ($n = 209$, 192 (91.9%) no, 17 (8.1%) yes), Child drinking and drug problems ($n = 209$, 200 (95.7%) no, 9 (4.3%) yes) and Child parenting problems ($n = 209$, 189 (90.4%) no, 20 (9.6%) yes) were not included in analyses.

Finally, emotional closeness and understanding of child's parenting practices were heavily negatively skewed. Thus, transformations were attempted to improve normality. However, because no transformations substantially improved normality and due to their use being controversial to begin with (Tabachinck & Fidell, 2013), this method was abandoned. Instead, Tabachinck and Fidell suggested an alternative method of changing the outlying scores to less deviant values. Thus, scores of 1 or 2 on emotional closeness (i.e., "not at all close" and "slightly close") were recoded to 3 (i.e., "somewhat

close”). In total, 10 cases were recoded on emotional closeness. Similarly, scores of 1 or 2 on knowledge of child’s parenting practices (i.e., “poorly” and “fairly”) were recoded to 3 (i.e., “good”). In total, 11 cases were recoded on knowledge of parenting practices. Thus, both of these variables remained negatively skewed, but all univariate outliers were eliminated and distribution was vastly improved with these methods. To confirm the assumptions of linearity and homoscedasticity, residual scatterplots were examined. Although non-linearity and heteroscedasticity does not completely invalidate a regression, either violation will weaken the regression findings (Tabachnick & Fidell). Residual scatterplots did not show any conclusive evidence of violation of the assumption of linearity and homoscedasticity. Also, multicollinearity, which occurs when two or more variables are highly correlated (.90 or higher; Tabachnick & Fidell) and therefore account for the same variance in the model, is important to evaluate as it can render a regression useless. No variables included in the multiple regression analyses were correlated above - 0.524.

Data Cleaning and Preliminary Analyses

Considering much of behavioral research relies on self-report measurement, it is critically important to examine the reliability of all measures. Thus, in this study, reliability was assessed through internal consistency, or evaluating Cronbach’s alphas. The Cronbach’s alphas associated with all scales used in this study are presented in Table 11.

Table 11

Internal Consistency Estimates

Measure	α
MEG Cognitive (14 items)	.634
MEG Symbolic (19 items)	.779
MEG Affective (21 items)	.837
MEG Behavioral (23 items)	.952
IAS	
Positive Questions (2 items)	.670
Negative Questions (2 items)	.499
Direct Questions (5 items)	.728
Indirect Score and Direct Questions	.669
ARPPS	
Positive Questions (2 items)	.827
Negative Questions (3 items)	.656
Direct Questions (5 items)	.774
Indirect Score and Direct Questions	.748

The internal consistency of the IAS and ARPPS was difficult to calculate due to combining a direct and indirect measure of ambivalence. Each measure is composed of positive questions, negative questions and direct questions on ambivalence; different concepts are being measured. It is not until the indirect ambivalence subscale score is calculated that the same construct is being measured. Thus, multiple reliability estimates are provided for these measures: positive questions; negative questions; direct questions; and the indirect subscale score with the direct questions, which is the closest representation of a unitary reliability estimate for these measures.

Additionally, multicollinearity was first assessed by looking at the bivariate correlation matrix, which produced no correlations above .757. Typically, a correlation of above .90 becomes problematic (Tabachnick & Fidell, 2013), so for more concrete evidence, multicollinearity can also be assessed by observing the variance inflation factors (VIF), or how much the variance for a predictors is inflated when compared to the estimated variance. Typically, the rule of thumb for evaluating VIF is that any value

higher than 10 may represent redundancy (Gall, Gall, & Borg, 2007). Since no correlation came close to the .90 cut off, VIFs were not assessed. Finally, missing data is common in research and can occur for a number of reasons, including nonresponse and fatigue (Schlomer, Bauman, & Card, 2010). If the amount of missing data is small, is concentrated in a few variables, and is randomly missing, then deletion of the case or variable is an appropriate option (Tabachnick & Fidell). Any participants with more than 10% of the items missing on a particular measure were omitted from the analyses; however, the participant was not automatically omitted for other analyses where the measures were adequately completed.

Statistical Treatment for Each Research Question

- Q1 What are the factor structures and psychometric qualities (e.g., adequate internal consistency reliability) of a unitary scale of intergenerational ambivalence as measured by the Intergenerational Ambivalence Scale (IAS), a scale assessing a specific source of ambivalence as measured by the Ambivalence Regarding Parenting Practices Scale (ARPPS), and the Multidimensional Experiences of Grandparenthood inventories (MEG) when the dimensional scores are utilized?

There was no hypothesis as this was an exploratory question since the IAS and ARPPS were recently created and the MEG's dimensional scores have never been calculated or used.

To assess the factor structure of these measures, three exploratory factor analyses (EFA) were conducted. After completing outlier detection procedures and confirming the data met assumptions for running EFA, a common factor analysis was used to understand the latent factors (Worthington & Whittaker, 2006). Although principal components analysis (PCA) is a common analytic technique in behavioral research, it is not recommended for scale construction (Furr, 2011; Worthington & Whittaker). Multiple extraction methods (e.g., maximum likelihood, principal factors) were utilized to ensure

the best fit for the data. Communality estimates and cumulative explained variance was observed to help determine which extraction method was most appropriate and provided evidence for the number of factors. Higher communality estimates were desired because they indicated more homogeneity, and thus stronger relationships, within the data. Moreover, the importance of each factor was determined by the proportion of total variance accounted for by the factor. After determining the appropriate extraction method, the number of retained factors was confirmed using Kaiser's Rule; all items with eigenvalues above 1.00 were retained. This is not a consistently accurate method, so a scree plot was also examined for a "leveling off" point which provides clear indication of the number of factors.

Next, multiple rotation strategies were considered to maximize interpretability. Oblique rotations are recommended when factors are thought to be correlated, as is the case in the present study, and typically provides the most clarity for interpretation (Furr, 2011). The factor loadings were observed for each of the items on the factors, and any items with a loading lower than .3 were deleted; any items with a loading of .4 or above were considered for inclusion. If cross-loading occurred, any item with less than a .15 *difference* between the two factor loadings from an item's highest factor loading was deleted. If the difference was .15 or higher, then the item was determined to load on the factor with the highest factor loading (Worthington & Whittaker, 2006). A final step in the EFA when doing oblique rotating is observing the correlation coefficients between the factors. When factors are strongly correlated, then researchers can confidently combine scores of each factor into a total score (Furr, 2011). To assess the reliability of

these measures, internal consistency as reported by Cronbach's alpha was obtained for each full scale and extracted factor.

- Q2 What parent-adult child characteristics as reported in the demographic questionnaire account for the most variance in overall intergenerational ambivalence perceived by the parent as measured by the Intergenerational Ambivalence Scale (IAS)?
- H1 Parents whose adult children have successfully obtained adult status or reached adult developmental milestones will experience lower levels of ambivalence.
- H2 Parents who have an adult child with problems perceived as "voluntary" (e.g., drinking or drug problems, problems with the law, and problems with relationships) are expected to report higher levels of ambivalence.
- H3 Geographic proximity (how close a parent and adult child live) is expected to be negatively related to IGA while contact frequency (how often the two are in contact) is expected to be positively related to IGA as experienced by the parent.

To assess these hypotheses, a series of bivariate correlation analyses were conducted and analyzed to determine which variables were significantly correlated with IGA. Only the demographic variables that were significantly related with IGA were used in the multiple regression analyses. Next, a simultaneous multiple regression model was created to determine which variables accounted for a significant portion of the variance in IGA. The predictors that were significantly correlated with IGA were regressed onto IGA (i.e., the IAS total score) in one step. By utilizing multiple regression instead of a series of correlations, unexplained variance in IGA was reduced and nonlinear relationships between predictors and IGA could be examined. Additionally, the relative significance of specific predictors could be assessed with this approach.

- Q3 How much variance in the total level of intergenerational ambivalence perceived by the grandparent can be attributed to ambivalence regarding the adult child's parenting practices as measured by the Ambivalence Regarding Parenting Practices Scale (ARPPS)?

- H1 Ambivalence related to the adult child's parenting practices as measured by the ARPPS will account for a significant portion of variation in the grandparent's reported level of general intergenerational ambivalence as measured by the IAS.

To assess this hypothesis, a hierarchical regression was conducted. Only demographic variables that were significantly related to the IAS score (i.e., IGA) were included in the regression model. A two-step multiple regression was conducted, with all the demographic variables that significantly correlated with IGA included in the final regression model for Question 2 were entered into the model first, followed by the ARPPS score. Hierarchical regression is only used when strong theoretical evidence determines the order of entry and which variables to control in the model. Thus, hierarchical regression was appropriate considering the model from Question 2 was used, which dictated which variables to control. Additionally, this process allowed the unique variance explained by ARPPS to be evaluated when controlling for other variables that explain IGA. To do this, the change in R^2 from step one (just demographic variables) to step two (included ARPPS score while controlling for variance attributed to demographic variables) was examined.

- Q4 How does the level of IGA and ambivalence regarding parenting practices relate to each grandparenting dimension as measured by the Multidimensional Experiences of Grandparenthood inventories (MEG)?
- H1 Grandparents who experience higher levels of IGA with their adult child will express less investment to the grandparenting role as measured by lower scores on the attitudinal/cognitive, affective, and behavioral scales of the MEG.
- H2 Grandparents who experience higher levels of IGA with their adult child will give lower symbolic meaning to her or his role as a grandparent as measured by lower scores on the symbolic scale of the MEG.

To assess these hypotheses, the variance in each dimension (cognitive, behavioral, affective, and symbolic) that could be attributed to the perceived overall level of IGA and ambivalence regarding their adult child's parenting practices was determined through a series of multiple regression analyses. First, only variables that were significantly related to each dimension of the MEG were included in regression analyses. Next, four simultaneous-entry multiple regressions were conducted with the IAS score and the ARPPS score regressed on each of the dimensional scores in the MEG (cognitive, affective, behavioral and symbolic). This process allowed the unique variance explained by the IAS and ARPPS score in each grandparenting dimension to be evaluated. Since multiple tests are being conducted at once, a Bonferroni correction factor was applied to adjust for alpha inflation. Thus, the regression models were only considered significant if they reached the $p < 0.0125$ level (i.e., $.05/4 = .0125$; Pedhazur, 1997).

Summary

This chapter presented the methods and procedures used to explore the relationship between intergenerational ambivalence (IGA) toward an adult child, ambivalence towards an adult child's parenting practices, and various dimensions of grandparenting from an older parent's (i.e., grandparent's) perspective. Specifically, it outlined information about the participants, the recruitment and data collection procedures, and instrumentation, with particular attention given to how the measures were combined and are being used in this study, and statistical analyses. The following chapter will include results of the data cleaning procedures, tests of assumptions, psychometric information and exploratory factor analyses results for each measure, and results for the regression analyses.

CHAPTER IV

RESULTS

This chapter presents the data analysis procedures and results exploring the relationship between intergenerational ambivalence (IGA) toward an adult child, ambivalence towards an adult child's parenting practices, and various dimensions of grandparenting from an older parent's (i.e., grandparent's) perspective. Results presented include data cleaning, descriptive statistics, and the statistical treatment of the four primary research questions. Psychometric information and factor analyses results are reported for the IAS, ARPPS, and the MEG dimensional scales. Second, the relationship between overall IGA and ambivalence regarding an adult's child parenting practices as perceived by the older parent is assessed. Finally, the relationship between the two types of measures for ambivalence and four dimensions (attitudinal/cognitive, behavioral, affective, and symbolic) of grandparenting is examined.

Sample Characteristics

The initial sample included 230 individuals, but due to not meeting inclusion criteria or not completing the study, 20 were removed from the analysis. Thus, the sample used for analysis included 210 grandparents. Participant ages ranged from 46-88 (mean = 68.94, SD = 8.776) and the majority of participants identified as female (Female: $n = 162$, 77.1%; Male: $n = 44$, 21.0%). Additionally, most participants identified as White ($n = 189$, 90%), married or in a domestic partnership ($n = 136$, 64.8%), heterosexual ($n = 188$,

89.5%) and as being in very good physical health ($n = 92, 43.8\%$). Participants represented a range of education levels (range = 2 to 26 years) and had a mean of 2.75 total children (range = 1 to 12, $SD = 1.36$). In addition, 53 participants identified as great-grandparents. A pair of independent-samples t-tests were conducted to compare the IAS and ARPPS scores for paper-pencil administration (IAS: $M = 14.0, SD = 4.27$; ARPPS: $M = 14.44, SD = 4.74$) and online administration (IAS: $M = 13.11, SD = 4.12$; ARPPS: $M = 14.02, SD = 4.34$). There was not a significant difference between the paper-pencil administration group and online administration group for the IAS score ($t(194) = 1.42, p = .157$) or ARPPS score ($t(200) = .628, p = .531$). There was a significant difference in age between the paper-pencil group ($M = 71.87, SD = 8.12$) and the online group ($M = 63.89, SD = 7.52; t(202) = 6.95, p = .000$).

Regarding the adult children thought about throughout the study, reported ages ranged from 18-63 ($M = 41.73$ years, $SD = 8.938$) and most were identified as female (Female: $n = 125, 59.5\%$; Male: $n = 78, 37.1\%$), married or in domestic partnerships ($n = 164, 78.1\%$), employed ($n = 174, 82.9\%$), or heterosexual ($n = 183, 87.1\%$). Adult children's education level ranged from 4 to 24 years (mean = 14.97 years, $SD = 3.027$). Most adult children were reportedly the primary guardian for her or his children (Yes: $n = 169, 80.5\%$; No: $n = 36, 17.1\%$). Sample demographic characteristics are summarized in Tables 12 and 13.

Table 12

Demographic Summary, for Participants (n = 204)

Variable	N	Range	Mean \pm SD
Age (years)	204	46-88	68.94 \pm 8.776
Education (years)	197	2-26	14.74 \pm 3.584
Total Children	205	1-12	2.75 \pm 1.363

Variable	N	%	
Gender	Female	162	77.1%
	Male	44	21%
Ethnicity/Race	African-American/ Black	1	0.5%
	Asian	1	0.5%
	Caucasian/White	189	90%
	Hispanic/Latino	6	2.9%
	Native American	3	1.4%
	Multiracial	3	1.4%
	Other	3	1.4%
Sexual Orientation	Heterosexual	188	89.5%
	Bisexual	9	4.3%
	Gay/Lesbian	1	0.5%
	Other	7	3.3%
Marital Status	Never married	1	0.5%
	Divorced/Separated	24	11.4%
	Committed Dating Relationship	2	1.0%
	Married/Domestic Partnership	136	64.8%
	Widowed	43	20.5%
Health Status	Poor	5	2.4%
	Fair	13	6.2%
	Good	65	31.0%
	Very Good	92	43.8%
	Excellent	31	14.8%
Great-Grandparent Status	Yes	53	25.2%
	No	154	73.3%
Geographic Distance	Same house	11	5.2%
	Same neighborhood	13	6.2%
	15 minute drive	53	25.2%
	15-30 minute drive	35	16.7%
	30-60 minute drive	26	12.4%
	Over an hour drive	69	32.9%

Table 13

Demographic Summary, for Adult Children

Variable	N	Range	Mean \pm SD
Age (years)	198	18-63	41.73 \pm 8.938
Education (years)	193	4-24	14.97 \pm 3.027

Variable	N	%	
Gender	Female	125	59.5%
	Male	78	37.1%
Sexual Orientation	Heterosexual	183	87.1%
	Bisexual	10	4.8%
	Gay/Lesbian	5	2.4%
	Other	7	3.3%
Marital Status	Never married	9	4.3%
	Divorced/Separated	22	10.5%
	Committed Dating Relationship	9	4.3%
	Married/Domestic Partnership	164	78.1%
	Widowed	3	1.4%
Employment Status	Employed	174	82.9%
	Unemployed, looking for job	10	4.8%
	Unemployed, not looking for job	14	6.7%
	Retired/Disabled	9	4.3%
Guardianship	Yes	169	80.5%
	No	36	17.1%
Endorsed Child Problems	Physical Health	48	22.9%
	Mental Health	17	8.1%
	Drinking/Drug	8	4.3%
	Legal	3	1.4%
	Relationship	33	15.7%
	Parenting	20	9.5%
	Other/None	128	61.0%

The majority of grandparents reported living over an hour drive from the adult child ($n = 69$, 32.9%), felt extremely close to the child ($n = 132$, 62.9%), and believed she or he held a very good understanding of how the adult child was parenting her or his grandchildren ($n = 96$, 45.7%). The frequency and type of contact between grandparents and adult children, and grandparents and grandchildren are presented in Table 14 and 15.

Table 14

Contact Frequency with Adult Child and Grandchildren

Frequency	With Adult Child				With Grandchild(ren)			
	Face to Face (n = 206)		Other (n = 205)		Face to Face (n = 206)		Other (n = 205)	
	%	n	%	n	%	n	%	n
Less than once a year or never	1.9%	4	1.0%	2	2.4%	5	4.9%	10
Once a year	3.9%	8	0.5%	1	5.3%	11	2.0%	4
A few times a year	23.8%	49	5.4%	11	24.3%	50	17.6%	36
Monthly	7.3%	15	5.9%	12	6.8%	14	10.2%	21
A few times a month	16.0%	33	9.8%	20	15.0%	31	19.5%	40
Weekly	16.0%	33	22.9%	47	16.0%	33	19.0%	39
A few times a week	19.9%	41	36.1%	74	20.4%	42	18.5%	38
Daily	11.2%	23	18.5%	38	9.7%	30	8.3%	17

Table 15

Other Contact Type with Adult Child and Grandchildren

Other Contact Type	With Adult Child		With Grandchild(ren)	
	%	n	%	n
Text Message	68.1	143	36.7	77
Phone Conversation	92.9	195	88.1	185
Facebook or other social media	23.2	76	19.0	40
Facetime or Skype	21.0	44	24.8	52
Email	59.5	125	21.4	45
Through a third party	11.0	23	13.8	29
Snail Mail	20.5	43	22.4	47
Other	12.4	26	12.4	26

Statistical Treatment

Research Question 1

To address the first research question, a series of exploratory factor analyses were conducted. Each measure is addressed separately.

Intergenerational Ambivalence Scale. An initial unrotated maximum likelihood (ML) factor analysis produced a total of three factors. The number of factors were determined using a scree plot (Figure 2) and using Kaiser's Rule; all factors with eigenvalues above 1.00 were retained.

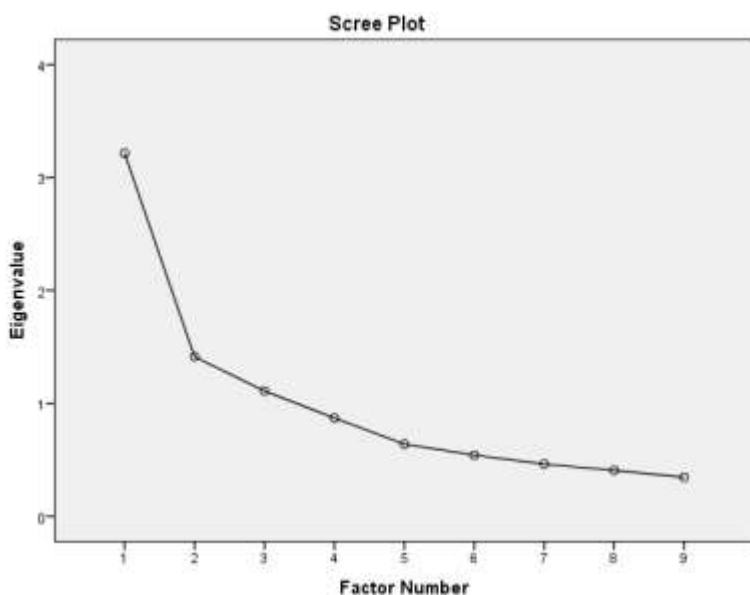


Figure 2. ML Scree Plot for IAS

The scree plot indicates minimal change from 3 to 9 factors, with more drastic change between 1-2 factors; thus it is estimated that there are between 2 to 3 factors. Final communality estimate for this model was 5.74, with the communality of each factor ranging from 1.109 (Factor 3) to 3.214 (Factor 1). The cumulative variation explained by the above three factors model for IAS was quite moderate at 63.74% as seen in Table 16.

Following this initial method, a series of data reduction methods were conducted to determine the most appropriate method for explaining this particular data set, including ML, principal axis factoring (PFA), generalized least squares (GLS), and unweighted least squares (ULS). The results of each are summarized in Table 16.

Table 16

Summary of each Data Reduction Method with IAS, all unrotated

Method	# of Extracted Factors	Cumulative Explained Variation	Communality Estimate
ML	3	63.74%	5.74
PFA	3	63.74%	5.74
GLS	3	63.74%	5.74
ULS	3	63.74%	5.74

Considering identical initial results were produced with each extraction type, PFA was chosen as the extraction method given its higher frequency of use in counseling psychology research (Worthington & Whittaker, 2006). Despite its appropriateness, it was still difficult to interpret the produced factors. Thus, multiple rotation methods were used to aid in interpretation. An oblique Promax rotation produced the most interpretable factors. The pattern matrix is presented in Table 17.

Table 17

Pattern Matrix with a PFA extraction and Promax rotation for IAS

Items	Factor 1 35.71% Explained Variance	Factor 2 15.70% Explained Variance	Factor 3 12.33% Explained Variance
1	.074	-.954	.183
2	-.150	-.462	-.153
3	-.150	.305	.453
4	-.007	-.196	.696
5	.075	.048	.700
6	.344	.261	.076
7	.523	-.062	.205
8	.915	-.116	-.175
9	.507	.282	.053

As observed in Table 17, most of the factor loadings for each factor were well above the .4 inclusion cut off, but two cross-loadings occurred with less than a .15 difference on item 3 and item 6. Thus, the analysis was re-run without these two items. Figure 3 and Table 18 present the results this analysis.

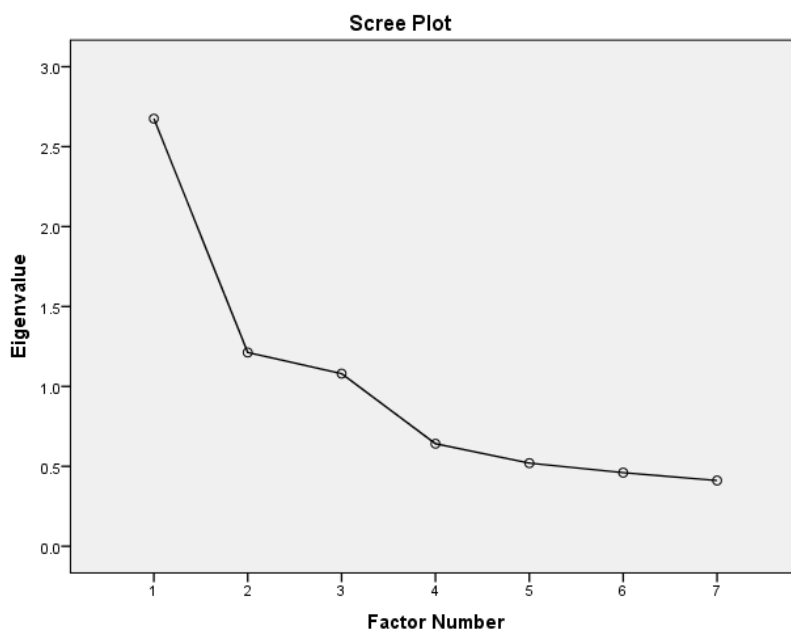


Figure 3. PFA Scree Plot for IAS, without items 3 and 6

Table 18

Pattern Matrix with PFA extraction and Promax rotation, without items 3 and 6

Items	Factor 1 38.22% Explained Variance	Factor 2 17.32% Explained Variance	Factor 3 15.43% Explained Variance
1	.097	.796	.151
2	-.025	.687	-.111
4	-.036	.158	.797
5	.020	-.177	.526
7	.491	-.018	.222
8	.965	.114	-.129
9	.395	-.362	.043

As observed in Table 18, most of the items loaded cleanly on to one factor above the .4 inclusion cut off. However, one cross-loading occurred with less than a .15 difference on item 9. Thus, the analysis was run another time without this item. Figure 4 and Table 19 represents the results this analysis.

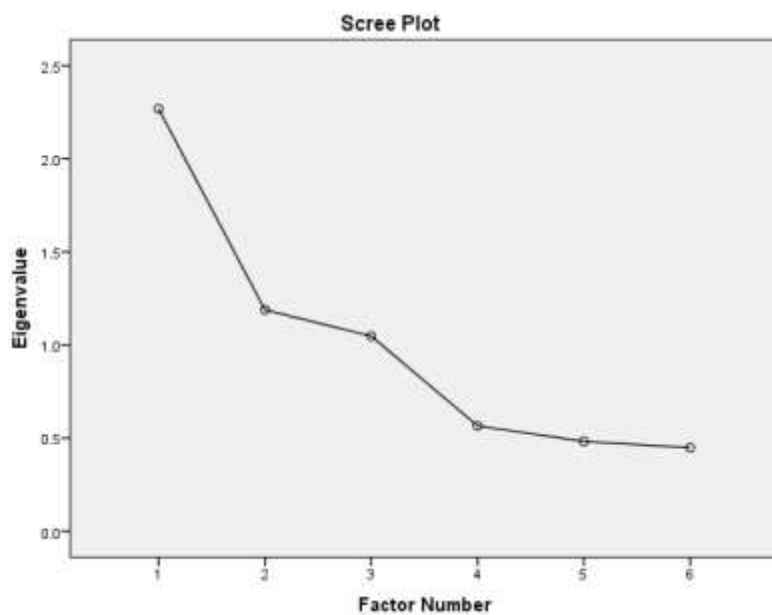


Figure 4. PFA Scree Plot for IAS, without items 3, 6, and 9

Table 19

Pattern Matrix for PFA extraction and Promax rotation, without items 3, 6 and 9

Items	Factor 1	Factor 2	Factor 3
	37.79% Explained Variance	19.81% Explained Variance	17.46% Explained Variance
1	.791*	.073	.114
2	.650*	-.074	-.131
4	.123	-.057	.807*
5	-.180	.010	.514*
7	-.002	.690*	.124
8	.032	.723*	-.131
Internal Consistency	.669 ¹	.626 ¹	.589 ¹

¹As measured by Cronbach's alpha; only include item with a * in each column

With the solution presented in Table 19, all items cleanly loaded above the .4 inclusion cut off. Moreover, this solution produced a lower communality estimate than the full scale at 4.504, but accounted for more total variance at 75.06%. Thus, this structure appears to be the most appropriate. Factor 1, which included both positive indirect questions, accounted for the most variation at 37.79%. Factor 2, which included two of the direct ambivalence questions, accounted for 19.81% of the variation. Finally, Factor 3 included the remaining negative indirect question and direct ambivalence question (“How often have you felt torn in two directions or conflicted about the child?”). The fact that this item loaded on the “negative” factor may illustrate the negative connotation often associated with ambivalence when asked in such a direct manner. Finally, internal consistency estimates are included for each factor and range from .589-.669. Although these are below the recommended .70 for reliability estimates, alpha scores tend to decrease with the number of items. In addition, these fall within the range of

internal consistency estimates found in the IGA literature that was presented in Chapter II, Table 3. Correlation coefficients between the factors are presented in Table 20.

Table 20

Factor Correlation Matrix for IAS

Factor	1	2	3
1	-		
2	-.355	-	
3	-.441	.407	-

The correlations between each of the factors fall within the moderate range (Cohen, 1988). When correlations are strong, then factors can be confidently combined into a total score (Furr, 2011). Thus, factors can likely be combined given the correlation, but with some caution. In addition, the correlations are not so high as to suggest multicollinearity or redundancy.

Ambivalence Regarding Parenting Practices Scale. An initial unrotated maximum likelihood (ML) factor analysis produced a total of three factors. The number of factors were determined using a scree plot (Figure 5) and using Kaiser's Rule; all factors with eigenvalues above 1.00 were retained.

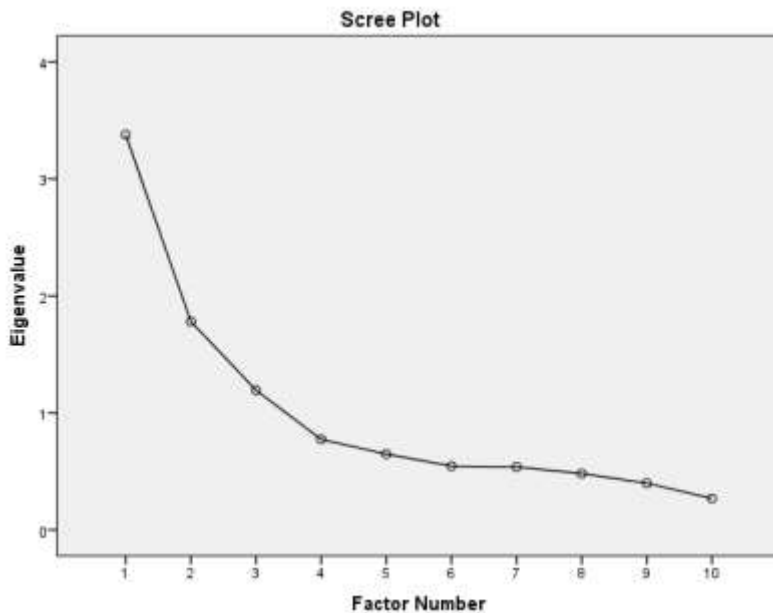


Figure 5. ML Scree Plot for ARPPS

The scree plot indicates minimal change from 4 to 10 factors, with more drastic change between 1-3 factors; thus it is estimated that there are between 3 to 4 factors.

Final communality estimate for this model were 6.351, with the communality of each factor ranging from 1.193 (Factor 3) to 3.377 (Factor 1). The cumulative variation explained by the above three factors was moderate at 63.51% as seen in Table 21.

Following this initial method, a series of data reduction methods were conducted to determine the most appropriate method for explaining this particular data set, including ML, principal axis factoring (PFA), generalized least squares (GLS), and unweighted least squares (ULS). The results of each are summarized in Table 21.

Table 21

Summary of each Data Reduction Method with ARPPS, all unrotated

Method	# of Extracted Factors	Cumulative Explained Variation	Communality Estimate
ML	3	63.51%	6.35
PFA	3	63.51%	6.35
GLS	3	63.51%	6.35
ULS	3	63.51%	6.35

Considering identical initial results were again produced with each extraction type, PFA was chosen given its prevalence in counseling psychology research (Worthington & Whittaker, 2006). Interpretation was difficult from the unrotated solution, so multiple rotation methods were used to aid in interpretation. A Promax rotation produced the most interpretable structure. The final factor structure is displayed in Table 22.

Table 22

Pattern Matrix with a PFA extraction and Promax rotation for ARPPS

Items	Factor 1 33.77% Explained Variance	Factor 2 17.81% Explained Variance	Factor 3 11.93% Explained Variance
1	-.084	.814	.115
2	.084	.878	-.078
3	.100	-.334	.468
4	-.049	-.104	.755
5	.044	.337	.621
6	.657	-.029	-.001
7	.648	-.006	-.067
8	.607	.076	.077
9	.507	.037	.124
10	.713	-.052	-.075

As observed in Table 22, items loaded onto the three factors with loadings above the .4 inclusion cut off. However, item 3 cross-loaded on factor 2 and 3 with less than a

.15 difference. This item was deleted and the analysis was re-run. Figure 6 and Table 23 present this analysis.

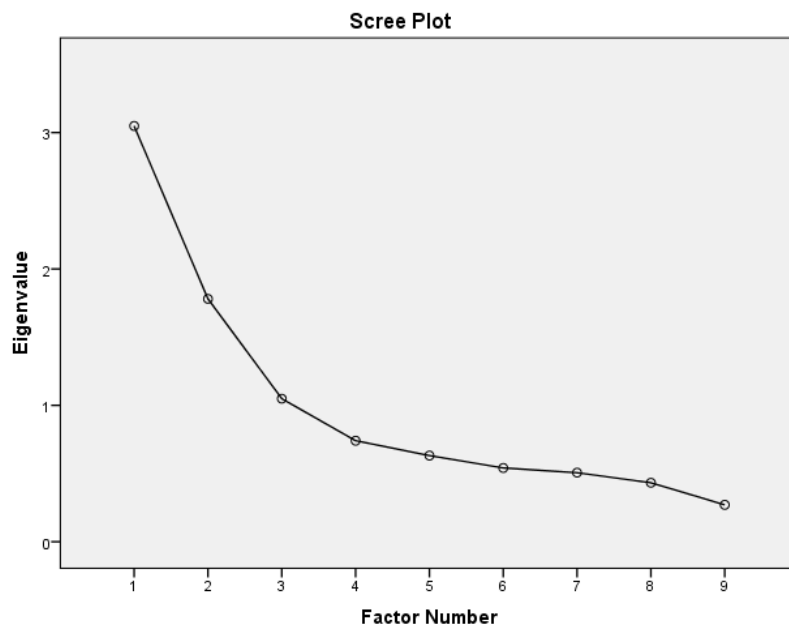


Figure 6. PFA Scree Plot for ARPPS, without item 3

Table 23

Pattern Matrix with PFA extraction and Promax rotation, ARPPS without item 3

Items	Factor 1	Factor 2	Factor 3
	33.87% Explained Variance	19.79% Explained Variance	11.66% Explained Variance
1	-.070	.812*	.074
2	.073	.882*	-.100
4	.028	-.213	.654*
5	.012	.183	.734*
6	.645*	-.040	.016
7	.625*	-.019	-.029
8	.627*	.085	.041
9	.529*	.039	.083
10	.707*	-.051	-.056
Internal Consistency	.763*	.826	.614

¹As measured by Cronbach's alpha; only include item with a * in each column

With the solution presented in Table 23, all items loaded on only one factor above the .4 inclusion cut off. Moreover, this solution produced a lower communality estimate than the full scale at 5.878, but accounted for slightly more total variance at 65.31%.

Thus, this structure appears to be the most appropriate. The factor structure in Table 23 could be expected since the items loaded as anticipated based on previous research.

Factor 1, which included all of the direct ambivalence questions, explained 33.87% of the total variation. Factor 2, the two positive indirect questions, accounted for 19.79% of the total variation. This was the most well-defined factor with both items loading above .80.

Finally, Factor 3 included the two negative indirect questions used in the final analysis and accounted for nearly 12% of the variance. Finally, internal consistency estimates are included for each factor and range from .614-.826. Factor 1 and Factor 2 fall above the rule of thumb of .7 for appropriate internal consistency for research; Factor 3 is below at .614. However, similarly to the IAS, α scores tend to decrease with the number of items

(Pallant, 2013) and this estimate still falls within the range of values found in the IGA literature. Correlation coefficients between the factors are presented in Table 24.

Table 24

Factor Correlation Matrix for ARPPS

Factor	1	2	3
1	-		
2	-.361	-	
3	.352	.143	-

The correlations between Factor 1 and Factor 2, and Factor 1 and Factor 3 fall within the moderate range (Cohen, 1988). Conversely, there seems little to no correlation between Factor 2 and 3. Thus, there is some evidence to suggest that these factors should not be combined into a total score since correlations were not strong (Furr, 2011). On the other hand, there is little evidence to suggest multicollinearity and redundancy given the little correlation between factors.

Multidimensional Experiences of Grandparenthood. An initial unrotated maximum likelihood (ML) factor analysis with the four dimensional scores produced one factor. The initial number of factors extracted were determined using Kaiser's Rule such that all factors with eigenvalues above 1.00 were retained. The scree plot is presented in Figure 7.

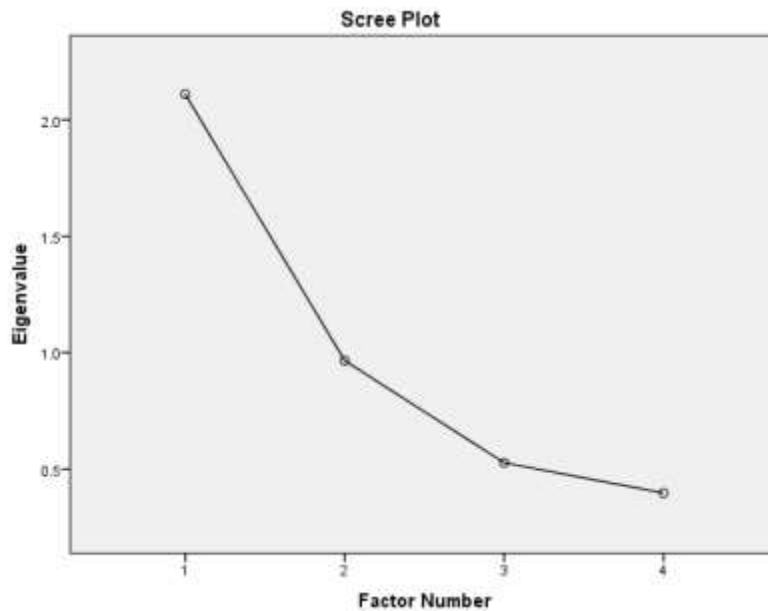


Figure 7. ML Scree Plot for MEG

The scree plot illustrates more drastic change between the first and second factor, with more minimal change from 2-4 factors. Therefore, it is estimated there are between 1 and 2 factors. Using Kaiser's rule, only one factor was retained. The final communality estimate for this model was low at 2.110, but the cumulative variation explained by this factor was actually moderate at 52.76%. Following this initial method, a series of data reduction methods were conducted to determine the most appropriate method for explaining this particular data set, including ML, principal axis factoring (PFA), generalized least squares (GLS), and unweighted least squares (ULS). As previously found, these methods produced identical results. However, PFA produced higher factor loadings and thus was retained. Since only one factor was extracted, the solution cannot be rotated. The factor loadings are presented in Table 25.

Table 25

Factor loadings with a PFA Extraction, unrotated for MEG

Dimension	Factor Loading	Factor Loading (revised)
Cognitive	.249	---
Symbolic	.635	.653
Behavioral	.801	.842
Affective	-.713 ¹	-.658

¹The affect score used was transformed

As observed in Table 25, factor loadings for three dimensions (Symbolic, Behavioral, Affective) were well above the .4 inclusion criteria. However, the factor loading for Cognitive (.249) did not meet the .3 cut-off for inclusion and thus was deleted. The analysis was completed without the cognitive dimension. Again, one factor was found and the scree plot is presented in Figure 8.

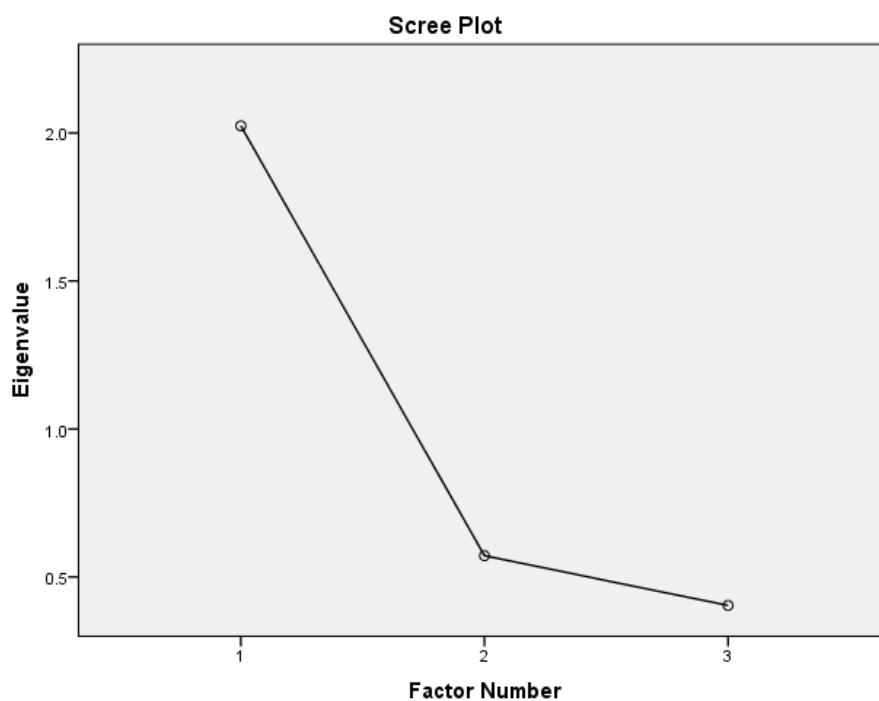


Figure 8. PFA Scree Plot for MEG, revised

Communality estimate for this revised model was 2.024 with a total explained variance of 67.47%; revised factor loadings are also presented in Table 25. Thus, it seems that the behavioral, affective and symbolic dimensions all load on one factor while the cognitive may load on a not well-defined second factor given the change in the scree plot after removing the cognitive dimension. The cognitive dimension is the only dimension to assess commitment to the grandparenting role. In addition, 50% of this dimension assesses the obligations of being a grandparent which could be interpreted as more negative (e.g., “Being a grandparent means giving up some of my privacy”), whereas the other dimensions include less about the potential difficulties of being a grandparent.

Research Question 2

To address the second research question, a simultaneous multiple regression was conducted with the demographic variables that were determined to significantly correlate with the IAS score (Table 10, Chapter III) and that did not present significant outliers. These variables were: emotional closeness, knowledge of parenting practices, child age, child sexual orientation, child physical problems, child relationship problems, and child other/none problems.

Results for the full model are presented in Table 26 and Table 27. For the full model, the $R^2 = 0.384$, meaning that the entered variables account for nearly 39% of the total variance in IGA. Since R^2 can be inflated by the number of variables in the model, the adjusted R^2 was also calculated and adjusted $R^2 = 0.360$. When comparing these two values, it seems the number of predictors only slightly impacts the model.

Table 26

ANOVA Table for Full Model, Demographic Items and IAS

Source	<i>df</i>	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	1286.519	183.788	16.117	.000*
Error	181	2064.003	11.403		
Corrected Total	188	3350.522			

*Significant at the $p < .05$ level

The full model has an F -value of 16.117 with $p < 0.000$, which is significant at the customary $p = .05$ level, so this does appear to be an appropriate model for the data. Next, each variable was examined to determine how much variance it accounted for in the overall model (Table 27).

Table 27

Standardized coefficients, significance levels, and part correlations, for Demographic Items

Variable	B	Std. Error	β	Sig.	95% Confidence Interval for B		Part Correlation	Unique Variance
Intercept	31.251	2.315			26.683	35.819		
Qualitative Closeness	-1.142	.426	-.184	.008*	-1.983	-.302	-.156	2.43%
Knowledge of Parenting	-2.407	.412	-.398	.000*	-3.221	-1.594	-.341	11.63%
Child's Age	-.048	.028	-.101	.094	-.104	.008	-.098	0.96%
Child's S.O.	1.760	.830	.127	.035*	.122	3.399	.124	1.54%
Physical Problems	.319	.766	.032	.678	-1.193	1.831	.024	0.06%
Relationships Problems	.801	.816	.069	.327	-.808	2.411	.057	0.32%
None/Other	-1.043	.745	-.121	.163	-2.512	.426	-.082	0.67%

*Significant at the $p < .05$ level

When controlling for the all other variables in the model, knowledge of parenting ($\beta = -.398$) and qualitative closeness ($\beta = -.184$) make the strongest unique

contributions to the explaining the total IAS score. Moreover, qualitative closeness, knowledge of parenting, and child's sexual orientation all reach the $p < .05$ level, meaning each of these variables are making significant unique contributions to explaining IGA. Knowledge of parenting explains the most variance of the IAS score, accounting for 11.63% of the variance. The first hypothesis for this question posited that parents who perceived their adult children having more "voluntary" problems (e.g., problems with relationships, problems with drinking or drugs) would report higher levels of ambivalence. This hypothesis was not supported, with no significant contribution from either "child relationship problems" (conceptualized as a "voluntary" problem) or "child physical health problems" (conceptualized as an "involuntary" problem). The second hypothesis involved geographic proximity and contact frequency; neither of these variables were significantly related to IGA, so this hypothesis was also not supported.

Research Question 3

For the third research question, a two-step hierarchical regression was conducted with the the regression model from Question 2 entered in the first step and the ARPPS total score entered in the second step. This allowed the unique variance attributed to ambivalence regarding parenting practices to be evaluated while controlling for the variance accounted for demographic variables when assessing intergenerational ambivalence. Results for each model are presented in Table 28.

Table 28

Model Summary, with ARPPS Added in Step 2

Model	R	R ²	Adjusted R ²	SEE	R ² Change	Change Statistics			
						F Change	df1	df2	Sig.
1	.620	.384	.360	3.377	.384	16.117	7	181	.000*
2	.781	.610	.593	2.694	.226	104.486	1	180	.000*

*Significant at the $p < .05$ level

For Model 2, the $R^2 = .610$ and adjusted $R^2 = .593$, meaning that nearly 60% of the total variance in the data can be described by this model. This represents over a 20% increase in explained variance from model 1 (just demographic variables) to model 2 (including ARPPS). Additionally, the model was significant ($p < 0.000$) at the $p = .05$ level, so this does appear to be an appropriate model for the data (Table 29).

Table 29

ANOVA Table for Model 2, with ARPPS

Source	df	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	2044.586	255.573	35.226	.000*
Error	180	1305.936	7.255		
Corrected Total	188	3350.522			

*Significant at the $p < .05$ level

Finally, Table 30 provides evidence for the importance of each variable. The ARPPS score uniquely and significantly accounted for nearly 22.66% of the variance in the IAS total score in the second model. Emotional closeness and knowledge of parenting were significant in this model at the $p < .05$ level, meaning each of these variables are making significant unique contributions to explaining IGA. Thus, the hypothesis for this question, that the ARPPS score would account for a significant portion of the variance in the IAS score, was supported.

Table 30

Standardized coefficients, significance levels, and part correlations for Model 2, Demographic Variables and ARPPS

Variable	B	Std. Error	β	Sig.	95% Confidence Interval for B		Part Correlation	Unique Variance
Intercept	14.934	2.441			10.117	19.750		
Qualitative Closeness	-.787	.341	-.127	.022*	-1.461	-.113	-.107	1.14%
Knowledge of Parenting	-.863	.362	-.143	.018*	-1.577	-.148	-.111	1.23%
Child's Age	-.037	.023	-.078	.106	-.082	.008	-.076	0.58%
Child's S.O.	1.231	.664	.089	.066	-.080	2.542	.086	0.74%
Physical Problems	-.128	.613	-.013	.835	-1.337	1.081	-.010	0.01%
Relationships Problems	.569	.651	.049	.383	-.715	1.854	.041	0.17%
None/Other	-.514	.596	-.060	.390	-1.690	.663	-.040	0.16%
ARPPS	.532	.052	.578	.000*	.429	.653	.476	22.66%

*Significant at the $p < .05$ level

Question 4

The final research question assesses how much variance in each of the MEG dimensions (cognitive, symbolic, behavioral, and affective) could be attributed to the total IAS score and total ARPPS score. First, a series of bivariate correlations were conducted to determine if the IAS and ARPPS score were significantly correlated with each dimension, and thus appropriate to include in a regression analysis. Table 31 is the correlation matrix of these six variables.

Table 31

Correlation Matrix for MEG Dimensions, IAS, and ARPPS

	IAS	ARPPS	Cognitive	Symbolic	Affect ¹	Behavioral
IAS	-					
ARPPS	.736**	-				
Cognitive	-.439**	-.319**	-			
Symbolic	-.046	-.003	.096	-		
Affect ¹	.393**	.330**	-.295**	-.428**	-	
Behavioral	-.118	-.067	.144*	.550**	-.554**	-

¹Transformed variable used (Reflect Square Root). *Significant at the $p < .05$ level. **Significant at the $p < .01$ level

From Table 31, IAS and ARPPS significantly correlate with only the Cognitive and Affective dimension. Thus, only two simultaneous-entry regressions were conducted with the IAS and ARPPS score regressed on the Cognitive and Affective scores. Tables 32, 33, and 34 present the results of these regressions.

Table 32

Model Summary for Cognitive and Affective Models

Model	R	R ²	Adjusted R ²	SEE
Cognitive	.439	.193	.184	5.852
Affective	.397	.158	.149	1.114

For the Cognitive model, the $R^2 = .193$ and adjusted $R^2 = .184$, meaning that over 18% of the total variance in the cognitive dimension on the MEG can be described by the IAS and ARPPS total score. For the Affective model, the $R^2 = .158$ and adjusted $R^2 = .149$, meaning that nearly 15% of the total variance in the affective dimension on the MEG can be described by the IAS and ARPPS total score. Additionally, both models were significant ($p < 0.000$) which exceed the $p < .025$ level suggested by a Bonferroni correction which was applied to adjust for alpha inflation (i.e., $.05/2 = .025$; Pedhazur, 1997).

Table 33

ANOVA Table for Cognitive Dimension

Source	<i>df</i>	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	1535.239	767.619	22.418	.000*
Error	188	6437.378	34.241		
Corrected Total	190	7972.617			

*Significant at the $p < .025$ level

Table 34

ANOVA Table for (Reflect Square Root) Affective Dimension

Source	<i>df</i>	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	43.690	21.845	17.601	.000*
Error	188	233.328	1.241		
Corrected Total	190	277.018			

*Significant at the $p < .025$ level

To assess the unique variance attributed to the IAS and the ARPPS total score in these models, the part correlations were observed from Table 35 and Table 36.

Table 35

Standardized coefficients, significance levels, and part correlations for cognitive model

Variable	B	Std. Error	β	Sig.	95% Confidence Interval for B		Part Correlation	Unique Variance
Intercept	20.668	1.509			17.692	23.645		
IAS	-.684	.149	-.446	.000*	-.977	-.391	-.302	9.12%
ARPPS	.013	.137	.010	.922	-.256	.283	.006	0.004%

*Significant at the $p < .025$ level

Table 36

Standardized coefficients, significance levels, and part correlations for affective model

Variable	B	Std. Error	β	Sig.	95% Confidence Interval for B		Part Correlation	Unique Variance
Intercept	2.259	.287			1.692	2.826		
IAS	.094	.028	.328	.001*	.038	.150	.222	4.93%
ARPPS	.023	.026	.088	.373	-.028	.075	.060	0.36%

*Significant at the $p < .025$ level

The IAS score uniquely and significantly accounted for only 9.12% of the total variance of the cognitive dimension score, while the ARPPS did not significantly contribute to the model. Similarly, the IAS score uniquely and significantly accounted for nearly 5% of the variance in the (reflect square root) affective dimension score and the ARPPS did not significantly contribute. It was hypothesized that grandparents who experience higher levels of IGA would express less investment in the grandparenting role as measured by lower scores on all MEG dimensions. There is evidence to support this hypothesis for the cognitive dimension given that for each unit increase in the Cognitive score, the IAS score drops by -.684. However, this hypothesis was not supported for the affective dimension with the IAS score raising .094 for every unit increase in the (reflect square root) affective score. Multiple regression could not be completed to evaluate the hypothesis for the other two dimensions.

Summary

This chapter presented the data analysis procedures and results from exploring the relationship between intergenerational ambivalence (IGA) toward an adult child, ambivalence towards an adult child's parenting practices, and various dimensions of grandparenting from an older parent's (i.e., grandparent's) perspective. Data cleaning,

descriptive statistics, and the statistical treatment for the four primary research questions was presented. In addition, hypotheses for each research question were addressed. The following chapter will include a discussion of the data results and study limitations, as well as address future research, theoretical, and clinical implications.

CHAPTER V

DISCUSSION

This chapter presents a discussion of the data results, possible implications of the findings, and limitations of the study. First, the rationale, purpose, and specific research questions of the study are provided. Then, the relationships between IGA, ambivalence regarding parenting, the experience of grandparenting, and demographic factors are explored. Third, research and clinical implications and the study's limitations are discussed, followed by final conclusions.

Summary of the Study

As U.S. population demographics shift towards increasing life expectancies, decreasing birth rates, and better quality of life (Antonucci et al., 2007), more individuals are experiencing grandparenting as an identity. These changing population demographics have implications for intergenerational relationships, or relationships across generations, as they now have more time to develop and foster. However, the relationship between an aging parent and her or his adult child, as well as the impact of other relationships on the grandparent identity, have received little research attention. Given changing population demographics and increasing opportunities for long-term intergenerational relationships, understanding grandparenting within the context of intergenerational relationships is a timely and relevant area for research.

Two theoretical frameworks are particularly useful for addressing this gap in the literature: intergenerational ambivalence (IGA) and grandparenthood dimensions. First discussed by Lüscher and Pillemer (1998), IGA is the simultaneous experience of positivity and negativity in the parent-adult child relationship at the socio-cultural (i.e., norms, roles) and individual levels (i.e., cognitions, emotions) that cannot be reconciled. It takes an intergenerational view by acknowledging that generations influence and are influenced by other generations around them (Antonucci et al., 2007). Moreover, IGA has been the most consistently used theory in the research exploring the parent-adult child relationship and was recently recommended as a theory that could be useful for studying grandparenting and aging families (Bates & Taylor, 2013). On the other hand, research on grandparenting is marked by theoretical inconsistency and ambiguity. One lens used to explore the grandparent role that has recently received research attention (e.g., Findler, 2014) is Hurme's (1991) theory on grandparenthood dimensions. This theory conceptualizes a multidimensional grandparent role through four dimensions: attitudinal/cognitive, affective, symbolic, and behavioral.

While these theories, and particularly IGA, are the gold-standard in study with the aging family and parent-adult child relationships, both are limited in terms of measurement. Previously, IGA has been measured with sets of direct or indirect questions despite research that each method should be used to provide a holistic measurement of ambivalence (Lendon et al., 2014). Findler et al. (2013) recently operationalized Hurme's (1991) theory in a set of inventories titled the Multidimensional Experiences of Grandparenthood (MEG), of which more research is needed to provide evidence of its validity and reliability. Another gap in the literature is the limited knowledge related to

the sources of ambivalence or specific contexts related to greater levels of ambivalence (Lettke & Klein, 2004). One possible source of ambivalence briefly mentioned in the literature and relevant for intergenerational relationships is an older parent's ambivalence regarding her/his adult child's parenting practices (Peters et al., 2006). Lastly, few studies consider how IGA between a parent and adult child impact either person's experience of other family roles or relationships (Connidis, 2015); what research does exist suggests IGA between a parent and adult child impacts the grandparenting role (e.g., Mueller & Elder, 2003).

Based on these gaps in the literature, the present study sought to offer a new and parsimonious model for how IGA, its sources, and grandparenting experiences are measured. Importantly, this is one of the only studies that includes both direct and indirect measures of ambivalence within a unitary measure. Providing psychometric information on the combined measure for future research is a critical contribution to a growing literature base that currently has no standard quantitative measure for IGA, and has gone back and forth on the most appropriate way to measure IGA since the theory's formulation in 1998. The results also provide evidence of the MEG's psychometric utility in hopes of contributing to Bates and Taylor's (2013) call to conduct more theoretically grounded research on grandparenting. The MEG is one of the few measures to quantitatively explore grandparenting experiences, but initially did so in a limited, piecemeal fashion by only calculating specific factor scores. The present study provides a model for how to use this measure in a more holistic manner that aligns theory by calculating dimension scores. Moreover, this study presents more evidence to understand how levels of IGA are related to specific relational and social aspects, parenting

practices, and various dimensions of grandparenthood. This knowledge is useful for better understanding the increasing complexity of intergenerational relationships and the role shifts grandparents may be forced to make, such as in providing permanent care to their grandchildren. Four research questions were created to address these gaps:

Q1 What are the factor structures and psychometric qualities (e.g., adequate internal consistency reliability) of a unitary scale of intergenerational ambivalence as measured by the Intergenerational Ambivalence Scale (IAS), a scale assessing a specific source of ambivalence as measured by the Ambivalence Regarding Parenting Practices Scale (ARPPS), and the Multidimensional Experiences of Grandparenthood inventories (MEG) when the dimensional scores are utilized?

There was no hypothesis as this was an exploratory question since the IAS and ARPPS were recently created and the MEG's dimensional scores have never been calculated or used.

Q2 What parent-adult child characteristics as reported in the demographic questionnaire account for the most variance in overall intergenerational ambivalence perceived by the parent as measured by the Intergenerational Ambivalence Scale (IAS)?

H1 Parents whose adult children have successfully obtained adult status or reached adult developmental milestones will experience lower levels of ambivalence.

H2 Parents who have an adult child with problems perceived as "voluntary" (e.g., drinking or drug problems, problems with the law, and problems with relationships) are expected to report higher levels of ambivalence.

H3 Geographic proximity (how close a parent and adult child live) is expected to be negatively related to IGA while contact frequency (how often the two are in contact) is expected to be positively related to IGA as experienced by the parent.

Q3 How much variance in the total level of intergenerational ambivalence perceived by the grandparent can be attributed to ambivalence regarding the adult child's parenting practices as measured by the Ambivalence Regarding Parenting Practices Scale (ARPPS)?

H1 Ambivalence related to the adult child's parenting practices as measured by the ARPPS will account for a significant portion of variation in the

grandparent's reported level of general intergenerational ambivalence as measured by the IAS.

- Q4 How does the level of IGA and ambivalence regarding parenting practices relate to each grandparenting dimension as measured by the Multidimensional Experiences of Grandparenthood inventories (MEG)?
- H1 Grandparents who experience higher levels of IGA with their adult child will express less investment to the grandparenting role as measured by lower scores on the attitudinal/cognitive, affective, and behavioral scales of the MEG.
- H2 Grandparents who experience higher levels of IGA with their adult child will give lower symbolic meaning to her or his role as a grandparent as measured by lower scores on the symbolic scale of the MEG.

Measurement

A primary contribution of this investigation was exploring and providing evidence for novel ways to measure IGA, specific ambivalence, and dimensions of grandparenthood in order to stimulate future research with these constructs since study is currently limited by instruments with low validity and reliability. The first of these contributions was formulating a unitary measure of ambivalence, the IAS, which incorporated the direct and indirect measurement approaches used separately for the past two decades. For the IAS, the final factor solution included six items with three factors. A three-factor structure was likely given that the IAS was compiled of questions that directly asked about ambivalence (i.e., direct questions), and then questions that asked about positive and negative relationship experiences that combined into an indirect composite score (i.e., positive indirect questions and negative indirect questions). The final factor solution was similar with a key difference: factor one included the positive indirect questions; factor two included the direct questions; and factor three included one negative indirect question and one direct question. The third factor included the two

items: “How much does he/she make demands on you?” and “How often have you felt torn in two directions or conflicted about the child?” While the item loadings on the first two factors are easy to interpret based on how the items were combined, this third factor does so less cleanly being that one is an indirect negative question and one a direct question on IGA. Thus, it may highlight the negativity associated with ambivalence when asked about it directly. Also, it is possible that the wording of this direct question by including “conflicted” gives the question a negative valence that the other direct questions do not have. It is important to note that on the initial rotation with all items, Item 3 (the other negative question; “How much does he/she criticize”) did load above .4 on the Factor 3, but it was eliminated due to cross-loading on the factor with the direct questions with only a .13 difference. Thus, here is another example where negative indirect questions may have loaded significantly with direct questions of IGA.

This study is not the first in the literature to find ambivalence and conflict associated or even presented as analogous experiences (e.g., Cooney & Dykstra, 2013). In a recent study, Gilligan, Sutor, Feld, and Pillemer (2015) found negative, indirect questions were “...a primary driving factor in the association between [IGA] and psychological well-being” (p. 273). Moreover, IGA towards children, acknowledged often only through humor in our culture, is taboo and perhaps too threatening to admit as it may seem to comment on one’s efficacy as a parent (Parker, 1997). The experience of ambivalence, however, is not solely about conflict. Lüscher and Pillemer (1998) describe intergenerational ambivalence as the simultaneous experience of both positivity and negativity in the parent-adult child relationship. If participants interpret ambivalence as just an experience of negativity, then the construct is not being measured correctly.

Participants may see relationship quality as an all-or-nothing experience: either the relationship is completely positive, or it has no positivity. Due to this potential bias, future research should consider avoiding using the word “conflicted” in direct questions assessing IGA. The phrase “feel torn in two directions or conflicted” was used in this study due to its use in previous research (see Table 3, Chapter II), but other studies have just used the phrase “feel torn in two directions” with seemingly similar results. The latter wording is recommended in future research using direct and indirect methods. Also, in this study, negative indirect questions and direct questions were presented concurrently. Participants may have continued answering the direct questions with a negative bias and thus skewed results and factor structure. Thus, it may also be beneficial to present indirect and direct questions at different times during administration or intermingle question types. Further research like that of Gilligan et al. which assessed the distinctive impact of positive and negative indirect questions is also warranted given their findings and the findings of the current study.

Nevertheless, factors moderately correlated with each other (Table 20, Chapter IV), which mirrors the findings of Lendon et al. (2014) and Pillemer (2004) that direct and indirect methods produce correlated and distinct response, and should both be used to measure IGA. In other words, the fact that these two measurement types were used and only moderately correlated with each other provide further evidence that IGA is a complex construct that cannot be fully understood using one measurement approach. Studying nuanced relationships requires nuanced, integrated measurement approaches. Also, reliability estimates for the similar question combinations (i.e. positive indirect, negative indirect, and direct) and total IAS (Table 11, Chapter III) matched or were

higher than in previous research. In future research, reliability may be further improved by using indirect question sets that demonstrate higher reliability estimates in the research (see Table 3, Chapter II). The four questions used in current study were chosen because of their extant research support and to keep the total IAS to a minimum number of questions. Adding one or two positive and negative indirect questions would not significantly alter administration time and may provide a clearer distinction between the contribution of direct and indirect methods. Overall, the high reliability estimates provide further evidence that the IAS is a promising instrument that warrants further consideration when measuring IGA and conducting research with grandparents.

A second measurement contribution was creating a method to assess specific ambivalence, something not addressed in previous research. Despite its similarity, the ARPPS factor structure with this sample did not strictly follow the IAS; instead, items cleanly loaded based on the types of questions (positive indirect, negative indirect, or direct). Interestingly, Factor 3 on the ARPPS included both remaining negative indirect questions, both of which referred to demands placed on the grandparent by the adult child. Thus, unlike Peters et al. (2006) who suggested that a parent's ambivalence toward their adult child's parenting was related to different parenting views and difficulty communicating this difference, these results suggest that ambivalence may also be related to the adult child asking more of the parent in terms of caring for their grandchildren and giving parenting advice or support.

Some of these differences may be related to sample differences between Peters et al.'s (2006) study and the current study. In Peters et al., 52% of participants lived in a different state than their adult children and the average age was 75-76. Also, participants

were excluded if they lived in the same house with their adult child. In contrast, the current study's sample was generally younger by at least five years ($M = 68.9$ years) and 65.7% lived within an hour drive of their adult child. Thus, this sample likely had more face-to-face opportunity and perhaps better physical ability to provide care for grandchildren than grandparents in the Peter et al. study. These differences raise an interesting implication for grandparents who are raising grandchildren, given that these differences seem to highlight that ambivalence regarding parenting practices can change with distance and age. Results from this study suggest that grandparents who are providing high levels of parenting support may experience more ambivalence related to demands made on their time to provide care, rather than ambivalence related to differing parenting philosophy. For example, grandparents may feel they have to make too many personal sacrifices of time for the grandparent role, or may feel too physically and/or emotionally spent to provide as much care is demanded by their adult children. Thus, interventions with grandfamilies that facilitate discussion around boundaries, family roles, and support may be more helpful than specific parenting interventions. More research is needed on the different experiences of ambivalence in diverse family compositions to guide interventions for grandparents and their families.

Finally, the MEG inventories are one of the few measures for assessing experiences of grandparenting, but have only previously been used by assessing specific factors within four broad dimension (Findler et al., 2013). This study was the first to calculate composite scores for the cognitive, symbolic, affective, and behavioral dimensions, and one of the first to conceptualize the MEG as a unitary measure of experiences of grandparenting. For the current study, when each composite score was

used, the affective, symbolic, and behavioral dimensions loaded on to a single factor; the cognitive dimension was not included in the final factor model.

There are some unique characteristics of the cognitive dimension that could account for this difference. First, the cognitive dimension directly assesses commitment to the grandparent role, something only obliquely assessed in other dimensions. Additionally, half of the items that make up this dimension have a negative valence by assessing obligation to the role; in other words, this dimension includes more about the potential difficulties of being a grandparent. Finally, the cognitive dimension measures expectations and attitudes towards the role (Hurme, 1991). As reviewed in Chapter II, grandparenthood has at times been referred to as a “roleless role” (Clavan, 1978, p. 351), but extant research shows that grandparents, adult children, and grandchildren all have expectations of the grandparent role which influence each other (e.g., Breheny et al., 2013; Sorenson & Cooper, 2010; Stelle, et al., 2010; Toledo & Brown, 2013). Thus, unlike the other three dimensions that measure internal/personal experiences or meanings, the cognitive dimension uniquely measures an interaction of internal and external expectations.

IGA Sources and Contexts

Results indicated that child sexual orientation, emotional closeness, and knowledge of child parenting practices were the only variables making significant contributions to understanding IGA. However, results related to child sexual orientation should be interpreted with caution due to the fact that only 10.5% of adult children were identified by their parents as identifying as non-heterosexual. In some ways, these findings do not mirror prior research. Table 4 in Chapter II outlines the correlates of

increased IGA for parents. Poor child physical health, poor parent physical health, and child's financial problems have consistently related to higher levels of IGA, but were not found to significantly account for IGA in this model. Again, this may be related to the specific sample. Less than 10% of participants identified their health as "poor" or "fair" and child physical health problems were only identified by 22% of participants.

Moreover, child financial problems were not directly assessed. Instead, participants were asked about their child's employment status and it was hypothesized that participants whose children were unemployed would experience more IGA. Financial problems, however, do not directly relate to employment and thus this study cannot provide comment on how an adult child's financial problems may impact IGA. Future research should ask more directly about financial problems, perhaps like how the current study assessed child physical health problems.

Moreover, gender and gender interactions are often assessed in IGA research (e.g., Fingerman et al., 2008; Guo et al., 2013; Pillemer et al., 2012), but showed no influence here. Again, this may be explained by the sample since women made up over 75% of the sample. Interestingly, geographic proximity and contact frequency, both of which have mixed findings on the impact of these factors on IGA, was not found to significantly explain IGA in this study. It may be helpful in future research to provide more options to identify distance when grandparents live over an hour away given the differences found between this sample and Peters et al.'s sample regarding geographic proximity. While this study hoped to add to the literature by providing more clarity on how these factors impact IGA, it instead added to the uncertainty and interactional complexity characteristic of the IGA literature.

How IGA was measured in this study, with a composite score, could account for some of these differences when compared to previous research. Lendon et al. (2014) assessed IGA using both direct and indirect methods, and then compared the influence of various independent variables on the two IGA scores. Only child's marital status and parent's perceived similarity with children significantly accounted for IGA in both the direct and indirect model. Frequency of contact was significant for the indirect method, but not the direct method. Likely, using a composite IGA score provides a more holistic illustration of IGA by capturing the distinct, yet related aspects typically studied using only one measurement type (Lendon et al., 2014; Sutor et al., 2011).

This is the only known study in the IGA literature that assesses great-grandparent status and IGA. It was initially believed that being a great-grandparent would make it too complex to evaluate the relationship with grandchildren because it adds another relationship dynamic; however, great-grandparent status was not correlated with IAS ($r = .058$; $p = .423$). Additionally, this was one of the few quantitative studies to assess the impact of an adult child's sexual orientation on IGA, albeit the small representation of non-heterosexual sexual identity. Previous research suggests that parents do feel ambivalent towards their adult children who identify as gay or lesbian (e.g., Cohler, 2004; Connidis, 2003). Reczek (2016) analyzed interviews from gay and lesbian adults to observe their perceptions of IGA experienced by their own families and those of their partner. Seventy percent of respondents discussed "overt perceived ambivalence" from family members by their co-occurring expressions of love and acceptance, and disapproval or conflict. Of course, there is also a plethora of research available based on intergenerational relationships after an adult child comes out. For example, Baiocco and

colleagues (2015) studied the factors that contribute to a parent's negative response to their young adult child's coming out, one of which was strong traditional values. We know that perceived value similarity can predict lower levels of IGA from parents, particularly mothers, towards their adult children (Pillemer et al., 2012). Thus, if parents see their child's coming out as a departure from a similar value structure, then it seems likely that IGA would be higher.

Further evidence of a relationship between child's sexual orientation and IGA is provided by Bertone and Franchi (2014) who conducted a qualitative study that seems to closely speak to IGA. Their exploration illustrates how parents who strongly identify as Catholic, and are thus influenced by the Catholic Church's stance on sexual minorities, navigate her or his child's coming out process. They note: "Parents' strategies show us the possibilities of combining contradictory elements of different cultural repertoires...[and] proves useful for looking beyond what appears in public discourse as an irreconcilable opposition" (Bertone & Franchi, p. 60) between the LGBT community and the Catholic Church. In other words, this might model how parents navigate IGA in the relationship with their adult children.

Another unique contribution of this study was to assess a specific aspect of ambivalence, ambivalence related to parenting practices. In fact, ambivalence related specifically to parenting accounted for 20% more variance in IGA when controlling for variables previously shown to account for IGA in the study. Thus, these findings provide evidence for Peters et al.'s (2006) assertion that "...parenting is an area fraught with ambivalent perceptions" (p. 549). In addition to the ARPPS score, a self-report evaluation of understanding of parenting practices was obtained and included as a check to assess

how knowledgeable parents felt evaluating their ambivalence related to their adult child's parenting. Knowledge of parenting significantly accounted for IGA in both models, and may speak to the frequency of interaction between a parent and adult child. To have a better understanding of their adult child's parenting, a parent likely needs to spend more time (either face-to-face or in other ways) with her or his child; contact frequency and geographic proximity are identified in Table 4 (Chapter II) as factors that often contribute IGA. Thus, it may be helpful in future research to assess *how* parents learn about their child's parenting to include so this can be incorporated into measurements of specific ambivalences.

Dimensions of Grandparenthood

A final contribution of this study was to examine how an individual's experience of being a grandparent is impacted by levels of IGA in the relationship with their adult child. Bates and Taylor (2013) strongly urged researchers to use IGA as a theoretical base from which to study grandparenting, but this is the only known study to follow this recommendation. Bivariate correlations showed no relationship between the behavioral and symbolic dimensions with IGA, so these dimensions were not included in a regression analysis (Table 31, Chapter IV). For both the cognitive and affective dimensions, IGA accounted for a significant portion of the variance in each dimension. The relationship between IGA and affective experiences is difficult to interpret since the IGA standardized coefficient was so slight ($B = .094$). On the other hand, as the cognitive score increased, the IAS score decreased. Higher scores on the cognitive dimension means strongly agreeing with questions such as, "I am highly motivated to fulfill my role as grandparent" or "I have a strong sense of commitment to my role as grandparent,"

while simultaneously disagreeing with items such as, “Being a grandparent sometimes mean compromising my values and principles.” Thus, findings suggest that lower levels of IGA in a parent-adult child relationship as perceived by a parent accounts for greater commitment to the grandparent role.

On the one hand, individuals whose relationships with their adult children are marked by positivity have more devotion in their relationships with their grandchildren. This may be an expected relationship. Yet, on the other hand, individuals who also experience lower IGA on the other side of the continuum by experiencing a parent-adult child relationship marked by negativity and conflict also demonstrate more devotion to their grandparenting role. One example of this may be grandparents who are raising their grandchildren due to their adult child being unfit to parent. Currently, this study cannot assess if these differences are related to experiencing more positivity or more negativity the parent-adult child relationship; this would be an important area for future research. Finally, ambivalence related to parenting practices showed no impact on an individual’s experience of grandparenting in this study.

A relationship was expected between the behavioral dimension and IGA due to Bowers and Myers (1999) research that showed grandparents who took care of their grandchildren part-time experienced high levels of satisfaction in their grandparenting role. While IGA and the behavioral dimension were slightly negatively correlated ($r = -.118$), this was not significant and thus a regression analysis was not conducted. When looking at Table 5 (Chapter II), the grandparenting styles that may experiences IGA with their adult children do so because of serving in a disciplinary role for their grandchildren. The behavioral dimension on the MEG does not include any item referring to providing

discipline, which could be one reason why no relationship was found between this dimension and IGA.

Research Implications

The main contribution of this study is related to measurement of IGA. As one of the few studies to combine direct and indirect methods, multiple directions for future research arose that could further address Lendon et al.'s (2014) recommendation to use both modalities simultaneously. First, it may be important to further assess the presentation of indirect negative questions with direct questions. In this study, these items cross-loaded or loaded cleanly on one factor together. Ambivalence is commonly associated with negativity or conflict in the literature (e.g., Cooney & Dykstra, 2013; Lüscher, 2002) and largely in society (Parker, 1997), so it is not surprising that participants may approach a direct question on IGA, like “To what degree do you have very mixed feelings toward the child?” with a negative valence. Future research that explored how to present these questions in such a way to still capture the irreconcilable nature of ambivalence asked about in a direct question is warranted.

For nearly two decades, researchers have called for studies addressing specific ambivalence between a parent and adult child, and this is still a needed area for further exploration. This study provided a nascent model for how to quantitatively assess ambivalence related to a specific aspect of a parent-adult child relationship, ambivalence related to parenting practices, which will hopefully inspire IGA researchers to more intricately explore IGA and intergenerational relationships. Given evidence of ARPPS' psychometric soundness (Table 11; $\alpha = .748$), it can be used as an appropriate model for future measures assessing specific ambivalences between a parent and adult child. Future

research exploring the validity of this instrumentation method is recommended, specifically the current study's approach of simply modifying general IGA questions. Next, expanding this method to study other aspects of a parent-adult child relationship, such as navigating a parent's transition to long-term care, when adult children become caregivers for their parents, or when an older parent starts a new romantic relationship after being widowed or divorced, would add to the literature on IGA in new ways (Connidis, 2015).

There are also research implications for how the MEG was utilized in this study. To this point, the MEG is one of the few measures to operationalize a theory on grandparenting (Findler, 2014; Findler et al., 2013). Bates and Taylor (2013) found that nearly 40% of studies on grandparenting have not delineated a theoretical framework, perhaps due to the difficulty in operationalizing grandparenting theories. The MEG, and the composite scores for each dimension as calculated in this study, could provide a straightforward, adaptable measure for research on grandparenting. More evidence is needed to support the use of composite scores and the MEG overall given its recent creation.

Regarding IGA, assessing the impact of technology on contact frequency and IGA may be an important avenue of research. In this study, phone conversations still accounted for the highest percentage of non-face to face contact (Table 15, Chapter IV; 92.9% with adult child, 88.1% with grandchild), followed by text messaging (68.1% with adult child, 36.7% with grandchild). However, the next most frequent contact type was different for adult children (email, 59.5%) and grandchildren (Facetime or Skype, 24.8%). Moreover, more participants reported contact with their adult child over social

media (23.2%) or Facetime/Skype (21%) than snail mail (20.5%). With findings on IGA and contact frequency often being inconsistent (Table 4, Chapter II), studies that assess the impact technology and contact frequency on IGA and the grandparent-grandchild relationship could be a ripe area for future exploration. In particular, studies that assess how technology moderates the impact IGA has on a grandparent-grandchild relationship would be valuable and timely.

Furthermore, with this study showing that specific ambivalence related to parenting practices does account for a significant portion of overall levels of IGA, more research is needed to continue exploring this relationship. Although beyond the scope of this study, incorporating the substantial body of literature on parenting styles, behaviors, attitudes, and attributes would likely be helpful in providing a theoretical foundation and beginning to bridge the existing literature on parenting and intergenerational relationships. In particular, this study would serve as a firm foundation from which to assess how the parenting styles grandparents adopted when rearing their now adult children related to current levels of IGA and experiences of grandparenting.

A number of implications are relevant for the study of grandparenting and older adults as well. The sample of this study was very homogenous: most participants were White, married, heterosexual, educated women. Future research that actively recruits a more diverse sample would be invaluable. First, recruiting at organizations for LGBT older adults or those in more ethnically-diverse areas could be helpful. It should be noted that grandparents who are racial/ethnic minorities may have less access to community centers or resources. Similarly, LGBT older adults may not feel comfortable or safe at a community center. Thus, in both cases, targeting recruitment at known congregating

points in the community (i.e., churches, community events) would be helpful in creating more generalizable research. An additional way of increasing the sample's diversity would be to provide materials translated in to a variety of languages. Family dynamics and the experiences of family roles is founded in cultural experience; by only providing surveys in the dominant language, research fails to capture the unique experience of linguistically diverse older adults.

Overall, the literature base on grandfathering, as opposed to grandparenting or grandmothering, is quite small and in early stages of exploration (Bates, 2009). Since gender is often a characteristic examined in the literature on IGA, future intergenerational research should explore the likely unique experiences of grandfathers. As noted in Chapter III, many older men were invited to participate and declined. Thus, targeting organizations or centers where there is an increased opportunity for inviting older men, such as VAs, should be considered in future research.

Finally, this study and others that begin to explore IGA and grandparenting can inform the research on families with non-traditional childcare arrangements, particularly custodial grandparents who find themselves simultaneously in the role of parent and grandparent. How do custodial grandparents navigate both of these roles in the relationship with one grandchild? Do they feel more like a parent, a grandparent, or a third, integrated role? Future research exploring the intersectionality of parenting and grandparenting for older adults would begin answering these questions and help the field better understand this role.

The methodology of this study is unique in that it employs online *and* paper-pencil surveys, intended to be more accessible to a wide age range. An independent

samples *t*-test showed that in fact those who completed a paper-pencil survey were significantly older than those who completed an online survey. Interestingly, there is limited research on different methodologies used with an older adult population (J. Weil, personal communication, September 29, 2014). While this study found no significant relationship between any of the outcome variables and administration type, the study of older adults could greatly benefit from a systematic review of methods and more attention to how different methods impact research outcomes. Also, given the primary researcher's experience during recruitment of hearing the unique stories of older adults, it is recommended in the future to use mixed methods to capture the experiences and voice of grandparents while also generating generalizable, quantitative data that is desperately needed in the field of grandparenting.

Clinical Implications

This study and the exploration of IGA, parenting, and grandparenting have implications for counseling psychology and clinical work. First, attending to ambivalence is a core tenant in many psychotherapeutic interventions and theories, from psychoanalytic and psychodynamic theory to motivational interviewing to Erikson's psychosocial stages of development (Erikson, 1968; Miller & Rollnick, 2012; Parker, 1995, 1997). Thus, using IGA to study intergenerational relationships, and now grandparenting, may increase the applicability of research findings given that many psychotherapists already integrate ambivalence into conceptualization and treatment planning. The present study can begin to inform clinical work with families as individuals transition between roles, age, and become part of a multi-generational family structure. Again, this may be particularly important with grandparents who are temporary or

permanent custodial guardians for their grandchildren due to the need to shift and adapt to familiar, yet increasingly complex roles and relationships.

Grandparenting, a role that often is attributed to graying hair, old age, and illness (Crawford & Bhattacharya, 2014), is actually a salient role for many middle-aged adults; in the current study, the age range for participants started at age 46 (Table 12; Chapter IV). Counseling psychology is preventative, strengths-based and focuses on lifespan development, adjustment, and normative transitions (Gelso, Williams, & Fretz, 2014). Thus, a salient theme in therapy for middle to older adults may be working through developmental stages and adjustment to the grandparent role, a role expected to be held by one-third of adults in the U.S. by 2020 (Francese, 2011). Research shows, however, that although the role of grandparent is incredibly salient, the role of parent and other social identities continue to be integral for older adults (Reitzes & Mutran, 2004). Thus, having an awareness and understanding of how these roles may interact and coexist, in much the same way this study addresses, is helpful for psychotherapists working with middle-aged and older adults.

Finally, counseling psychology deeply values the promotion of social justice and empowerment of marginalized groups, including sexual minorities (Gelso et al., 2014). This study cautiously indicates that an adult child's sexual orientation may impact levels of parental IGA. Other studies provide evidence of this relationship, and also illustrate how parents may navigate the irreconcilability of their values and their adult children's sexuality, perhaps modelling a way society can foster an environment of acceptance (e.g., Bertone & Franchi, 2014). Counseling psychologists can use this awareness and deeper understanding of IGA to help families develop a tolerance for this ambivalence

characteristic of parent-adult child relationships, rather than assuming a “flawed” relationship because of conflict. In other words, a deeper awareness of the specific forms of IGA can normalize relational dynamics by asserting that “...intergenerational relations generate ambivalences” (Lüscher & Pillemer, 1998, p. 414), and help families move through conflict and disunion to a sense of understanding and greater connectedness. Finally, custodial grandparents often face legal, financial, health, and social barriers while caring for their grandchildren (Hayslip & Kaminski, 2008; Toledo & Brown, 2013). They may be managing chronic health conditions, be on a fixed income, and are now charged with raising a child they did not plan to raise. In many ways, the role of custodial grandparent is a marginalized role, a role that often has to fight against the same social structure which also implies they have a responsibility to care for their grandchildren. Clinical for grandparents raising their grandchildren undoubtedly aligns with counseling psychology’s value and mission of social justice and advocacy.

Limitations

While this study contributed to the literature in a number of novel ways, its findings are limited. The generalization of this study’s findings is restricted based on the largely homogenous sample. The overwhelming majority of participants were White, heterosexual, married women with at least a high school education. As outlined in Chapter II, intergenerational relationships and grandparenting norms and realities are cross-culturally diverse, so this study misses many of the unique experiences of diverse older adults and their families. In addition, the study required participants to self-select, which could have introduced bias into the results. Given these limitations, results

regarding the theory of IGA, the factors that relate to IGA, and experiences of grandparenting should be generalized with caution.

There were also a number of limitations related to measurement. First, a major contribution of this work including the inclusion of novel instrumentation methods; however, this is also a limitation due to the little information available regarding their validity and psychometric acceptability. Due to this, there are a number of suggested changes for wording questions (i.e., not using “conflicted” in direct questions) as well as considering a different order for which to present question types. Second, this study only collected the older adult’s perspectives on intergenerational relationships and ambivalence due to constraints in time and resources, thereby ignoring the recommendations of Lettke and Klein (2004) to collect multiple perspectives when studying intergenerational relationships. In doing so, the study relies on individual’s to self-report on her or his experiences, which can be especially difficult when being asked about potentially sensitive experiences like ambivalence. If conducted again, this study should consider assessing the adult child’s perspective of their parent’s ambivalence. Additionally, including the grandchild’s perspective would also provide an outside perspective on the grandparent-adult child relationship while also conducting research that is more multi-generational. Nevertheless, future research can use these new methods in research with more than one perspective.

Multiple variables were non-normally distributed, most of which were heavily negatively skewed with this sample, including: emotional closeness, knowledge of parenting, MEG Behavioral, and MEG Affective. Higher scores on these variables all indicated more involvement or positivity: more emotional closeness, greater knowledge

of parenting, more behavioral investment with grandchildren, and more positive affective experience as a grandparent. It is not surprising that participants would respond in a more self-favorable way given the high face validity and self-report nature of the instruments. Skewness was improved during preliminary analysis, but was not completely corrected so it is likely that these response patterns skewed analyses. Despite the anonymity of responses, social desirability seemed to impact these results in some way. Researchers may partially account for this by including reports of these experiences from multiple sources (e.g., spouse, adult children, grandchildren) and asking questions that are less face valid. A mixed methods approach would also address social desirability by allowing older adults, adult children, and grandchildren to reflect on their relationships in a number of different ways.

Conclusions

With the increase in life expectancy and diversifying of family structures, the study of intergenerational relationships, dynamics, and roles is a pertinent and timely area of study (Antonucci et al., 2007; Bearegard et al., 2009). To this point, there is a broad, quite general literature base on intergenerational relationships, particularly using IGA as a theoretical frame (e.g., Birditt et al., 2010; Fingerman et al., 2008). While the same can be said of the scope of research on grandparenting, this body of literature is marked by theoretical inconsistency (Bates & Taylor, 2013). Thus, this study sought to fill the gap by providing research on new methods to assess IGA, specific sources of IGA, and how IGA impacts the experiences of intergenerational roles like grandparenting. In Chapter II, a case study of Herb & Maria's family was used to illustrate the complexity and fluidity of intergenerational relationships, and also the difficulty in understanding these

relationships with the existing literature. By combining direct and indirect measures of IGA, further exploring factors related to IGA, investigating the impact of specific ambivalence towards parenting practices, and considering the impact of each of these on an individual's multi-dimensional experience of grandparenting, this study begins integrating previous research so that intricate intergenerational relationships can be better understood. Specifically, an adult child's sexual orientation and a parent's ambivalence regarding a child's parenting practices were shown to account for significant portions of overall IGA. Higher levels of IGA in a parent-adult child relationship were also shown to account for lower expectations and commitment to the grandparent role. These results are important for deepening our understanding of the shifting, intertwined nature of family relationships.

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APPENDIX A

**UNIVERSITY OF NORTHERN COLORADO
INSTITUTIONAL REVIEW BOARD**



Institutional Review Board

DATE: November 24, 2014

TO: Janae Sones
FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [682106-1] Intergenerational Ambivalence, Parenting Practices, and the Impact on Grandparenthood Dimensions

SUBMISSION TYPE: New Project

ACTION: APPROVAL/VERIFICATION OF
EXEMPT STATUS DECISION DATE: November 20, 2014

Thank you for your submission of New Project materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

Hello Janae,

Thank you for this exceptionally well prepared IRB application. Your study is approved, however, there is updated contact information which needs to be placed in the final sentence of the last paragraph of the Consent. The following needs to be included following "please contact": Sherry May, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, 970-351-1910.

I trust you to add this and will not hold up your approval. Good luck with your research. Sincerely,

Nancy White, PhD, IRB Co-Chair

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Sherry May at 970-351-1910 or Sherry.May@unco.edu. Please include your project title and reference number in all correspondence with this committee.

APPENDIX B
INVITATION TO PARTICIPATE IN STUDY

ONLINE RECRUITMENT EMAIL

Dear Grandparent,

My name is Janae Sones and I am completing a study about grandparents and family relationships. If you are a grandparent with at least one grandchild that is eighteen months or older, please consider taking a few moments to fill out a brief survey about your thoughts about the relationship with one of your adult child, your adult child's parenting and what it is like being a grandparent. The survey should not take longer than 25-30 minutes to complete and your participation will help others and me understand more about how family relationships impact each other.

For each participant who completes the survey across the multiple research studies linked with this project, an average of \$5.00 will be donated for each participant up to \$150 to a non-profit organization promoting the importance of grandparents and the grandparenting role.

Please click on the link below to participate...

Survey Link

If you have any questions or would like additional information, please contact me at: Janae.Sones@unco.edu or [TELEPHONE NUMBER]

Thank you,
Janae Sones

PAPER-PENCIL RECRUITMENT FLYER

Dear Grandparent,

My name is Janae Sones and I am completing a study about grandparents and family relationships. If you are a grandparent with at least one grandchild that is eighteen months old or older, please consider taking a few moments to fill out a brief survey about your thoughts about the relationship with one of your adult child, your adult child's parenting, and what it is like being a grandparent. The survey should not take longer than 25-30 minutes to complete and your participation will help others and me understand more about how family relationships impact each other.

For each participant who completes the survey across the multiple research studies linked with this project, an average of \$5.00 will be donated for each participant up to \$150 to a non-profit organization promoting the importance of grandparents and the grandparenting role.

Please fill out the surveys enclosed in this envelope. When you are complete, please take the consent document so you have my contact information, put the three surveys back in the envelope, seal it, and give it back to me or drop it in the nearest mailbox.

If you have any questions or would like additional information, please contact me at: Janae.Sones@unco.edu or [TELEPHONE NUMBER]

Thank you,
Janae Sones

APPENDIX C
INFORMED CONSENT



CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Project Title: Exploration of Intergenerational Ambivalence, Parenting Practices, and the Impact on Grandparenthood Dimensions

Researcher: Janae Sones, B.A.
E-mail: Janae.sones@unco.edu

Research Advisor: Brian Johnson, Ph.D.
Email: brian.johnson@unco.edu

The primary purpose of this study is to explore the relationships between a grandparent's perceived intergenerational ambivalence, ambivalence regarding the parenting practices of their adult child, and their experience of grandparenting. To participate in this study, you will be asked to complete three surveys and a brief demographic form. Your total participation should be between 25 and 30 minutes.

At the end of the survey, I would be happy to answer any questions you may have. In order to ensure your anonymity, please do not write or type your name on any of the forms so it is impossible to link you to a specific questionnaire. I will take every precaution in order to protect the confidentiality of the information you provide.

Potential risks in this project are minimal. By participating, you will be asked to recall relationships, attitudes, and personal experiences, which may be an emotional process. The harm is in not knowing how to express or process these emotions once they arise. This risk is not expected to be any greater than the risk involving dealing with difficult relationships in everyday life. Should some uncomfortable emotions come up for you, and you wish to seek counseling after completion of this survey, I can provide you with a resource. Though no financial compensation will be provided, for each participant who completes the survey across the multiple research studies linked with this project, an average of \$5.00 will be donated for each participant up to \$150 to a non-profit organization promoting the importance of grandparents and the grandparenting role.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the Sherry May, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, 970-351-1910.

If you have any questions or concerns, please do not hesitate to ask me in person or contact me via email or phone.

By completing these questionnaires, you are providing your consent to participate in the study. Thank you for participating.

Sincerely,

Janae R. Sones, B.A.

APPENDIX D
DEBRIEFING STATEMENT

Thank you for participating in this study about your family relationships and your experience as a grandparent. Should you have any questions or comments about the study, please feel free to contact the primary researcher, Janae Sones, at janae.sones@unco.edu.

Sometimes, answering questions about yourself or your family can be distressing. If you are experiencing distress and would like to talk to someone, please consider contacting a therapist. The following website is a national listing for therapists so you can be sure to find someone in your area.

PsychologyToday.com

<http://www.psychologytoday.com/>

APPENDIX E
DEMOGRAPHIC QUESTIONNAIRE

Demographic Questionnaire

1. Your Age: _____
2. Your Gender: Male _____
Female _____
Other _____
3. Ethnicity/Race: African-American/Black _____
Asian _____
Caucasian/White _____
Hispanic/Latino _____
Native American _____
Native Hawaiian/Pacific Islander _____
Multiracial _____
Other _____
4. Your sexual orientation:
Bisexual _____
Gay/Lesbian _____
Heterosexual _____
Other _____
5. What is your relationship status?
Never married _____
Divorced/Separated _____
In a committed dating relationship _____
Married/Domestic partnership _____
Widowed _____
6. How many years of formal education have you completed? _____

7. Please indicate your general physical health status.

Poor_____

Fair_____

Good_____

Very Good_____

Excellent_____

*During this study, you will be asked to answer questions about the relationship with **ONE** of your children and their children (i.e. your grandchildren). So, choose one of your children who has their own children. Answer the following questions about this adult child.*

8. Your child's age: _____

9. Your child's gender: Male_____

Female_____

Other_____

10. Your child's sexual orientation:

Bisexual_____

Gay/Lesbian _____

Heterosexual_____

Other_____

11. How many total children do you have? _____

Where does this child come in that group? _____ (E.g. first, second, third)

12. What is your child's relationship status?

Never married___

Divorced/Separated_____

In a committed dating relationship ____

Married/Domestic Partner_____

Widowed_____

13. How many years of formal education has your child completed? _____

14. What is your child's employment status

Employed _____

Unemployed, looking for job _____

Unemployed, not looking for job _____

Retired/Disabled _____

15. How close do you live to this child?

Same house _____

Same Neighborhood _____

Within a 15 minute drive _____

Within a 15-30 minute drive _____

Within a 30-60 minute drive _____

Over an hour drive _____

16. How close to do you feel to this child?

Not at all close _____

Slightly close _____

Somewhat close _____

Moderately close _____

Extremely close _____

17. How would you rate your understanding of how your child is parenting your grandchildren? Poorly _____

Fairly _____

Good _____

Very good _____

Excellent _____

18. Is your child the primary guardian for his or her children?

Yes _____ No _____

19. In the past 12 months, how often have you had face-to-face contact with your adult child?

Less than once a year or never _____

Once a year _____

A few times a year _____

Monthly _____

A few times a month _____

Weekly _____

A few times a week _____

Daily _____

20. In the past 12 months, how often have you had other contact (e.g. phone, email, mail) with your adult child?

Less than once a year or never _____

Once a year _____

A few times a year _____

Monthly _____

A few times a month _____

Weekly _____

A few times a week _____

Daily _____

Please indicate all forms of contact you have had with your child:

Text message_____

Phone conversations_____

Facebook or other social media_____

FaceTime or Skype_____

Email_____

Through a third party_____

Snail mail (letters, boxes, etc.)_____

Other_____

21. In the past 12 months, how often have you had face-to-face contact with your grandchildren?

Less than once a year or never_____

Once a year_____

A few times a year_____

Monthly_____

A few times a month_____

Weekly_____

A few times a week_____

Daily_____

22. In the past 12 months, how often have you had other contact (e.g. phone, email, mail) with your grandchildren?

Less than once a year or never_____

Once a year_____

A few times a year_____

Monthly_____

A few times a month_____

Weekly_____

A few times a week_____

Daily_____

Please indicate all forms of contact you have had with your child:

Text message_____

Phone conversations_____

Facebook or other social media_____

FaceTime or Skype_____

Email_____

Through a third party_____

Snail mail (letters, boxes, etc.)_____

Other_____

23. Compared to the average person, your child has had to deal with more:

Physical health problems_____

Mental health problems_____

Problems with drinking or drugs_____

Problems with the law_____

Problems with relationships_____

Problems parenting their children_____

APPENDIX F

INTERGENERATIONAL AMBIVALENCE SCALE AND SCORING GUIDE

Intergenerational Ambivalence Scale

*Please think of one of your grown children that has their own children (i.e. your grandchildren).
Select the response that best reflects your views of your relationship with your grown child.*

1. How much does he/she make you feel loved and cared for?

Never Rarely Sometimes Fairly Often Very Often

2. How much does he/she understand you?

Never Rarely Sometimes Fairly Often Very Often

3. How much does he/she criticize?

Never Rarely Sometimes Fairly Often Very Often

4. How much does he/she make demands on you?

Never Rarely Sometimes Fairly Often Very Often

5. How often have you felt torn in two directions or conflicted about the child?

Never Rarely Sometimes Fairly Often Very Often

6. To what degree do you have very mixed feelings toward the child?

Strongly Disagree Disagree Agree Strongly Agree

7. My child and I often get on each other's nerves, but nevertheless we feel very close.

Strongly Disagree Disagree Agree Strongly Agree

8. My relationship with my child is very close, but that also makes it restrictive.

Strongly Disagree Disagree Agree Strongly Agree

9. Although I love my child very much, I am sometimes indifferent toward him or her.

Strongly Disagree Disagree Agree Strongly Agree

Scoring Guide: IAS

Items 1, 2, 3, 4, 5	Items 6, 7, 8, 9
1 = Never 2 = Rarely 3 = Sometimes 4 = Fairly Often 5 = Very Often	1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

For Indirect score:

1. Sum items 1 and 2. This is the *positive score*.
2. Sum items 3 and 4. This is the *negative score*.
3. Calculate the following to obtain the indirect score:

$$\frac{(Positive+Negative)}{2} - |Positive - Negative| + 1.5$$

For Direct score:

1. Sum items 5-9.

For Total Ambivalence score:

1. Sum Direct and Indirect score. Higher values reflect greater ambivalence.

APPENDIX G

**AMBIVALENCE REGARDING PARENTING
PRACTICES SCALE AND SCORING GUIDE**

Ambivalence Regarding Parenting Practices Scale

These questions are similar, but specifically address your adult child's parenting practices toward your grandchild(ren). Select the response that best reflects your relationship with your adult child when thinking of HIS or HER PARENTING PRACTICES.

1. **How much does he/she make you feel valued and included as a source of information on parenting?**
 Never Rarely Sometimes Fairly Often Very Often

2. **How much does he/she understand your perspectives on caring for your grandchild(ren)?**
 Never Rarely Sometimes Fairly Often Very Often

3. **When you offer parenting suggestions for your grandchildren, how much does he/she criticize you?**
 Never Rarely Sometimes Fairly Often Very Often

4. **How much does he/she make demands on you concerning caring for your grandchildren?**
 Never Rarely Sometimes Fairly Often Very Often

5. **How much does he/she make demands on you concerning providing parenting advice or feedback?**
 Never Rarely Sometimes Fairly Often Very Often

6. **When thinking about their parenting attitudes, style and behaviors, how often have you felt torn in two directions or conflicted about your child's actions and opinions towards your grandchild(ren)?**
 Never Rarely Sometimes Fairly Often Very Often

7. **To what degree do you have very mixed feelings towards the way in which your child parents or is raising your grandchild?**
 Strongly Disagree Disagree Agree Strongly Agree

8. **My child and I often get on each other's nerves when we discuss care for my grandchild, but nevertheless we feel very close.**
 Strongly Disagree Disagree Agree Strongly Agree

- 9. My relationship with my child is very close, which means I sometimes find myself restricting what I say in regards to how he or she parents my grandchild(ren).**

Strongly Disagree Disagree Agree Strongly Agree

- 10. Although I love and support my child very much, I am sometimes indifferent toward him or her in regards to the way he or she parents my grandchild(ren).**

Strongly Disagree Disagree Agree Strongly Agree

Scoring Guide: ARPPS

Items 1, 2, 3, 4, 5, 6	Items 7, 8, 9, 10
1 = Never	1 = Strongly Disagree
2 = Rarely	2 = Disagree
3 = Sometimes	3 = Agree
4 = Fairly Often	4 = Strongly Agree
5 = Very Often	

For Indirect score:

1. Sum items 1 and 2. This is the *positive score*.
2. Find the mean of items 4 and 5.
3. Sum item 3 with the mean of 4 and 5. This is the *negative score*.
4. Calculate the following to obtain the indirect score:

$$\frac{(Positive+Negative)}{2} - |Positive - Negative| + 1.5 = \text{Indirect Score}$$

where *positive* = Item1 + Item 2

$$negative = \text{Item 3} + \left(\frac{\text{Item 4} + \text{Item 5}}{2}\right)$$

For Direct score:

1. Sum items 6-10.

For Total Ambivalence score:

1. Sum Direct and Indirect score. Higher values reflect greater ambivalence regarding parenting practices.

APPENDIX H

**PERMISSION TO USE MULTIDIMENSIONAL
EXPERIENCES OF GRANDPARENTING
INVENTORIES**

To:

[Sones, Janae](#)

Attachments:

(2)Download all attachments

[MEGr.svt025.full.pdf \(171 KB\)\[Open as Web Page\]](#); [Grandfathers Quest men eng~1.doc \(135 KB\)\[Open as Web Page\]](#)

Thursday, July 31, 2014 11:46 PM

You replied on 8/4/2014 11:21 AM.

Dear Janae,

Attached please find the English version for the Multidimensional Inventories of Grandparenthood (MEG).

You are more than welcome to use the MEG for your purposes.

We would appreciate it very much if you could send us your results upon completing your research.

Good luck with your research,

Liora

APPENDIX I
MULTIDIMENSIONAL EXPERIENCES OF
GRANDPARENTHOOD INVENTORIES

Cognitive Dimension

	Strongly disagree	Slightly agree	3	Agree	Strongly agree
1. I am highly motivated to fulfill my role as grandparent. ^P	1	2	3	4	5
2. It is important to me to invest in my relationship with my grandchildren, even if it means I have to give up other things in my life. ^P	1	2	3	4	5
3. Being a grandparent sometimes interferes with relations with my spouse and friends. ^N	1	2	3	4	5
4. I make an effort to promote my relationship with my grandchildren. ^P	1	2	3	4	5
5. Being a grandparent means giving up some of my privacy. ^N	1	2	3	4	5
6. Being a grandparent sometimes means compromising my values and principles. ^N	1	2	3	4	5
7. It is important to me to devote time to my grandchildren. ^P	1	2	3	4	5
8. I have a strong sense of commitment to my role as grandparent. ^P	1	2	3	4	5
9. Being a grandparent sometimes involves financial sacrifices. ^N	1	2	3	4	5
10. I try to ensure my grandchildren's future. ^P	1	2	3	4	5
11. Being a grandparent requires an emotional, as well as practical, investment. ^P	1	2	3	4	5
12. Being a grandparent sometimes means giving up my free time. ^N	1	2	3	4	5
13. Being a grandparent sometimes means giving up other social and leisure activities. ^N	1	2	3	4	5
14. The role of grandparent requires a change in my priorities. ^N	1	2	3	4	5

^PPositive items

^NNegative items

Affective Dimension

Please indicate how strongly you experience the following feelings as a grandparent.

	Not at all				Very much
1. Happiness ^P	1	2	3	4	5
2. Pride ^P	1	2	3	4	5
3. Disappointment ^N	1	2	3	4	5
4. Pleasure ^P	1	2	3	4	5
5. Anger ^N	1	2	3	4	5
6. Closeness ^P	1	2	3	4	5
7. Sadness ^N	1	2	3	4	5
8. Frustration ^N	1	2	3	4	5
9. Satisfaction ^P	1	2	3	4	5
10. Joy ^P	1	2	3	4	5
11. Guilt ^N	1	2	3	4	5
12. Concern ^P	1	2	3	4	5
13. Failure ^N	1	2	3	4	5
14. Vitality ^P	1	2	3	4	5
15. Inadequacy ^N	1	2	3	4	5
16. Contentment ^P	1	2	3	4	5
17. Weakness ^N	1	2	3	4	5
18. Challenge ^P	1	2	3	4	5
19. Exhilaration ^P	1	2	3	4	5
20. Excitement ^P	1	2	3	4	5
21. Accomplishment ^P	1	2	3	4	5

^PPositive items

^NNegative items

Behavioral Dimension

	Never	Seldom	Sometimes	Often	Very often
1. I expand my grandchildren's general knowledge.	1	2	3	4	5
2. I show my love for my grandchildren.	1	2	3	4	5
3. I pay close attention to my grandchildren's development.	1	2	3	4	5
4. I offer my support when my grandchildren are in distress.	1	2	3	4	5
5. I do things with my grandchildren that help develop their abilities and contribute to their education.	1	2	3	4	5
6. I encourage and praise my grandchildren.	1	2	3	4	5
7. I am someone my grandchildren can talk to.	1	2	3	4	5
8. I make my grandchildren their favorite foods.	1	2	3	4	5
9. I hug and kiss my grandchildren.	1	2	3	4	5
10. I teach my grandchildren about values and their legacy.	1	2	3	4	5
11. I babysit my grandchildren when they are sick.	1	2	3	4	5
12. I display an interest in my grandchildren's hobbies.	1	2	3	4	5
13. I try to help my grandchildren stay calm in stressful situations.	1	2	3	4	5
14. I tell my grandchildren stories.	1	2	3	4	5
15. I show my grandchildren how clever I think they are.	1	2	3	4	5
16. I babysit my grandchildren when their parents go out.	1	2	3	4	5
17. I comfort my grandchildren when they have problems.	1	2	3	4	5
18. I am always available for my grandchildren.	1	2	3	4	5
19. I change/changed my young grandchildren's diapers.	1	2	3	4	5
20. I tell my grandchildren about the family history.	1	2	3	4	5
21. My grandchildren and I do things together, like arts and crafts, homework, games, writing poems, reading, studying, praying, etc.	1	2	3	4	5
22. I display an interest in my grandchildren's lives.	1	2	3	4	5
23. I bathe/bathed my young grandchildren.	1	2	3	4	5

Scored on total score indicating level of behavioral involvement

Symbolic Dimension

	Strongly disagree	Slightly agree		Agree	Strongly agree
1. Being a grandparent is one of the greatest challenges in my life. ^P	1	2	3	4	5
2. My grandchildren do not add a lot of meaning to my life. ^N	1	2	3	4	5
3. Being a grandparent makes my life seem more vital. ^P	1	2	3	4	5
4. Being a grandparent strengthens my relationship with my children. ^P	1	2	3	4	5
5. Being a grandparent gives more purpose to my life. ^P	1	2	3	4	5
6. Being a grandparent tires me out. ^N	1	2	3	4	5
7. Being a grandparent gives me the chance to correct the mistakes I made as a parent. ^P	1	2	3	4	5
8. My grandchildren represent the continuation of my family. ^P	1	2	3	4	5
9. My relationship with my grandchildren is one of the most significant relationships in my life. ^P	1	2	3	4	5
10. My grandchildren are a link between the past and the future. ^P	1	2	3	4	5
11. I find being a grandparent more rewarding than being a parent. ^P	1	2	3	4	5
12. At this stage in my life, other things are more important to me than being a grandparent. ^N	1	2	3	4	5
13. Being a grandparent gives me the opportunity to connect with my family history. ^P	1	2	3	4	5
14. Being a grandparent is another inconvenience in my life. ^N	1	2	3	4	5
15. I feel I am a better grandparent than I was a parent. ^P	1	2	3	4	5
16. Being a grandparent enriches my world. ^P	1	2	3	4	5
17. For me, being a grandparent is a real burden. ^N	1	2	3	4	5
18. I sometimes feel inadequate as a parent, but my role as grandparent makes up for that. ^P	1	2	3	4	5
19. Grandparenthood extends the connections between the generations in the family. ^P	1	2	3	4	5

^PPositive Items

^NNegative Items

APPENDIX J
MANUSCRIPT

Exploration of Intergenerational Ambivalence, Parenting Practices,
and the Impact on Grandparenthood Dimensions

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Exploration of Intergenerational Ambivalence, Parenting Practices, and the Impact on
Grandparenthood Dimensions

ABSTRACT

Changing population demographics have important implications for intergenerational relationships as role transitions occur and relationships have more time to develop. While research abounds on certain family relationships, substantially less attention has been given to the relationship between an aging parent and her or his adult child. Two theoretical constructs that have consistently been identified as useful for examining these relationships include intergenerational ambivalence (IGA) and, to a lesser degree, dimensions of grandparenthood. Thus, the purpose of the present study is to suggest new measurement strategies for these constructs, expand on the correlates of IGA and a grandparent's perceived ambivalence regarding her or his adult child's parenting practices and bring new perspectives to the experience of grandparenting using IGA. Using data from 210 grandparents, exploratory factor analyses and regression analyses were conducted. Results provided support for these new measurement strategies, and indicated that ambivalence related to parenting practices significantly accounts for overall IGA. Moreover, IGA accounted for a significant portion of a participant's cognitive experience of grandparenting. This study has implications for the measurement of IGA and grandparenting, as well as clinical work with adults in transition and grandparents who are raising their grandchildren.

Keywords: Intergenerational Ambivalence, IGA, Intergenerational Relationships, Parenting, Grandparenting, Grandparenthood Dimensions

Exploration of Intergenerational Ambivalence, Parenting Practices, and the impact on
Grandparenthood Dimensions

United States population structure is reaching an important shift as life expectancies increase, birth rates decrease, and the number of those living into later life remaining healthy and active increases (Antonucci, Jackson, & Biggs, 2007). Consequently, grandparenting is an identity on the rise. Changing population demographics and the role of grandparents have important implications for families as intergenerational relationships, or relationships across generations, have more time to develop and foster. While research abounds on the relationship between a parent and young child, and grandparent-grandchild relationship, substantially less attention has been given to the relationship between an aging parent and her or his adult child. Similarly, there is a vast research base on grandparenting, yet little theoretically consistent research that informs our knowledge of how the experience of grandparenting is impacted by relationships with other generations. Thus, understanding grandparenting within the context of intergenerational relationships is a timely and relevant area for research.

Overall, research on parents and their adult children follow an intergenerational framework (Lüscher & Pillemer, 1998). Simply, an intergenerational view asserts that individuals influence and are influenced by the generations around them (Antonucci et al., 2007). As more of society can expect to live well into older adulthood, intergenerational relationships between adults in a family become more intricate. Two theories that captures the complexity of parent-adult child relationships and the

experience of grandparenting that has been used consistently in the literature the intergenerational ambivalence framework (Lüscher & Pillemer, 1998) and grandparenthood dimensions (Hurme, 1991).

Intergenerational Ambivalence

First discussed by Lüscher and Pillemer (1998), intergenerational ambivalence (IGA) is a consistently used construct in the research exploring the parent-adult child relationship and explores the simultaneous experience of positivity and negativity in the parent-adult child relationship that cannot be reconciled (Lüscher & Pillemer).

Ambivalence can be a confusing construct in the context of relationships. Lettke and Klein (2004) identified that IGA is not wholly represented by conflict, inconsistent behavior, or differences in time spent together. Additionally, ambivalence is different than ambiguity which indicates a lack of clarity (Lüscher & Pillemer). Instead of assessing behavior, it is more helpful to consider IGA on the dimensions of “emotionality, agreement, and social norms” (Lettke & Klein, p. 87).

Since its introduction, IGA has been consistently identified as a valuable construct with which to study the aging family (see Fingerman et al., 2013; Lendon, Silverstein, & Giarrusso, 2014; Pillemer & Suito, 2004). There is less agreement, however, on how to measure IGA. It has been measured through self-report question sets that either directly [e.g., “To what degree do you have very mixed feelings toward your parent/the child?” (e.g., Pillemer et al., 2007)] or indirectly [e.g., “How much does he/she make you feel loved and cared for?” (e.g., Fingerman, Pitzer, Lefkowitz, & Mroczek, 2008)] assess the perceived levels of IGA. Indirect methods ask questions that assess both positive and negative relationship characteristics, then use an algorithm to obtain an estimate of one’s

ambivalence score (see Birditt, Fingerman & Zarit, 2010). Lendon et al. evaluated these two methods, and concluded that studying IGA using both methods provided distinct yet related information on parent-adult child IGA. Thus, they concluded that both methods should be used, but to date only three other studies were found that employed both methods (Lüscher & Lettke, 2004; Pillemer & Suito, 2004; Suito, Gilligan, & Pillemer, 2011) and there are no uniform measures that holistically measure IGA.

Research is growing, but still limited, on what personal aspects or situations relate to higher levels of ambivalence in relationships. Pillemer and Suito (2002) concluded that an adult child's inability to achieve and maintain adult statuses (e.g., financial independence) was related to higher levels of ambivalence in older parents. Other studies have found that fathers tend to have higher levels of ambivalence than mothers and that IGA is felt more strongly towards children of the same sex (e.g., Pillemer, Munsch, Fuller-Rowell, Riffin, & Suito, 2012). For additional information regarding correlates of IGA, reference: Birditt, et al., 2010; Fingerman, et al., 2008; Guo, Chi, & Silverstein, 2013; Lendon, et al., 2014; Lüscher & Lettke, 2004; Mueller & Elder, 2003; Peters, Hooker, & Zvonkovic, 2006; Pillemer, et al., 2012; and Willson, Shuey, Elder, & Wickrama, 2006.

There are several limitations to the study of IGA (Fingerman, Sechrist, & Birditt, 2013). First, there are no established measures to holistically study the construct and researchers instead rely on sets of questions to either directly or indirectly assess an individual's perceived level of ambivalence (Pillemer et al., 2007). Second, little is known about the sources of ambivalence or specific contexts related to greater levels of ambivalence. One area that has been mentioned as a possible source of ambivalence is an

older parent's ambivalence regarding her/his adult child's parenting practices. In Peters et al.'s (2006) qualitative study, many participants described differing parenting views from their adult children and also their unwillingness to communicate this different view.

Finally, very few studies consider how IGA impacts either person's experience of other familial roles or relationships. Mueller and Elder (2003) found that "tension" between an older parent and adult child was associated with different styles of grandparenting, yet relationships with increased tension still were described as "close." The existence of both negativity and positivity imply ambivalence exists *and* that the adult child's parenting is somehow related to the grandparent's ambivalent feelings. Therefore, research suggests IGA impacts the grandparenting role, but has yet to be more fully explored.

Grandparenthood Dimensions

Unlike IGA, research on grandparenting is marked by theoretical inconsistency and ambiguity. In Bates and Taylors' (2013) comprehensive review of 209 recently published studies on grandparenting, over 55 different theories were used and over 40% of studies failed to identify any theory. One theory was Hurme's (1991) theory of grandparenthood dimensions which recently became one of the few grandparenting theories operationalized (Findler, 2014; Findler, Taubman – Ben-Ari, Nuttman-Shwartz, & Lazar, 2013).

Rather than positing one style or a unidimensional grandparenting role, Hurme (1991) described four grandparenting dimensions that represent important aspects of most roles found across social settings. The first dimension, *attitudinal/cognitive*, is concerned with one's perceived obligations or normative expectations of grandparenthood. The second dimension refers to the distinctive *behaviors* or activities in the grandparenthood

role. Thiele and Whelan (2008) identify child care as a key instrumental behavior of grandparents. A third aspect in Hurme's (1991) model is the *affective experiences* in the grandparent role, typically referred to as satisfaction (e.g., Reitzes & Mutran, 2004). Research indicates grandparents who are highly involved with their grandchildren, but are not solely responsible for parenting, are the most satisfied as grandparents (e.g., Bowers & Myers, 1999). Finally, the *symbolic dimension* is the personal meaning attributed to the role by a grandparent (Szinovacz, 1998).

Hurme's (1991) model of grandparenthood dimensions may be the most appropriate grandparenting theory for exploring ambivalence because, like IGA, it does not assume duality. It places significance on the complexity of human experiences by comprehensively exploring multiple aspects of the same construct. Furthermore, Hurme (1991) does not simplify grandparenting to a set of behaviors or observable phenomenon. This is particularly important for studying IGA since ambivalence concerns norms, attitudes, and emotions, not just behaviors (Lettke & Klein, 2004). In addition, IGA was recently recommended as a useful theory for studying grandparenting and aging families (Bates & Taylor, 2013).

The Present Study

Considering the popularity of using IGA as an empirical lens to study the aging family, it is problematic that a uniform measure of IGA is not available. Furthermore, measures are clearly needed to assess specific sources of and contexts surrounding IGA, such as the grandparent's perceived ambivalence regarding her/his adult child's parenting practices (Lettke & Klein, 2004). Providing a novel and parsimonious model for how sources of IGA are measured could greatly contribute to the literature. Looking at

parenting is also valuable considering changing family structures where there may be an increasing reliance on grandparents for child care (Livingston & Parker, 2010).

Moreover, limited studies include relational characteristics in their evaluations of intergenerational ambivalence, so a study that followed Bates and Taylors' (2013) recommendation to use IGA to study grandparenting would contribute to the literature.

Thus, the purpose of the present study is three-fold: (1) to provide a concise measure of IGA that unites the direct and indirect question sets; (2) to expand the literature on how IGA by exploring correlates of IGA for older parents and a grandparent's perceived ambivalence regarding her or his adult child's parenting practices; and (3) to bring new perspectives to the experience of grandparenting while observing her or his adult child raising their grandchildren.

Methods

Participants

Participants were 210 grandparents who had at least one grandchild between the ages of 18 months to 24 years to provide adequate time for the grandparent to see her or his adult child's parenting practices and be introduced to the grandparenting role.

Participant ages ranged from 46-88 (mean = 68.94, SD = 8.776) and the majority of participants identified as female (Female: $n = 162$, 77.1%; Male: $n = 44$, 21.0%). Only 25% of participants identified as great-grandparents Yes: $n = 53$, 25.2%; No: $n = 154$, 73.30%). Sample characteristics are summarized in Table 1.

Table 1

Demographic Summary, for Participants (n = 204)

Variable	N	Range	Mean \pm SD
Age (years)	204	46-88	68.94 \pm 8.776
Education (years)	197	2-26	14.74 \pm 3.584
Total Children	205	1-12	2.75 \pm 1.363

Variable	N	%	
Gender	Female	162	77.1%
	Male	44	21%
Ethnicity/Race	African-American/ Black	1	0.5%
	Asian	1	0.5%
	Caucasian/White	189	90%
	Hispanic/Latino	6	2.9%
	Native American	3	1.4%
	Multiracial	3	1.4%
	Other	3	1.4%
Sexual Orientation	Heterosexual	188	89.5%
	Bisexual	9	4.3%
	Gay/Lesbian	1	0.5%
	Other	7	3.3%
Marital Status	Never married	1	0.5%
	Divorced/Separated	24	11.4%
	Committed Dating Relationship	2	1.0%
	Married/Domestic Partnership	136	64.8%
	Widowed	43	20.5%
Health Status	Poor	5	2.4%
	Fair	13	6.2%
	Good	65	31.0%
	Very Good	92	43.8%
	Excellent	31	14.8%
Great-Grandparent Status	Yes	53	25.2%
	No	154	73.3%
Geographic Distance	Same house	11	5.2%
	Same neighborhood	13	6.2%
	15 minute drive	53	25.2%
	15-30 minute drive	35	16.7%
	30-60 minute drive	26	12.4%
	Over an hour drive	69	32.9%

The majority of participants reported living over an hour drive away from the adult child ($n = 69$, 32.9%) or within a 15-minute drive ($n = 53$, 25.2%), felt extremely close to the child ($n = 132$, 62.9%), and believed she or he held a very good understanding of how the adult child was parenting her or his grandchildren ($n = 96$, 45.7%). The frequency and type of contact of participants with their adult children and grandchildren are presented in Table 2.

Table 2

Contact Frequency and Type with Adult Child and Grandchildren

Frequency	With Adult Child				With Grandchild(ren)			
	Face to Face ($n = 206$)		Other ($n = 205$)		Face to Face ($n = 206$)		Other ($n = 205$)	
	%	n	%	n	%	n	%	n
Less than once a year or never	1.9%	4	1.0%	2	2.4%	5	4.9%	10
Once a year	3.9%	8	0.5%	1	5.3%	11	2.0%	4
A few times a year	23.8%	49	5.4%	11	24.3%	50	17.6%	36
Monthly	7.3%	15	5.9%	12	6.8%	14	10.2%	21
A few times a month	16.0%	33	9.8%	20	15.0%	31	19.5%	40
Weekly	16.0%	33	22.9%	47	16.0%	33	19.0%	39
A few times a week	19.9%	41	36.1%	74	20.4%	42	18.5%	38
Daily	11.2%	23	18.5%	38	9.7%	30	8.3%	17

Additionally, participants reported phone conversations (92.9% with adult child, 88.1% of grandchildren) and text message (68.1 % with adult child, 36.7% with grandchildren) as the two most frequent ways they were in other contact, with social media being the third most used medium with adult children and Facetime/Skype the third most with grandchildren.

Instrumentation

Participants completed: the Multidimensional Experiences of Grandparenthood Inventories (MEG: Findler et al., 2013); the Intergenerational Ambivalence Scale (IAS); the Ambivalence Regarding Parenting Practices Scale (ARPPS); and the demographic questionnaire. The IAS, ARPPS, and demographic questionnaire were created for the present study.

Grandparenthood Dimensions. The MEG is a set of self-report inventories assessing the four dimensions of grandparenting as postulated by Hurme (1991): cognitive (attitudinal in Hurme's original model; fourteen items), behavioral (twenty three items), affective (twenty one items), and symbolic (nineteen items) (Findler et al., 2013). Questions are answered on 5-point Likert scales and total completion time is 10-15 minutes. In previous research, only the factors within each dimension have been used; scores for each dimension have not been calculated. In the present study, one score was given for each dimension. For the cognitive, affective, and symbolic dimension, a total score was found by adding up the items on the positive factors and subtracting the items on the negative factors; on the behavioral dimension, a total score was found just by summing all items indicating frequency. Cronbach's α levels have previously only been calculated for each factor no reliability estimates are available for each overall dimension in the previous literature. The Cronbach's α levels for this study on each dimension are: cognitive ($\alpha = .634$); behavioral ($\alpha = .952$); affective ($\alpha = .837$); and symbolic ($\alpha = .779$).

Measures of Ambivalence. Because no consistent measures are used to study IGA that combine both direct and indirect question, the IAS was created for this study.

Additionally, the ARPPS was created to measure ambivalence as it relates to a specific aspect in the parent- adult child relationship.

Instrument Development. For the IAS, all nine items were written into a preliminary draft. An effort was made to make the response option uniform across all items, but this proved impossible since items ask about time, frequency, or attitudes. Thus, all items were left in the form used in previous research. One wording change was made from “intimate” to “close”, to better reflect how a parent might describe the relationship with a child. For the ARPPS, questions were created that applied to parenting practices broadly.

Next, the scoring procedures were adapted and created. To remain as similar to established research as possible, a total composite score was created by combining a direct score (sum of all direct items; IAS: Items 5 through 9; ARPPS: Items 6 through 10) and an indirect score found using Griffin’s Similarity and Intensity of Components formula (e.g., Fingerman et al., 2008). This formula has been used consistently in the IGA literature (e.g., Lendon et al., 2014) and equally acknowledges opposing positive and negative feelings, and also the absence of any feeling. The formula for the IAS is:

$$\frac{(Positive+Negative)}{2} - |Positive - Negative| + 1.5 = \text{Indirect Score}$$

where *positive* = Item 1 + Item 2

negative = Item 3 + Item 4

A nearly identical scoring process is used on the ARPPS with one minor difference since the indirect negative score has three items. In order to continue using Griffin’s formula, the mean score was taken between the two related items (items four and five); the mean score of these two items was then added to the other negative

question (item three) to calculate the *negative* score. By using the mean score for items four and five, the scoring process and score range remained identical to the IAS. Next, the total ambivalence score for the IAS and ARPPS was found by summing the direct and indirect scores. Using this method, the range of values is 6 to 32.5, with higher scores reflecting greater levels of total ambivalence.

Intergenerational Ambivalence Scale. The IAS is a nine-item self-report measure of IGA created by combining questions used in previous studies and presenting them as one instrument (e.g., Birditt et al., 2010; Fingerman, Chen, Hay, Cichy, & Lefkowitz, 2006; Pillemer et al., 2007). Participants respond on either a four-point Likert-type scale ranging from Strongly disagree (1) to Strongly Agree (4) or a five-point Likert-type scale ranging from Never (1) to Very often (5). Cronbach's α levels in for the direct items have been .68-.79, and indirect items have been .34-.79. The Cronbach's α levels for this study were: direct questions ($\alpha = .782$); positive indirect questions ($\alpha = .670$); negative indirect questions ($\alpha = .499$); and total IAS ($\alpha = .669$).

Ambivalence Regarding Parenting Practices Scale. The ARPPS is a ten-item self-report measure of ambivalence regarding parenting practices modeled after the IAS. It provides a single score of specific ambivalence related to parenting practices perceived by an older parent. It follows the IAS in a nearly identical format, but with specific focus on parent practices. The Cronbach's α levels for this study were: direct questions ($\alpha = .774$); positive indirect questions ($\alpha = .827$); negative indirect questions ($\alpha = .656$); and total ARPPS ($\alpha = .748$).

Demographic Questionnaire. The demographic questionnaire consisted of 23 items asking about the participant and her or his adult child. Obtained information

included: age; gender; ethnicity/race; sexual orientation; relationship status; years of education; and general physical health status. Similar information was obtained for the participant's adult child. Participants were also asked: total number of children; child's placement in that group; geographic proximity to adult child; emotional closeness; guardianship status of grandchildren; understanding of child's parenting practices; frequency of face-to-face and other contact with adult child and grandchildren; type of other contact with adult child and grandchildren; and problems the adult child has had to face more often than the average person

Procedures

Following IRB approval, participants were recruited using convenience and snowball sampling methods and first contacted either in-person or via e-mail with a brief description of the study. Data were collected with either an online survey using Qualtrics or a packet of surveys to be completed by hand. Of the two administration types, 132 participants (62.9%) completed paper-pencil surveys and 78 participants (37.1%) completed online surveys. Participants in both conditions were prompted to think of the same adult child and grandchild(ren) throughout the study. As an incentive for participation, all participants were notified that upon completion of the study, a \$150 donation would be made to a non-profit organization supporting grandparenting.

Results

Preliminary Analyses

Diagnostic tests were first completed to ensure the data met all assumptions needed to run the intended exploratory factor analyses (EFA) and regression analyses. First, all univariate outliers were identified and deleted. For normality, MEG Affective

and MEG Behavioral were considered negatively skewed using the Shapiro-Wilks test. A reflect square root transformation was used for MEG Affect, with the new variable no longer being significantly negatively skewed. However, no transformation provide significant improvements for MEG Behavioral, so this variable was left as is which will mean the factor solution for MEG Behavioral may not be as precise (Tabachinck & Fidell, 2013). All other assumptions for EFA were met.

On the dicotomous categorical variables used for the regression analyses, Tabachinck and Fidell cite Rummell (1970) to suggest that variables with a 90-10 split between categories should be deleted. Thus, Parent's sexual orientation, Child mental health problems, Child drinking and drug problems and Child parenting problems were not included in analyses. Finally, emotional closeness and understanding of child's parenting practices were heavily negatively skewed. No transformations substantially improved normality; instead, Tabachnick and Fidell's suggestion of recoding score was utilized. Thus, scores of 1 or 2 on emotional closeness were recoded to 3. In total, only 10 cases were recoded on emotional closeness. Similarly, scores of 1 or 2 on knowledge of child's parenting practices were recoded to 3. In total, 11 cases were recoded on knowledge of parenting practices. All other assumptions were met.

Research Question 1: What are the factor structures and psychometric qualities of the Intergenerational Ambivalence Scale (IAS), the Ambivalence Regarding Parenting Practices Scale (ARPPS), and the Multidimensional Experiences of Grandparenthood inventories (MEG) when the dimensional scores are utilized?

To address the first question, a series of EFAs were conducted. Multiple data reduction methods were initially used to explain the data. Results for each method were similar, so principal axis factoring (PFA) was chosen as the extraction method in each EFA given its frequent use in counseling psychology research (Worthington & Whittaker,

2006). A scree plot and Kaiser's Rule were utilized to determine how many factors should be retained; all factors with eigenvalues above 1.00 were retained. Finally, multiple rotation methods were used to aid in interpretation. Any item with a factor loading lower than .3 was deleted; any items with a loading of .4 or above were considered for inclusion. If cross-loading occurred, any item with less than a .15 *difference* between the two factor loadings from an item's highest factor loading was deleted (Worthington & Whittaker). When a factor was deleted, the EFA was re-run until no cross-loading occurred.

For the IAS, the most appropriate structure appeared to be explained using a PFA with Promax rotation, which produced a total of 3 factors with eight items and accounted for total variance at 75.06%. Table 3 displays the final factor loadings.

Table 3

Pattern Matrix for PFA extraction and Promax rotation, without items 3, 6 and 9

Items	Factor 1	Factor 2	Factor 3
	37.79% Explained Variance	19.81% Explained Variance	17.46% Explained Variance
1	.791*	.073	.114
2	.650*	-.074	-.131
4	.123	-.057	.807*
5	-.180	.010	.514*
7	-.002	.690*	.124
8	.032	.723*	-.131
Internal Consistency	.669 ¹	.626 ¹	.589 ¹

¹As measured by Cronbach's alpha; only include item with a * in each column

For the ARPPS, the most appropriate structure appeared to be explained using a PFA with Promax rotation, which produced a total of 3 factors with nine items and accounted for total variance at 65.31%. Table 4 displays final factor loadings.

Table 4

Pattern Matrix with PFA extraction and Promax rotation, ARPPS without item 3

Items	Factor 1	Factor 2	Factor 3
	33.87% Explained Variance	19.79% Explained Variance	11.66% Explained Variance
1	-.070	.812*	.074
2	.073	.882*	-.100
4	.028	-.213	.654*
5	.012	.183	.734*
6	.645*	-.040	.016
7	.625*	-.019	-.029
8	.627*	.085	.041
9	.529*	.039	.083
10	.707*	-.051	-.056
Internal Consistency	.763*	.826	.614

¹As measured by Cronbach's alpha; only include item with a * in each column

For the MEG dimensional scores, the most appropriate structure appeared to be explained using an unrotated PFA, which produced a one factor with three of the dimensions and accounted for total variance at 67.47%. All factor loadings were well above .4 [Symbolic = .653; (transformed) Affect = -.658; Behavioral = .842).

Research Question 2: What parent-adult child characteristics account for the most variance in overall intergenerational ambivalence perceived by the parent?

It was hypothesized that parents whose adult children have successfully obtained adult status or reached adult developmental milestones would report lower IGA while those with adult children with problems perceived as “voluntary” (e.g., drinking or drug problems) would report higher levels of IGA. Geographic proximity was expected to be negatively related to IGA while contact frequency was expected to be positively related to parental IGA. A simultaneous multiple regression analysis was conducted with demographic factors that significantly correlated with the IAS score which were: emotional closeness, knowledge of parenting practices, child age, child sexual orientation, child physical problems, child relationship problems, and child other/none problems. The regression equation was significant, $F(7,181) = 16.117$, $p < .000$ and the adjusted $R^2 = 0.360$, meaning that the entered variables accounted for 36% of the total variance in IGA. When controlling for the all other variables in the model, knowledge of parenting ($\beta = -.398$) and qualitative closeness ($\beta = -.184$) made the strongest unique contributions to the explaining the IAS score. Moreover, qualitative closeness, knowledge of parenting, and child’s sexual orientation all reach the $p < .05$ level, meaning each of these variables are making significant unique contributions to explaining IGA. No hypotheses were supported.

Research Question 3: How much variance in the total level of IGA can be attributed to ambivalence regarding the adult child's parenting practices?

It was hypothesized that ambivalence related to the adult child's parenting practices would account for a significant portion of variation in total IGA. A two-step hierarchical regression was conducted with the regression model from question 2 entered in the first step and the ARPPS total score entered in the second step. The regression equation was significant, $F(8,180) = 35.226$, $p < .000$ and the adjusted $R^2 = 0.593$, meaning that the ARPPS score explained over 20% more variance in IGA. Thus, this hypothesis was supported.

Research Question 4: How does the level of IGA and ambivalence regarding parenting practices relate to each grandparenting dimension?

It was hypothesized that grandparents who experienced higher levels of IGA with their adult child would also express less investment to the grandparenting role as measured by lower scores on the attitudinal/cognitive, affective, and behavioral dimensions and give lower symbolic meaning to her or his role as a grandparent as measured by a lower score on the symbolic dimension. First, a series of bivariate correlations were conducted between the dimension scores, IAS score, and ARPPS score to determine the appropriateness of a regression analysis. The IAS and ARPPS scores were only significantly correlated with the Cognitive and Affective dimension; thus, only two simultaneous-entry regressions were conducted with the IAS and ARPPS score regressed on the Cognitive and Affective scores. The Cognitive model was significant, $F(2,188) = 22.418$, $p < .000$, and 18% of the total variance (adjusted $R^2 = .184$) was accounted for by the IAS and ARPPS scores. The Affective model was also significant, $F(2,188) = 17.601$, $p < .000$, and only about 15% of the total variance (adjusted $R^2 =$

.149) was accounted for by the IAS and ARPPS scores. Importantly, the IAS score uniquely and significantly accounted for some of the total variance in the Cognitive dimension score (9.12%) and Affective dimension score (nearly 5%), while the ARPPS did not significantly independently contribute to either model. There is evidence to support the hypothesis for the cognitive dimension, but not the other three dimensions.

Discussion

A primary contribution of this investigation was to provide evidence for new ways to measure IGA, specific ambivalence, and dimensions of grandparenthood. The first of these contributions was formulating a unitary measure of ambivalence, the IAS. For the IAS, the final factor solution included six items with three factors. Factors moderately correlated with each other, mirroring previous findings that direct and indirect methods produce correlated and distinct responses (e.g., Lendon, et al., 2014). A three factor structure was likely given how the IAS was compiled of direct, positive indirect, and negative indirect questions; in fact, the factor solution almost followed this pattern. However, factor three combined a negative indirect question and a direct question. This may highlight the negativity associated with IGA when asked about it directly. Also, it is possible that the wording of this direct question (“conflicted”) gives the question a negative valence that the other direct questions do not have, thereby explaining how why it loaded with a negative indirect question. This study is not the first in the literature to find ambivalence and conflict associated (e.g., Gilligan, Sutor, Feld, & Pillemer, 2015). The experience of ambivalence, however, is not solely about conflict (Lüscher & Pillemer, 1998). If participants interpret ambivalence as just an experience of negativity, then the construct is really not being measured correctly. Due to this potential bias, future

research should consider avoiding using the word “conflicted” in direct questions consider presenting indirect and direct questions at different times during administration.

Other measurement contributions were creating a method to assess specific ambivalence and assess the MEG. Despite its similarity, the final ARPPS factor solution did not mirror the IAS; instead, items cleanly loaded based on the types of questions. Interestingly, Factor 3 on the ARPPS included both remaining negative indirect questions which referred to demands placed on the grandparent by the adult child. Thus, unlike Peters et al. (2006) who suggested that a parent’s ambivalence toward their adult child’s parenting was related to different parenting views and communication, these results suggest ambivalence may also be related to demands by the adult child on their parent. Some of these differences may be related to sample differences. In Peters et al.’s study, 52% of participants lived in a different state than their adult children and the average age was 75-76. In contrast, the current study’s sample was generally younger by at least five years (mean = 68.9 years) and 65.7% lived within an hour drive of their adult child. Thus, this sample likely had more face-to-face opportunity and perhaps better physical ability to provide care for grandchildren than grandparents in the Peters et al. study.

Finally, this study was the first to calculate composite scores for the cognitive, symbolic, affective, and behavioral dimensions on the MEG. For the current study, when each composite score was used, the affective, symbolic, and behavioral dimensions loaded on a single factor; the cognitive dimension was not included in the final factor model. There are some unique characteristics of the cognitive dimension that could account for this difference. First, the cognitive dimension directly assesses commitment to grandparenting and measures internal and external expectations, rather than just

internal experiences. Also, half of the cognitive items have a negative valence and includes more about the potential difficulties of being a grandparent.

A second contribution of this study was assessing specific IGA sources and contexts. Results indicated that child sexual orientation, emotional closeness, and knowledge of child parenting practices were the only variables making significant contributions to understanding IGA. However, results related to child sexual orientation should be interpreted with caution due to the small sample size. In some ways, these findings do not mirror prior research, which may be related to this specific sample, vague assessment of certain factors, such as child financial problems, or the unique use of a composite IGA score. While this study hoped to provide clarity on how these factors impact IGA, it instead added to the uncertainty characteristic of the IGA literature.

This is the only known study in the IGA literature that assesses great-grandparent status and IGA, but great-grandparent status was not correlated with IAS (.058; $p = .423$). Additionally, this was one of the only known quantitative study to assess the impact of an adult child's sexual orientation on IGA. Previous research suggests that parents do feel ambivalent towards their adult children who identify as gay or lesbian (e.g., Reczek, 2016). There is also research available examining intergenerational relationships after an adult child comes out. For example, Baiocco and colleagues (2015) studied the factors that contribute to a parent's negative response to their young adult child's coming out, one of which was strong traditional values. We know that perceived value similarity can predict lower levels of IGA from parents, particularly mothers, towards their adult children (Pillemer et al., 2012). Thus, if parents see their child's coming out as a departure from a similar value structure, then likely IGA would increase. A last

contribution of this study related to IGA was to assess a specific aspect of ambivalence, ambivalence related to parenting practices. In fact, ambivalence regarding parenting accounted for 20% more variance in IGA when controlling for variables previously known to account for IGA. Thus, these findings provide evidence for Peters et al's (2006) assertion that "...parenting is an area fraught with ambivalent perceptions" (p. 549).

A final contribution of this study was to examine how experiences of grandparenting are impacted by levels of IGA in the parent-adult child relationship. For both the cognitive and affective dimensions, IGA accounted for a significant portion of the variance in each dimension. The relationship between IGA and affective experiences is difficult to interpret since the IGA standardized coefficient was so slight ($B = .094$). On the other hand, as the cognitive score increased, the IAS score decreased. Higher scores on the cognitive dimension means strongly agreeing with questions such as, "I am highly motivated to fulfill my role as grandparent" while simultaneously disagreeing with items such as, "Being a grandparent sometimes mean compromising my values and principles". Thus, findings suggest that lower levels of IGA as perceived by a parent accounts for greater commitment to the grandparent role. On the one hand, individuals whose relationships with their adult children are marked by positivity have more devotion in their relationship with their grandchildren. This may be an expected relationship. Yet, on the other hand, individuals who also experience lower IGA by experiencing a parent-adult child relationship marked by negativity and conflict also demonstrate more devotion to their grandparenting role. Ambivalence related to parenting practices showed no impact on an individual's experience of grandparenting in this study.

Research Implications

Due to combining direct and indirect questions on IGA, it may be important to further assess the presentation of indirect *negative* questions with direct questions. Future research that explored how to present these questions in such a way to still capture the irreconcilable nature of ambivalence asked about in a direct question is warranted. The novel way of exploring specific ambivalence, the ARPPS, will hopefully inspire future research on the validity of this method and its expansion to other relational aspects, such as navigating when an older parent starts a new romantic relationship after being widowed or divorced. Also, more evidence is needed to assess the appropriateness of using the MEG dimensional scores.

Regarding IGA, assessing the impact of technology on contact frequency and IGA may be an important avenue of research. In this study, phone conversations and text messaging accounted for the highest percentage of non-face to face contact. However, the next most frequent contact type was different for adult children (email, 59.5%) and grandchildren (Facetime or Skype, 24.8%). Type of contact related to levels of IGA could be a ripe area for future exploration. Furthermore, more research is needed to continue exploring the relationship between IGA and ambivalence regarding parenting practices, perhaps by incorporating the substantial body of literature on parenting styles, behaviors, attitudes, and attributes. Regarding grandparenting, the literature on grandfathering is quite small (Bates, 2009), so future intergenerational research should explore the likely unique experiences of grandfathers. The methodology of this study is also unique in that it employs online *and* paper-pencil surveys, intended to be more accessible to a wide age range. Interestingly, there is limited research on different methodologies used with an

older adult population (J. Weil, personal communication, September 29, 2014). While this study found no significant relationship between the outcome variables and administration type, the study of older adults could greatly benefit from a systematic review of methods and how different methods impact research outcomes.

Clinical Implications

This study and the exploration of IGA, parenting, and grandparenting have implications for counseling psychology and clinical work. First, attending to ambivalence is a core tenant in many psychotherapeutic interventions and theories (e.g., Erikson, 1968; Miller & Rollnick, 2012; Parker, 1997). Thus, using IGA to study intergenerational relationships, and now grandparenting, may increase the applicability of research findings given that many psychotherapists already integrate ambivalence into conceptualization and treatment planning. The present study also informs clinical work with families as individuals transition between roles, age, and become part of a multi-generational family structure. This may be particularly important with grandparents who are temporary or permanent custodial guardians for their grandchildren and find themselves simultaneously in the role of parent and grandparent.

Counseling psychology is preventative, strengths-based and focuses on lifespan development, adjustment, and normative transitions (Gelso, Williams, & Fretz, 2014). Thus, a salient theme in therapy for middle to older adults may be working through developmental stages and adjustment to the grandparent role, a role expected to be held by one-third of adults in the U.S. by 2020 (Francese, 2011). Research shows, however, that although the role of grandparent is incredibly salient, the role of parent and other social identities continue to be integral for older adults (Reitzes & Mutran, 2004). Thus,

having an awareness and understanding of how these roles coexist, like with this study, is helpful for psychotherapists working with middle-aged and older adults.

Finally, counseling psychology deeply values the promotion of social justice and empowerment of marginalized groups, including sexual minorities (Gelso et al., 2014). This study cautiously indicates that an adult child's sexual orientation may impact levels of parental IGA. Counseling psychologists can use an awareness of the specific forms of IGA to normalize relational dynamics by asserting that "...intergenerational relations generate ambivalences" (Lüscher & Pillemer, 1998, p. 414), and help families move through conflict and disunion to a sense of understanding and greater connectedness.

Limitations

While this study contributed to the literature in a number of novel ways, its findings are limited. The generalization of this study's findings is restricted based on the largely homogenous sample. Intergenerational relationships and grandparenting are cross-culturally diverse, so this study misses many of the unique experiences of diverse older adults and their families. In addition, the study required participants to self-select, which could have introduced bias into the results. Related to measurement, using novel instruments is a contribution, but also a limitation due to the little information available regarding validity and psychometric acceptability. Also, this study only collected the perspectives of older adult due to constraints in resources. If conducted again, researchers should consider assessing the adult child's perspective of their parent's ambivalence. Finally, multiple variables were non-normally distributed, most of which were heavily negatively skewed, indicating participants reported more behavioral involvement or positive emotional experiences. Researchers may partially account for this by including

reports of these experiences from multiple sources (i.e., spouse or adult children) and asking questions that are less face valid.

Conclusions

With the increase in life expectancy and diversifying of family structures, the study of intergenerational relationships, dynamics, and roles is a pertinent and timely area of study (Antonucci, et al., 2007). To this point, there is a broad literature base on intergenerational relationships, particularly using IGA as the theoretical frame (e.g., Birditt et al., 2010). While the same can be said of the scope of research on grandparenting, this body of literature is marked by theoretical inconsistency (Bates & Taylor, 2013). Thus, this study sought to fill the gap by providing research on new methods to assess IGA, specific sources of IGA, and how IGA impacts the experiences of intergenerational roles, such as grandparenting, while also using a theoretically grounded concept like IGA to study grandparenthood. These results are important for deepening our understanding of the shifting, intertwined nature of family relationships.

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