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Western Michigan University

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RELATIONSHIPS ASSOCIATED WITH LONG-TERM STEPGRANDMOTHER ROLE BEHAVIOR, ROLE MEANING, AND SATISFACTION

by

Mary-Catherine Kane

A Dissertation
Submitted to the
Faculty of The Graduate College
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Advisor: Alan Hovestadt, Ed.D.

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RELATIONSHIPS ASSOCIATED WITH LONG-TERM STEPGRANDMOTHER ROLE BEHAVIOR, ROLE MEANING, AND SATISFACTION

Mary-Catherine Kane, Ph.D.
Western Michigan University, 2009

Remarriage from the mid-1970s through the mid-1990s has resulted in a growing cohort of stepmothers transitioning into stepgrandmotherhood. The complexity of studying long-term stepfamilies has lead to a paucity of long-term stepfamily research, particularly among stepgrandmothers. This study is one of the first to embrace the complexity of long-term stepfamilies by examining stepgrandmother role behavior and role meaning, and stepgrandmother-stepgrandchild relationship satisfaction within the linked family system. One hundred and twenty-two long-term stepgrandmothers were recruited via convenience and snowball sampling to complete a 54-item questionnaire. Study criteria included stepgrandmothers, whose stepchildren (a) were minors at the time of their father's remarriage; and (b) have subsequently given birth, fathered, or adopted children of their own. Stepgrandmothers responded to questions about the current status of six dyadic relationships (stepgrandmother-adult stepchild closeness, father-adult child closeness, biological grandmother-adult child closeness, stepgrandmother-biological grandmother friendliness, husband-former spouse friendliness, and husband support for the step(grand)mother role), which have been shown to be associated with stepfamily dynamics in the early years of stepfamily formation. Additional questions surveyed stepgrandmother perceptions of
stepgrandmother role behavior and role meaning, satisfaction with the stepgrandchild relationship, custody arrangements of minor stepchildren, and demographic information. Multiple linear regression revealed significant associations between several dyadic relationships (stepgrandmother-adult stepchild closeness and biological grandmother-adult child closeness) and stepgrandmother role behavior, role meaning and relationship satisfaction. One-way ANOVA revealed a significant difference on stepgrandmother role meaning for stepgrandmothers who lived in shared residential arrangements with the middle generation as minors. Implications for clinical practice, policy, and research are offered.
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To the women who participated in this study, I am grateful for your willingness to share your lives with me. It was a gift to talk with you about your families and learn from your wisdom. I have shed tears of joy and sadness for your experiences and feel blessed to have met you.

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Mary-Catherine Kane
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Chapter I

Introduction

Statement of the Problem

Stepmothers and grandparents share a level of role ambiguity within the family (Berger, 1998; Robertson, 1977). The ambiguity of the stepmother role appears to be related to circumstances and relationships within the stepfamily system. Stepmothers enter stepfamilies negotiating various pre-existing relationships in order to become an intimate insider (Papernow, 1993). Grandparents negotiate relationships with adult children in order to enact a role as grandparent (Robertson, 1975). Life events influence the amount of contact and relationship building. Both have limited, if any, legal rights or obligations (Fine, 1997; Johnson, 1985). Considering the complexity of the relationships and circumstances that stepmothers and grandparents must negotiate to enact their roles it seems particularly important to examine perhaps one of the most ambiguous roles in later life, that of the long-term stepgrandmother (Ganong & Coleman, 2004).

Long term-stepgrandmothers have known the middle generation (the stepchildren) as minors. As the stepchildren transition to the middle generation through the birth and adoption of children, stepmothers become stepgrandmothers. Although no biological link exists between stepgrandmothers and stepgrandchildren, long-term stepgrandmothers are members of the family at the time of the stepgrandchild’s birth. As such, the role of stepgrandmother is considered likely to be similar to the grandmother role in first families.
(Ganong & Coleman, 2004), yet no published studies to date have investigated the long-term stepgrandmother role.

Given that approximately 40% of the aging American population is remarried many women are facing the mid-late life cycle role of stepgrandmother. As many women live well into their later life years (Szinovacz, 1998), seek to find meaning in the grandparent-grandchild relationship (Kivnick, 1982), and are the most frequent consumers of counseling services, it is essential that family therapist and gerontologists are aware of the factors influencing the long-term stepgrandmother role. With a better understanding of the relationships and life circumstances influencing the stepgrandmother role family therapist can devise treatment plans and appropriate interventions.

Background of the Problem

Nearly 50% of first marriages end in divorce. About 75% of divorced persons remarry, a majority of those with a child from a previous marriage (National Stepfamily Resource Center, 2006). Men are more likely to remarry than women creating more father/stepmother households than mother/stepfather households irrespective of primary residence of children. A large minority of remarried families remain so throughout the life span propelling a significant proportion of women in remarried families into the stepgrandmother role. Although research has been conducted with grandmothers (Hagestad, 1985; Kennedy, 1991; Kivnick, 1982; Robertson, 1977; Szinovacz, 1998), and stepgrandmothers resulting from later life remarriage (Clawson & Ganong, 2002) or remarriage of the middle generation (Cogswell & Henry, 1995; Sanders & Trygstad,
1989), no published research to date has investigated the stepgrandmother role from the perspective of long-term stepgrandmothers.

Much of the research on women in stepfamilies has been conducted with stepmothers in the early stages of the stepfamily formation. Many of these studies investigated stepmothers in the first decade of stepfamily life and the various relationships which influence her role. Long standing family dyadic relationships, such as the father-child, husband-former spouse, and biological mother-child relationships appear to influence the stepmother-stepchild relationship. Dyadic relationships directly involving stepmothers have been investigated, such as husband's support for the stepmother role, stepmother-biological mother relationship, and the stepmother-stepchild closeness.

Comparative studies have examined the influence of non-residential, residential and joint custody arrangements on stepmother relationships with her spouse and her stepchildren. Findings from studies investigating stepfamily relationships and residential arrangements of stepchildren have helped to define appropriate expectations for the stepmother role.

Other studies assessing stepmother stress and role strain have provided practitioners with a needed understanding of the struggles stepmothers face in lieu of societal expectations of women and stepmother mythology.

More generally, studies of stepfamily process have provided practitioners with normative stages (Papernow, 1993), a potentially reparative life cycle within the first nine years of stepfamily life (Bray & Kelly, 1998), stepfamily diversity (Berger, 1998), and pitfalls and successes of remarried families (Hetherington & Kelly, 2002). Albeit the majority of these studies investigated mother/stepfather households, they still provide
practitioners with relevant findings regarding stepfamilies with stepchildren under 18 years of age.

Once children leave the home and the stepmother and father transition into the middle adulthood and middle-late stages of the family life cycle little is known about stepfamilies. Perhaps, it is assumed that these families resemble, and function like, first families. Perhaps, it is assumed that once the stepmother and father launch the children the unique characteristics of the stepfamily fade away. Perhaps, long-term stepfamilies are considered too complex to study. For whatever the reasons, the role of stepparents in long-term stepfamilies have not been readily investigated.

Later life research conducted with adults in stepfamilies has focused on two distinct groups of stepparents, those acquired through parental remarriage in later-life, and those resulting from an adult child's marriage to an individual with children from a previous relationship. Stepparents acquired in later-life typically result from parental remarriage after spousal death or divorce (Ganong & Coleman, 2004). Women who marry divorced or widowed men in the later life cycle years are late entries into family systems with several decades of history. Limited research in this area has investigated relationship quality and obligations of adult children to "newly" acquired stepparents (Ganong & Coleman, 2006).

Considerably more research has been conducted on inherited stepgrandparents. Inherited stepgrandparents enter the role as a result of an adult son's or daughter's marriage to a person with a child from a previous relationship (Ganong & Coleman, 2004). Researchers have investigated inherited stepgrandparents via comparative studies with grandparents and from a variety of different perspectives. Sanders and Trygstad
(1989) examined (step)grandchildren relationships with stepgrandparents and grandparents from the young adult’s perspective. Grandchildren reported having and desiring more contact with their grandparents than stepgrandchildren with their inherited stepgrandparents. Grandchildren had higher expectations of grandparent behaviors, and had more personal and social involvement with grandparents than stepgrandchildren with inherited stepgrandparents. Furstenburg and Spanier (1984) investigated the extended family of stepfamilies. They found that kinship was expanded to include inherited stepgrandparents, if the middle generation was supportive of those relationships. Additionally, grandchildren did not find it difficult to have more than two sets of grandparents including stepgrandparents. Ganong and Coleman (1998) further studied differences in beliefs about intergenerational financial responsibilities for grandparents and grandchildren and inherited stepgrandparents and stepgrandchildren. Major findings highlighted how the nature of the relationship between stepgrandparents and the middle generation, and stepgrandparents and the stepgrandchild, influenced decisions regarding intergenerational financial responsibilities. Henry, Ceglian, and Matthews (1992) examined the middle generations perception of grandmother and inherited stepgrandmother role behavior, role meaning and grandmothering style. Henry et al. found that mothers in the middle generation perceived maternal and paternal grandmothers to exhibit more role behaviors than newly inherited stepgrandmothers, and have different social and personal role meanings than maternal or paternal stepgrandmothers. Haberstroh (1998) studied factors young adults perceived to contribute to positive relationships with grandparents and stepgrandparents. Haberstroh suggested that inherited stepgrandparents can improve relationships with stepgrandchild by
providing more parent-like behaviors and services and establishing closer relationships with the middle generation.

Although there has been a fair amount of research conducted on inherited stepgrandparents from the perspectives of (step)grandchildren and the middle generation, there is a dearth of published studies about long-term stepgrandmothers, especially from the perspective of the stepgrandmother. This is surprising given an aging population and that 40% of stepfamilies remain intact through the life cycle.

Purpose of the Study

The purpose of this study was to measure the association of seven factors that may influence the stepgrandmother role. The factors identified for this study include residence of stepchildren as minors, spousal support for the stepgrandmother role, stepgrandmother-biological grandmother friendliness, stepgrandmother-adult stepchild closeness as well as the husband-former spouse friendliness, father-adult child closeness, and the biological grandmother-adult child closeness. Each of these relationships has been derived from stepmother research during the early years of stepfamily formation. Each was examined in the current study of long-term stepfamilies as possible factors associated with the stepgrandmother role. By identifying unique relationships and influences on the long-term stepgrandmother role, clinicians may be able to differentiate the issues related to the stepgrandmother role and provide appropriate therapy and interventions for women in the later stages of the stepfamily life cycle.
Research Questions

1. Is long-term stepgrandmother role behavior and role meaning associated with any of the key dyadic relationships in the stepfamily, namely (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse relationship friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult stepchild closeness, and (f) biological grandmother-adult stepchild closeness?

2. Does the residential arrangement of stepchildren as minors influence stepgrandmother role behavior and role meaning?

3. Is the quality of the stepgrandmother-stepgrandchild relationship associated with any of the key dyadic relationships in the stepfamily, namely (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse relationship friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult stepchild closeness, and (f) biological grandmother-adult stepchild closeness?

Definition of Terms

This study utilizes terminology that differentiates between various kinship forms related to stepfamilies. These terms and definitions are provided below.

Types of Stepgrandmothers

Ganong and Coleman (2004) differentiate between three types of stepgrandmothers. As stepgrandmothers come to their role via different routes, varying kin relationships are formed within the stepfamily. A woman who arrives at
stepgrandmothering through marriage to a divorced or widowed man with adult children and grandchildren is a later-life remarried stepgrandparent. This person, suddenly a stepgrandmother, is a relative stranger to a family which has functioned for decades together. She is often referred to as “my dad’s wife” and rarely by the adult children as “my stepmother.” The new parental partner is considered more a family friend than family member.

An older person whose adult child marries someone, who has children from a previous relationship, is deemed an inherited stepgrandparent. Rather than becoming a grandparent through biological ties, this person becomes a stepgrandparent through the acquisition of stepgrandchildren through the adult child’s marriage. Inherited stepgrandparents may embrace the role of grandparent with the stepgrandchildren or they may remain focused on their biological grandchildren, not choosing to divide their time, energy or resources.

The final path to stepgrandmotherhood is when an adult stepchild adopts or has a child of their own. In this way the role of stepgrandmother may be more traditionally assumed, like a grandparent in first families. The stepparent-stepchild relationship has developed since before the stepchild was 18 years old. The birth/adoPTION of a child by the middle generation (adult stepchildren) transforms a stepmother into a long-term stepgrandmother.

For the purpose of this study, long-term stepgrandmothers are sometimes referred to as “stepmothers,” depending on the context. Sometimes context will drive the reference based on relationships and the stepfamily life cycle phase. Long-term stepgrandmothers are first stepmothers to their stepchildren (often referred to in the study...
as the middle generation or adult stepchildren), and then stepgrandmothers to their stepchildren’s children (stepgrandchildren).

**Biological Grandmother**

Biological grandmothers in the current study are both the biological mother of adult children (the middle generation) and the grandmother of the middle generations’ children. Her grandchildren and adult children are synonymous with the stepgrandmothers’ stepgrandchildren and adult stepchildren, respectively. She is referred to in the study as the biological mother, the biological grandmother, and the husband’s former spouse.

**Stepchildren and Stepgrandchildren**

*Stepchildren*, referred to as the middle generation or the adult stepchildren, are the non-biological children of the stepmother. They may have resided with the father and stepmother under varying residential arrangements, namely as residential, non-residential or shared-residential. They are biologically related to the stepmother’s spouse (their father), the biological mother (also known as the biological grandmother) and parents of the stepgrandchildren (their biological children). They were under the age of 18 at the time of their father’s marriage to the stepmother. They are the middle generation between the (step)grandmother and the (step)grandchildren.

*Stepgrandchildren* for the purpose of this study are children of an adult stepchild from a long-term stepfamily. This stepgrandchild is biologically related to the
grandfather, the biological grandmother, and the adult (step)child, but not the stepgrandmother.

Residential Arrangement

Visitation patterns, residency, and custody arrangements of minor stepchildren are common concerns in stepfamilies during the early years of stepfamily life. For the purpose of this study the legal terms of custody will be avoided by using a more fluid term which recognizes the ever changing residential arrangement of stepchildren as minors. These terms are defined as:

*Non-residential arrangement.* Stepchildren lived within their biological mother (and stepfather) household more than 50% of the time. Non-residential indicates that the stepchildren did not live within the father and stepmother's household more than 50% of the time while growing up.

*Residential arrangement.* Stepchildren lived within their father/stepmother household more than 50% of the time. Residential arrangement indicates that the stepchildren did not live within the biological mother (and stepfather) household more than 50% of the time while growing up.

*Shared-residential arrangement.* Stepchildren lived fairly equally between the biological mother and the father/stepmother households.
Overview

The following chapters propose the rationale for studying stepgrandmothers and describe the research methodology. Chapter II provides a theoretical framework related to step(grand)mother relationships, residential arrangements of minor stepchildren and the grandparent role. The literature review will outline grandparent role behavior and role meaning. Chapter III describes the study, including participants and inclusion criteria, the research protocol, data collection, instruments, and analyses. Chapter IV reports the results of multiple linear regression, one-way ANOVA analyses of the research hypotheses supported by qualitative response data. Chapter V describes the findings and implications, as well as outlines study limitations and areas of future research. This study aims to add to the stepgrandparenting research and to assist practitioners with clinical issues related to long-term stepgrandmothers in the later stages of the stepfamily life cycle.
CHAPTER II

LITERATURE REVIEW

This chapter will review the relevant literature on grandparenting and stepparenting as it pertains to long-term stepgrandmothers. The linked family system framework sets the context for understanding how the interplay of six relationships and custody arrangement of minor stepchildren may influence stepgrandmother role behavior, role meaning and relationship satisfaction in later-life cycle stepfamilies. Due to a dearth of research on long-term stepgrandmothers, the literature review draws upon stepmother research within the first decade of stepfamily life and the grandparenting literature. Research on grandparenting is mostly with intact families, although a few studies examining inherited stepgrandparenting will be highlighted. Additional factors shown to influence grandmother role behavior, role meaning, and satisfaction will be presented.

Stepfamily: A Linked Family System

Researchers in stepfamily studies commonly identify the complexity of stepfamilies and the need to understand them from a family systems perspective (Ganong & Coleman, 2004; Minuchin, 1985; Papernow, 1993; Whiting, Smith, Barnett, & Grafsky, 2007). Complexity in stepfamilies is determined by a myriad of factors contributing to varying family structures that impact intra- and interfamily relationships. Jacobson (1987) proposed a “linked family system” to provide a framework for
conceptualizing research to reflect the web of interrelationships and the dynamic complexity of the phenomenon known as the stepfamily.

A "linked family system" defines the stepfamily as inclusive of two households in which the members of a divorced and remarried family interact. Members of both households are connected through the interrelationships of the members. Within the linked family system the stepfamily structure is not fixed, but embraces variability. It suggests many dimensions along which stepfamilies may vary, i.e., the number of adults in parenting roles, residency of children, combinations of children (siblings, stepsiblings, half siblings), and conflicts between households.

Jacobson (1987) originally devised the typology to contribute to the understanding of stepfamily interactions on child well-being. In this context Jacobson purported two assumptions. Children's behavior is most notably influenced by the "nature and quality of interactions" (p. 262) among significant persons (parents, stepparents, grandparents, and siblings). Second, children's behavior can best be explained by examining dynamic variables, such as changing relationships, "rather than only static, demographic classifications" (p. 262).

If the typology assumes that behavior is influenced by the interactions of the members of the system, it follows that any member of the system can be the focal point of investigation. Additionally, examining the dynamic variables, such as intra- and inter family relationships within the system, may help to elucidate behavior of any individual. One individual who seems particularly influenced by the interrelationships with in the linked family system is the stepparent (Hetherington & Jodl, 1994).
Stepparenting is a role wrought with ambiguity (Coleman & Ganong, 1996) that is influenced by the interdependence of all the members of the stepfamily system, including children, biological parents, and noncustodial parents. Visher and Visher (1988) point out the challenges in negotiating and resolving competing loyalties these various relationships cause within the “suprafamily” system. Loyalties arise out of divorce, remarriage, and biological ties, and include four key individuals, the biological mother and father, the child(ren), and stepparents.

Stepmothers are considered to have the most difficult role to negotiate in the stepfamily (Fine, Voydanoff, & Donnelly, 1993; Nielsen, 1999). Societal influences bestow a “mother mandate” upon women that implies they are responsible for the well-being of all family members and the quality of the family relationships (Ganong & Coleman, 2004). Stepmothers have this mandate while not having the mothering role. The ambiguous boundaries of the role due to conflicting expectations from self, spouses, children and the biological mother influence how a stepmother enacts her role.

In an ethnographic study with nine self-professed successful stepmothers Whiting, Smith, Barnett, and Grafsky (2007) revealed both challenges and successes associated with the stepmother role. Not surprising, challenges associated with the role revolved around conflicting expectations of each family member and the stepmother. Successes converged around a husband’s support for the stepmother role, shared values, positive stepmother-biological mother relations, and husband-former spouse communication.

These four key stepfamily members (husband, stepmother, biological mother and stepchild) comprise six dyadic relationships influential to the linked family system. Most of what is known about these relationships is founded on research conducted within the
first ten years of stepfamily formation (Bray & Kelly, 1998; Hetherington, 2003; Papernow, 1993). The following section will review the literature regarding these relationships in the first 10 years of remarriage and hypothesize the salience of these relationships in establishing the stepmother’s role as stepgrandmother.

Six Key Dyads in the Linked Family System

*Husband support of stepmother role.* A common theme throughout the extant literature is the need for spousal support of the stepparent role. Coleman and Ganong (1996) state that the couple relationship and the happiness of the stepfamily are due to, in part, support for the stepmother role by her husband. A coordinated and unified parenting dyad creates a predictable environment for stepchildren increasing the chances of the stepfamily staying together (Visher & Visher, 1988). A strong marital relationship can also be a positive role model for children (Whiting et al., 2007), who may have witnessed previous or ongoing relational difficulties between their biological parents. Husband support manifests in various ways. Papernow (1993) points out that husbands (i.e., biological fathers of stepchildren) support stepmothers by including them in decision making regarding household rules and visitation. Visher and Visher (1988) emphasize that husbands and stepmothers should not only working together to determine the household rules, but that husbands should support stepmothers in the enforcement of rules. This clear support is essential if stepmother are to be able to elicit cooperation from the stepchildren (Kashet, 2001). Clarity and consensus about roles decreases stepmother role strain (Saint-Jacques, 1995), and stepfamily risk, while at the same time increasing stepfamily resiliency (Fine, Coleman, & Ganong, 1999). Husbands can act as gatekeepers
to develop close stepmother-stepchild relationships by encouraging special one-on-one time together, removing the stepmother from disciplining stepchildren, and mediating disputes (Ganong, Coleman, Fine, & Martin, 1999). With husband support over time stepmothers become integrated into the stepfamily as an "intimate outsider" reaping the benefits of a well established and special stepmother-stepchild relationship (Papernow, 1988).

**Husband-former spouse friendliness.** Warm relationships between former spouses benefit all those associated with the stepfamily (Visher & Visher, 1988). Studies examining the salience of this relationship on other relationships in the linked family system mostly support this statement. For non-residential father-child relationships friendlier relationships with former spouses may be critical. Residential parents control access to children and act as gatekeeper for non-residential parents. Non-residential fathers report that withheld access by former spouses was the primary reason for loss of contact with children (Kruk & Hall, 1995). In addition to contact, non-custodial fathers considered the support they received from their former spouse to be a significant factor contributing to their parenting relationship with their children (Hoffman, 1995).

Some evidence suggests that the husband’s relationship with his former spouse influences relations between stepmothers, biological mothers and stepchildren. Whiting et al. (2007) found that positive communication between the husband and former spouse aided stepmothers and biological mothers to develop a supportive relationship. With more positive communication between former spouses children felt fewer loyalty conflicts and their relationship with their stepmother improved. Other evidence suggests
that the quality of the co-parental relationship, "hostile" as opposed to "friendly/businesslike," did not have a significant effect on adolescent-stepparent relationships (Crosbie-Burnett, 1991). Conflicting evidence creates uncertainty about the impact of husband-former spouse relations (friendly or unfriendly) on the linked family system over the life course.

_S stepmother-biological mother friendliness. Relations between stepmothers and biological mothers may be particularly difficult due to women being more relationship oriented and feeling more intensely about family relationships (Ahrons & Wallisch, 1987). Additionally, conflicting social messages about motherhood may influence their perceptions of roles and create competition among stepmothers and biological mothers (Nielsen, 1999). Unfortunately, competition between stepmothers and biological mothers may make stepmother-stepchild bonding more difficult. Kashet (2001) notes that a lack of shared roles and role clarity make it difficult for biological and stepmothers to understand each other's perspectives. Biological mothers, who are critical of stepmothers to children, discount stepmothers' rights, or ignore their existence undermine the potential stepmother-stepchildren relationship and encourage loyalty conflicts for children (Coleman & Ganong, 1996; Ganong et al., 1999). Better communication, less conflict, and more positive relations between stepmothers and biological mothers are associated with stepmothers feeling more successful, reduced conflicts with children, and improved relations between members of the stepfamily system (Whiting et al., 2007). Two studies investigating the stepmother-biological mother relationship found cooperation and conflict equally split. According to one study, 50% of biological mothers care about the...
stepmother's welfare, have warm feelings and even "really like" the stepmother (Ahrons & Wallisch, 1987). In another study, nearly half of nonresidential stepmothers perceived biological mothers as purposefully sabotaging the development of their relationships with stepchildren (Weaver & Coleman, 2005). Ganong et al. (1999) suggested that even neutral relations with the non-residential biological parent, were better for stepparent affinity seeking with stepchildren, than negative relations. Yet, sometimes children dislike the biological parent's behavior toward the non-residential stepparent, and ignore criticisms while building independent relationships with stepparents (Coleman & Ganong, 1996).

Husband (biological father)-child closeness. The biological father role is important in mediating with whom the child is linked in the system, namely the stepmother (Schmeeckle, Giarrusso, Feng, & Bengston, 2006). White (1994) and Vinick and Lanspery (2000) found that a stepchild's current relationship with his/her own parent strongly correlates with the quality of relationship with stepparents. Adolescent satisfaction with their parental relationship strongly predicts higher levels of stepfamily belonging for adolescents (Leake, 2007). Bray (1999) and Fine et al. (1993) suggest custodial parents, especially fathers, should remain primarily responsible for control and discipline of children particularly early in remarriage. This creates more positive stepmother-stepchild relationships. Some fathers' relationships with children are strained, hostile or distant due to reduced contact after divorce. In some of these cases stepmothers mediate relations between fathers and children by encouraging contact with and welcoming friendly overtures by stepchildren (Schmeeckle et al., 2006; Vinick &
Lanspery, 2000); however, it is still through the biological father that stepmothers are linked to stepchildren. Without father-child bonds stepmothers would have little opportunity to enter relationships with stepchildren.

*Stepmother-stepchild closeness.* Developing a positive stepparent-stepchild bond is a major developmental task in stepfamilies (Papernow, 1993). Crosbie-Burnett (1984) found that mutually agreeable stepparent-stepchild relations accounted for 59% of the variance for overall stepfamily happiness. Researchers suggest potential obstacles to the stepparent-stepchild relationship are associated with parent-child relationships (White, 1994), confusion for the stepchild over the nature of the stepparent relationship (Weaver & Coleman, 2005), stepchild's developmental status (Bray, 1999), and a stepchild's characteristics and behaviors including level of acceptance of the remarriage (Erera-Weatherley, 1996). Filinson (1986) suggests competing biological parents, financial complexities and family structure may be more of a hurdle to relationship building than resistance to the roles of stepparent and stepchild, although the latter appears salient.

Fine, Coleman, and Ganong (1998) as well as Visher and Visher (1988) indicate stepchildren experience frustration when stepparents behave more like parents, which can create friction and distance. To overcome this challenge Bray (1999) suggests developing personal relationships with stepchildren unencumbered by discipline or control. By finding a stepparent role that is mutually acceptable for stepchildren and stepparents, perhaps as friend or parent-like figure, stepparents do not replace a parent after divorce. They are added to stepchildren’s stock of kin (Cherlin & Furstenberg, 1994). Supportiveness of fathers can also help facilitate stepmother-stepchild relationships by
opening up the parent-child boundary, encouraging stepparent-stepchild one-on-one time together, and not undermining the stepmother’s authority in the household (Kashet, 2001).

Compounding these influences is the type (simple, combined, complex) of stepfamily. Combined stepfamilies in which both adults bring children in to the remarriage are associated with more adjustment problems, as are greater numbers of children and birth of a child to the remarried couple (Santrock & Sitterle, 1987). Timing of the child’s birth may be critical. If the child enters a stepfamily which has not yet successfully integrated, it can amplify difficulties (Bernstein, 1989). Other researchers point out that mothers in complex stepfamilies were less involved with and showed less warmth toward stepchildren than their own (Henderson & Taylor, 1999; Mekos, Hetherington, & Reiss, 1996).

Seltzer (1994) suggests stepparent-stepchild bonds may be impacted by age of child at time of parental remarriage, although another researcher found age to be insignificantly related to stepmother notions of kinship. Seltzer (1994) states younger children at time of remarriage have more years to develop stronger relationships. Schmeeckle (2006) substantiated this claim in a retrospective study with adult stepchildren. Young adults with stepparents were more likely to perceive stepparents as parents the younger the stepchildren were at parental remarriage. Church (1999) found, on the other hand, that age of stepchild at time of remarriage was not related to stepmother notions of kinship.

Age appears to be only one of many influences on stepmother-stepchild bonding. No matter how bonds are created or roles defined, developing a level of closeness appears
to be a major developmental task of stepfamily development influencing adult stepchildren's perceptions of who is family and who is not (Schmeeckle et al., 2006).

*Biological mother-child closeness.* Biological mothers are awarded residential custody 9 out of 10 times by the courts creating ample opportunity for strong bonds between mothers and children (Hagestad, 1985). Compared to intact families residential mother-child bonds are only moderately weaker (White, 1994), indicating residential mother-child relationships are maintained after divorce. Mother-child emotional bonds appear to be more intense than stepmother-stepchild emotional bonds resulting in more positive child behaviors towards mothers as well as more conflict (Hetherington & Jodl, 1994).

Non-residential mothers are in more frequent contact with children than non-residential fathers (Furstenberg, Nord, Peterson, & Zill, 1983). As noted by King (2007) frequency of non-residential mother-child contact does not necessarily interfere with stepmother-stepchild closeness, if biological mothers are positive or neutral towards stepmothers (Ganong et al., 1999).

*Residential Status of Adult Stepchildren as Minors*

Sharing residency provides more opportunity for interacting, and developing closer relationships among stepfamily members (Ganong & Coleman, 2004). Residential or joint custody household members have opportunities for frequent contact to perform different roles under varying circumstances which can deepen and broaden interpersonal connections.
Results of studies on custody status have revealed some mixed results for stepmother-stepchild relations. Clingempeel and Segal (1986) report stepfamilies are most stressed when children reside in father-stepmother households with frequent visits to the biological mother. King (2007) reports that children are closer to the residential stepmother if the mother has no contact, while levels of closeness to non-residential mothers and stepmothers are very similar if the mother has at least some contact. Conversely, stepmother-stepchild bonds are hindered when children primarily reside with mothers and stepfathers (Seltzer, 1994).

Evidence suggests joint custody positively impacts relationships within the linked family system. In a joint versus sole custody study Bauserman (2002) found joint custody children better adjusted than sole mother custody children. No significant differences were found in child adjustment between joint custody and sole father custody, but there was a difference in favor of joint custody. Involvement with children by parents from both households during childhood and adolescents was beneficial to children. Joint custody positively impacts adolescent relationships with stepparents (Crosbie-Burnett, 1991), and appears to have a positive affect on the perception of stepparent-stepchild relationship into adulthood. Schmeckle’s (2006) study of adult stepchildren’s perceptions of current and former stepparents indicates that stepparent-stepchild co-residence while growing up significantly predicted adult stepchildren’s perception of stepparents as family members and parents.
Grandparenting

Like stepmotherhood, grandparenting is an contingent process (Troll, 1985) dependent on personal events and the quality of interrelationships. In a study of women transitioning to grandmotherhood Fischer's (1983) sought to unravel the system of family relationships linking grandparents to grandchildren. This is a much needed task as most studies focus on functional, structural, and associative components of relationships, instead of the nature and quality of those relationships (Barranti, 1985). One of the many challenges to studying intergenerational ties is the complexity (Hodgson, 1992; Silverstein, Giarrusso, & Bengston, 1998). This is particularly true for intergenerational relationships in stepfamilies (Ganong & Coleman, 2004). Complexity necessitates a family systems theory to examine grandparenting beyond the grandparent-grandchild pair to include grandparent-parent, parent-grandchild, and grandparent-grandchild relationships (Hagestad, 1985). These relationships may be particularly salient to stepgrandmother role behavior, role meaning and satisfaction, given the stepmother role is bound by interrelationships with biological parents and stepchild(ren).

It then seems necessary to investigate how role behavior, role meaning and satisfaction with the stepgrandchild relationship may be influenced by these relationships. To date, there are no published studies which have investigated long-term stepgrandmother role behaviors, role meaning, and satisfaction. As such, an overview of intergenerational ties in intact families and families of middle generation divorce and remarriage help to illuminate some of the factors influencing grandmotherhood.
Grandmother Role Behavior and Role Meaning

Grandparenting typologies began in the mid-1960s as researchers investigating grandparenting aspired to understand various psychological and social dimensions of the grandparent role. Neugarten and Weinstein (1964) were the first to hypothesize about grandparent roles and suggested five major styles. Each style described a set of behaviors and psychological conditions that differentiated each role from the other. It was determined that grandparenting is not a uniform construct. Grandparents engage in different roles over the life course.

Robertson's (1977) study expanded on this work by solely investigating grandmothers. Her research was designed to "examine the significance of grandmotherhood by focusing upon the conceptions of grandmothers with regard to the meaning and behaviors they associate with the role" (Robertson, 1977, p. 167). Robertson's role conception is grounded in a family systems framework, which presupposes that a grandmother's preconceived attitudes and expectations regarding the behavior of the grandmothering role are defined by her family orientation and attitudes and expectations regarding grandparent role-taking. Robertson proposed to measure these roles and expectation via two components—role behaviors and role meaning.

The role behavior component focuses on the range of behaviors which are voluntarily exchanged between grandparent and grandchild as intergenerational helping patterns. Robertson (1977) operationalized these behaviors along two dimensions, instrumental role behaviors and expressive role behaviors. Examples of instrumental role behaviors include care taking, acting as parent surrogates and family historians, assisting
in the time of crisis, and supplementing family income. Examples of expressive role behaviors include acting as a tension reliever, arbitrator, and affective liaison between grandchildren and their parents; grandmothers may also play the role of confidant or companionate friend to grandchildren.

Several studies have utilized Robertson’s behavior dimensions to investigate biological grandmother and inherited stepgrandmother role behavior. In a comparison study, Sanders and Trygstad (1989) found that adult (step)grandchildren expect biological grandparents to engage in more instrumental role behaviors than inherited stepgrandparents. Henry, Ceglian, and Matthews (1992) found similar results in the middle generation’s perceptions of grandmothers and stepgrandmothers. Mothers of grandchildren perceived that grandmothers and grandchildren participated in significantly more instrumental role behaviors than inherited stepgrandmothers and stepgrandchildren. Middle generation mothers also perceived significantly more expressive role behaviors between grandmothers and grandchildren than stepgrandmothers and stepgrandchildren. These results do not seem surprising since the observed stepgrandmothers had only known their stepgrandchildren on average 2.71 years.

Age, number of grandchildren, and frequency of contact were significantly related to the level of instrumental role behaviors for both stepgrandmothers and grandmothers. Younger (step)grandmothers demonstrated more instrumental role behaviors, while (step)grandmothers with more than 10 (step)grandchildren engaged in fewer behaviors. Stepgrandmothers and grandmothers who engaged in more frequent contact with (step)grandchildren also engaged in more instrumental role behaviors. Distance between homes was a poor predictor of instrumental role behavior.
The role meaning component of Robertson's (1977) typology focuses on attitudes and expectations that shape grandmother preconceptions regarding roles. These attitudes and expectations are either realized or not in the grandmother's lived experience.

The concept of role meaning is operationalized along two dimensions—social and personal. Social role meaning is "determined almost exclusively by social or normative forces which meet the needs of society" (Robertson, 1971, p. 8). It includes an orientation for the collective or social good; grandmothers engage the role with expectations of respect from the younger generation, a belief in family welfare, and providing an example of moral correctness. Personal role meaning stems from a personal orientation, which focuses within the individual and on one's personal needs. Social role meaning and personal role meaning are not mutually exclusive dimensions, but combined to reflect variability within one's role conception.

According to Robertson's (1977) typology there are four possible combinations of personal and social role meaning, which describe a grandparenting style. A grandmother with an *apportioned* role meaning type would be above the median score for both dimensions. A *remote* role meaning type would be below the median score on both dimensions. For those high on the personal but low on the social dimensions would be the *individualized* type, while those low on the personal but high on the social dimensions would be the *symbolic* type. Although Robertson used this typology to explain grandmother style, others have simply used personal and social meaning to understand role conception ( Sanders & Trygstad, 1989).

To date, Robertson's role meaning and role behavior constructs have been used to investigate biological grandmothers in intact and divorced families (Cogswell & Henry,
1995; Robertson, 1977) and inherited stepgrandmothers (Henry et al., 1992; Sanders & Trygstad, 1989); however, these constructs have not yet been used to examine the long-term stepgrandmother role. Nor have stepfamily member relationships or custody status of minor stepchildren been associated with the stepgrandmother role behavior or role meaning.

Factors Influencing Grandmother Role Behavior, Role Meaning, and Satisfaction

(Step)mothers as (step)grandmothers. Furstenberg and Spanier (1984) state, "Our kinship system permits the augmentation of kin without relinquishing existing relations" (p. 136). Cherlin and Furstenberg (1994) suggest that with divorce and remarriage grandparenthood is no longer ascribed to parents' parents, but achieved through effort. Additionally, 40% of White families have a stepparent in the family (Szinovacz, 1998). These findings seem to indicate that stepgrandmothering is becoming increasingly common and that biological relatedness appears less salient to grandmothering than relational effort. However, studies on American kinship networks demonstrate a martrifocal tilt to grandparenting (Hagestad, 1985; Johnson, 1998). Daughters and mothers have been shown to have the closest relationship within kinship ties (Rossi & Rossi, 1990). Women bring families together across generations facilitating contact and exchange, and acting as family monitors. Ganong and Coleman (2004) warn that a "jealous genetic grandparent" may influence stepgrandmother-adult stepchild relationships. Given that family kinship is socially a female role and is not just ascribed, but achieved, it is uncertain how the kin-keeper role will manifest in the linked family
system. Will stepgrandmother-grandmother friendliness and/or grandmother-adult child closeness be associated with stepgrandmother role meaning and role behavior?

**Fathers as grandfathers.** Given that American kinship is typically matrifocal (Hagestad, 1985; Johnson, 1998), what role do fathers play in the kinship network of long-term stepfamilies? In early stepfamily formation fathers acted as mediators and facilitators of stepmother relationships within the linked family system. As the conduit of positive (or negative) dyadic relationships within the stepfamily, it is hypothesized that his support for the stepgrandmother role, his friendliness towards his former spouse, and his closeness with his adult child will be associated with how stepmothers conceive and enact their.

**The middle generation: Minor aged stepchildren become adults.** Unlike inherited stepgrandparents and later-life stepgrandparents, long-term stepgrandparents have known the parents of their stepgrandchildren since the parents were minor children. Early contact provides time for relationship building opportunities with stepchildren. Opportunities for contact and relational closeness may be critical to the role behaviors and role meaning of stepgrandmothers. Research on grandparenthood indicates that the middle generation is the bridge between grandparent and grandchild (Hagestad, 1985; Robertson, 1977). Hodgson (1992) found that greater emotional closeness between grandparents and parents is associated with greater emotional closeness and contact with grandchildren. Fisher found similar results suggesting the system of family networks linking grandparents to grandchildren may be dependent on the grandparent-grandchild bond (Fischer, 1983). It is
hypothesized that stepgrandmother-adult stepchild relationship closeness will be correlated with stepgrandmother role behaviors and role meaning.

* Custody of minor stepchildren. It is further hypothesized that residence of minor stepchildren will impact stepgrandmother role behavior and role meaning. Rossi and Rossi (1990) indicate that generations are drawn together in later years that have experienced less strain and more cooperation while children are minors. Type of residency appears to contribute to or ameliorate the level of strain a child experiences and the quality of parent-child-stepparent relationships able to be developed (Clingempeel & Segal, 1986; Schmeeckle et al., 2006).

* Mediating factors. The mediating factors of the grandmother role have been substantially researched with fairly broad consensus. A brief outline identifies six factors associated with grandmother role meaning, role behavior and satisfaction. There are: age of grandmother (Kennedy, 1991; Neugarten & Weinstein, 1964), number of grandchildren (Robertson, 1977), age of grandchildren (Henry et al., 1992; Robertson, 1977), proximity and frequency of contact (Cherlin & Furstenberg, 1985; Kennedy, 1991; Whitebeck, Hoyt, & Huck, 1993), and relationship with middle generation (Hagestad, 1985; Robertson, 1977).

Summary

Norms associated with the long-term stepgrandmother role are not known. What are the factors that influence her role behaviors and role meaning? Are residency status, stepmother-adult stepchild closeness, husband's support, stepmother-biological mother
friendliness, husband-former wife friendliness, father-child closeness, and biological mother-child closeness associated with the stepgrandmother's role behavior and role meaning? Are these relationships associated her satisfaction with her stepgrandchild relationship? By investigating the relationships that may influence stepmothers as stepgrandmothers, we may begin to understand later-life, long-term stepmothers in hopes of providing normative expectations and recommendations for clinicians working with this population.
CHAPTER III

METHODOLOGY

The purpose of this study was to investigate dyadic relationships and residential arrangement of stepchildren as minors within the linked family system that may be associated with stepgrandmother role behaviors, role meaning, and stepgrandmother-stepgrandchild relationship satisfaction. Stepgrandmothers from long-term stepfamilies were recruited to participate in a self-administered, paper and pencil survey. The survey consisted of 54 questions related to stepgrandmother role behavior and role meaning, six dyadic relationships in the linked family system, and residential arrangements. Respondents anonymously completed and returned questionnaires in person or via mail. Participants were eligible to enter a $20 raffle and receive a summary of the survey results. Returned surveys were coded and data were cleaned. Multiple linear regression and one-way ANOVA were conducted.

Survey Pretest

A pretest of the survey was conducted to evaluate face validity, flow and clarity of instructions and questions (Frey & Oishi, 1995). Members of the dissertation committee as well as three stepgrandmothers provided feedback during the pretest phase. The stepgrandmother subjects were recruited through referral. Participation in the pretest was voluntary and no compensation was offered to the subjects for their participation.
Referrals were screened over the phone by the researcher to verify that they met inclusion criteria.

Survey packets were distributed by mail and included a cover letter, a consent form, a questionnaire, a raffle entry postcard and a self-addressed, postage paid return envelope. Participants were instructed to provide a written critique for each of the included items and to time themselves while completing the questionnaire.

Pretest participants provided feedback to the researcher regarding the accuracy and readability of the instructions, the quality of the question flow, the response options, and the time to complete the survey. Questions were revised or eliminated based on the recommendations by the evaluators and perceived relevance of those questions to the research hypotheses. The final survey consisted of 54 quantitative questions, and 2 qualitative questions allowing participants the opportunity to express their thoughts and feelings about the highlights and challenges of long-term stepgrandmothering.

Participants

Inclusion Criteria

The sample consisted of stepgrandmothers who were also stepmothers and met the following criteria:

1. Stepchild(ren) was under the age of 18 at the time of the biological father's remarriage to the stepmother.
2. Minor children lived in one of the following arrangements: mostly with biological mother “non-residential,” mostly with the biological
father/stepmother "residential," and fairly equally split between households “shared-residential.” Stepmothers may or may not have had biological children prior to the formation of the stepfamily, or subsequently thereafter resulting in simple, combined, or complex stepfamilies.

3. Adult stepchildren, now the middle generation, have either fathered or given birth to an off-spring, or adopted a child, which transformed stepmothers into stepgrandmothers.

4. Long-term stepgrandmothers have at least one stepgrandchild through birth or adoption by a stepchild.

Demographics

Participants for this study consisted of 122 long-term stepgrandmothers (see Table 1). Respondents ranged in age from 33 to 88 years old with a mean of 58.5 years ($SD = 10.2$); 20.5% were 30-49, 56% were 50-69, and 23.1% were 70 or over. The majority of the sample identified as European-American (81.1%) followed by mixed-race (3.3%), African-American, Asian-American, Latina, and Native American (each 1.6%), and unidentified/other (9.1%).

Duration of remarriages ranged from 7 to 65 years ($M = 26.7, SD = 16.9$). The majority of the respondents (82.8%) were married to the father of their stepchildren; 10.7% were widowed from the father of their stepchildren, 4.1% were separated or divorced from the father of their stepchildren, and 2.4% were remarried after being divorced or widowed from the father of their stepchildren. While minors, 47.5% of stepchildren lived with their biological mother more than half-time, 35.2% lived with
Table 1

Demographic Characteristics of Stepgrandmothers, Age, Race, Duration of Remarriage, Employment Status, Education, and Health

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age, years (range 33-88):</strong></td>
<td>122</td>
</tr>
<tr>
<td>30-49</td>
<td>25 (20.5%)</td>
</tr>
<tr>
<td>50-69</td>
<td>79 (66.4%)</td>
</tr>
<tr>
<td>70 or older</td>
<td>18 (15.1%)</td>
</tr>
<tr>
<td><strong>Race:</strong></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>2 (1.6%)</td>
</tr>
<tr>
<td>Asian-American</td>
<td>2 (1.6%)</td>
</tr>
<tr>
<td>European-American</td>
<td>99 (81.1%)</td>
</tr>
<tr>
<td>Latina</td>
<td>2 (1.6%)</td>
</tr>
<tr>
<td>Native American</td>
<td>2 (1.6%)</td>
</tr>
<tr>
<td>Mixed race</td>
<td>4 (3.3%)</td>
</tr>
<tr>
<td>Other/unidentified</td>
<td>11 (9.1%)</td>
</tr>
<tr>
<td><strong>Duration of Remarriage, years (range 7-65)</strong></td>
<td></td>
</tr>
<tr>
<td>Married to father of stepchildren</td>
<td>101 (82.8%)</td>
</tr>
<tr>
<td>Widowed from father of stepchildren</td>
<td>13 (10.7%)</td>
</tr>
<tr>
<td>Separated/divorce from father of stepchildren</td>
<td>5 (4.1%)</td>
</tr>
<tr>
<td>Remarried after divorced or widowed from father of stepchildren</td>
<td>3 (2.4%)</td>
</tr>
<tr>
<td><strong>Living Arrangement of Stepchildren as Minors</strong></td>
<td></td>
</tr>
<tr>
<td>Non-residential</td>
<td>58 (47.5%)</td>
</tr>
<tr>
<td>Residential</td>
<td>43 (35.2%)</td>
</tr>
<tr>
<td>Shared-residential</td>
<td>10 (8.2%)</td>
</tr>
<tr>
<td>Not applicable (unspecified)</td>
<td>11 (9.0%)</td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
</tr>
<tr>
<td>Retired, no longer working</td>
<td>35 (28.7%)</td>
</tr>
<tr>
<td>Retired, but working part-time</td>
<td>8 (6.6%)</td>
</tr>
<tr>
<td>Retired, but working full-time</td>
<td>6 (4.9%)</td>
</tr>
<tr>
<td>Employed full-time (never been retired)</td>
<td>43 (35.2%)</td>
</tr>
<tr>
<td>Employed part-time (never been retire)</td>
<td>13 (10.7%)</td>
</tr>
<tr>
<td>Self-employed</td>
<td>9 (7.4%)</td>
</tr>
<tr>
<td>Homemaker</td>
<td>5 (4.1)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>3 (2.5%)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>Some high school or less</td>
<td>4 (3.3%)</td>
</tr>
<tr>
<td>High school graduate</td>
<td>27 (22.1%)</td>
</tr>
<tr>
<td>Some college</td>
<td>43 (35.2%)</td>
</tr>
<tr>
<td>College graduate</td>
<td>25 (20.5%)</td>
</tr>
<tr>
<td>Graduate work/degree</td>
<td>23 (18.9%)</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>37 (30.3%)</td>
</tr>
<tr>
<td>Good</td>
<td>67 (54.9%)</td>
</tr>
<tr>
<td>Fair</td>
<td>14 (11.5%)</td>
</tr>
<tr>
<td>Poor</td>
<td>4 (3.3%)</td>
</tr>
</tbody>
</table>
their father and stepmother more than half-time, and 8.2% lived fairly equal time between biological mother households and father/stepmother households.

Stepgrandmothers described their work status as "retired," "retired, but working," "employed, never been retired" or "unemployed." Almost 28% were retired and no longer working. Of those who were retired from prior employment, but still working, 6.6% worked part-time and 4.9% worked full-time.

Most respondents were not retired and worked in some capacity. Of those identified as employed, but never retired, 35.2% worked full-time and 10.7% worked part-time; 7.4% identified as self-employed and 4.1% identified as homemakers. Two and half percent identified as unemployed.

Respondents were fairly well-educated and mostly reported good health. About 25% of the stepgrandmothers had a primary or secondary level of education only. Most women had some college education (35.2%), or completed a college degree (20.5%). Almost 19% completed some graduate work or a received a graduate degree. Good to excellent health was reported by most of the respondents (85.2%) with less than 15% reporting poor to fair health.

The majority of stepgrandmothers lived within 50 miles of the identified stepgrandchild (see Table 2). Of these, 21.3% lived "10 miles or less" from their stepgrandchild, 28.7% lived between 11-50 miles, and two stepgrandchildren lived with their stepgrandmothers (1.6%). A little over 16% of stepgrandmothers were in contact with their stepgrandchild "at least once a week"; 12.3% visited "every couple of weeks," and 16.4% were in contact "about once a month." The largest percentage, approximately 33% of stepgrandmothers, had contact with their stepgrandchild “once every few
months.” Almost 15% were in contact “about once a year.” Almost 6% visited either less than once a year or never. Two stepgrandchildren lived with their stepgrandmother.

Table 2
Demographic Characteristic, Proximity, and Frequency

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stepgrandmother “only”</td>
<td>63 (51.6%)</td>
</tr>
<tr>
<td>Stepgrandmother “combined”</td>
<td>59 (48.4%)</td>
</tr>
<tr>
<td>Average number of step/grandchildren</td>
<td></td>
</tr>
<tr>
<td>Stepgrandchildren</td>
<td>$M = 6.87, SD = 4.88$</td>
</tr>
<tr>
<td>Grandchildren</td>
<td>$M = 2.29, SD = 3.51$</td>
</tr>
<tr>
<td>Proximity</td>
<td></td>
</tr>
<tr>
<td>10 miles or less</td>
<td>26 (21.3%)</td>
</tr>
<tr>
<td>11-50 miles</td>
<td>35 (28.7%)</td>
</tr>
<tr>
<td>51-100 miles</td>
<td>14 (11.5%)</td>
</tr>
<tr>
<td>More than 100 miles</td>
<td>45 (36.9%)</td>
</tr>
<tr>
<td>My stepgrandchild lives with me</td>
<td>2 (1.6%)</td>
</tr>
<tr>
<td>Frequency of contact</td>
<td></td>
</tr>
<tr>
<td>At least once a week</td>
<td>20 (16.4%)</td>
</tr>
<tr>
<td>Every couple of weeks</td>
<td>15 (12.3%)</td>
</tr>
<tr>
<td>About once a month</td>
<td>20 (16.4%)</td>
</tr>
<tr>
<td>Once every few months</td>
<td>40 (32.8%)</td>
</tr>
<tr>
<td>About once a year</td>
<td>18 (14.8%)</td>
</tr>
<tr>
<td>Less than once a year, never</td>
<td>7 (5.7%)</td>
</tr>
<tr>
<td>My stepgrandchild lives with me</td>
<td>2 (1.6%)</td>
</tr>
</tbody>
</table>

Participants in the study were either stepgrandmothers “only” or “combined” stepgrandmothers and grandmothers. The stepgrandmother “only” group either did not have biological children, or adult biological children had not yet had children. The “combined” group was comprised of women who were stepgrandmothers as well as biological grandmothers, whose adult stepchildren and biological children have had children. The number of respondents who were stepgrandmothers “only” was similar to the “combined” group, almost 48% versus 52%, respectively.
Recruitment

Participants were recruited through convenience sampling and snowball sampling. Convenience sampling was conducted by setting up promotional tables at on-site locations in southwest Michigan. Venues included county fairs, YMCAs, churches, and senior centers. Promotional tables were staffed by the researcher or assistants, and provided information regarding the study, stepfamilies, and grandparenting. Participants completed surveys on-site, or at home and then returned surveys by mail. Referrals provided contact information (name, phone number, email or home address) of individuals potentially interested in the study. All contacts within the United States for which a name and address were provided were mailed a survey packet (see Table 3 for recruitment method, survey distribution, and returns).

Participants were also recruited via word-of-mouth. Five articles written about the study by the researcher or journalists were published in a local regional newspaper, on a national stepfamily website, on a local area family blog, as well as in local regional newsletters for seniors and grandparents. Information about the study expanded from these sources to a national clergy list-serve. Flyers explaining the study were posted in hair salons, coffee houses, and women's workout facilities as well as the children's section of public libraries. Recruitment also occurred at two undergraduate courses offered in a Family and Consumer Sciences department at a mid-size university in southwest Michigan. The study was described to undergraduates, who were asked for referrals. Referred contacts received a survey packet in the mail.
Table 3
Participant Recruitment Method, Survey Distribution, and Return

<table>
<thead>
<tr>
<th>Method</th>
<th>Attendance/Membership/Circulation</th>
<th>Surveys Distributed</th>
<th>Returned Surveys</th>
<th>% returned</th>
<th>% of valid returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>County fairs</td>
<td>12,000</td>
<td>128</td>
<td>39</td>
<td>51</td>
<td>58</td>
</tr>
<tr>
<td>YMCAs</td>
<td>6500</td>
<td>60</td>
<td>1</td>
<td>42</td>
<td>28</td>
</tr>
<tr>
<td>Senior Centers</td>
<td>1,300</td>
<td>6</td>
<td>1</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Churches</td>
<td>400</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Newspaper</td>
<td>55,000</td>
<td>12</td>
<td>na</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Newsletters</td>
<td>1750</td>
<td>1</td>
<td>na</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Stepfamily website</td>
<td>10,400</td>
<td>4</td>
<td>na</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>List-serves and blogs</td>
<td>400*</td>
<td>2</td>
<td>na</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Flyers</td>
<td>10,000</td>
<td>2</td>
<td>na</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Undergraduates</td>
<td>70</td>
<td>5</td>
<td>na</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Word of mouth</td>
<td>unknown</td>
<td>17</td>
<td>na</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Totals</td>
<td>242</td>
<td>42</td>
<td>136</td>
<td>122</td>
<td>73.5</td>
</tr>
</tbody>
</table>

1 includes men, women, children and households or distributions
2 total number of returned surveys divided by the number of distributed surveys
3 number of valid returned surveys divided by number of distributed surveys
* estimated number, unable to obtain actual distribution size

Adult children and stepchildren were important referral sources of stepgrandmother contact information. Other family members including stepgrandmother siblings, in-laws, and spouses were also helpful in recruiting women for the study. Anecdotal evidence suggests that approximately 20-30% of the surveys distributed to potential participants were based on names and addresses provided by referrals.
Survey packets included a cover letter, a consent form, a survey booklet, a raffle entry card, and a postage paid return envelope. The cover letter expressed thanks for interest in the study, while the consent form provided information about the survey, response options, and who to contact with inquiries or concerns (see Appendix A for a copy of the cover letter and Appendix B for the consent documents). Surveys took approximately 25 minutes to complete. For their time, respondents were provided an opportunity to enter a $20 raffle and receive a summary of the results. Completed self-addressed, postage paid raffle entry post cards were intended to be returned separately from the surveys to protect anonymity of respondents. Some postcards were returned within the survey return envelope. These postcards were removed and shuffled into the stack of postcards without looking at names. Forty-two surveys were returned at on-site locations, while 136 surveys were returned via mail.

Three standard recruitment scripts corresponded to the type of contact with subjects or referrals. Recruitment scripts varied slightly depending on whether subjects or referrals were contacted via telephone or in-person. Recruitment scripts included the names of researchers, purpose of the study, inclusion criteria and requirements of subjects (see Appendix C for a copy of the recruitment scripts). Each script was approved by the Human Subjects Institutional Review Board (HSIRB) at Western Michigan University.

Protection of Subjects

Two versions of the consent document were prepared to coincide with the distribution method (see Appendix B). Consent forms varied slightly to provide instructions for in-person or mail return, e.g., on-site drop box or postage paid return
envelope. Consent forms included the title of the study, the names and contact phone numbers of the researchers, the nature and purpose of the study, potential risks and benefits to the subject, inclusion criteria, procedures, a penalty free opt-out statement, and a statement of anonymity. Consent forms were for the subject’s record. A returned survey implied consent. Consent forms were valid for one year from the date “approved” by HSIRB (see Appendix D for HSIRB study approval).

It was assumed that subjects would experience limited to no direct harm from participating in the research study. A possibility existed that some questions might create some discomfort. For example, the subject may have become aware of some unsatisfactory aspect of her situation while considering question responses. All women had the opportunity to opt-out of or discontinue the survey at anytime without judgment from the researcher. All subjects were given phone numbers to call for assistance with any persistent uncomfortable feelings. These numbers included a counseling center and telephone hotline for mental health emergencies in southwest Michigan.

Subjects had an opportunity to enter one of five drawings for a $20 cash award. Subjects completed the raffle entry postcard if interested in participating in one of the drawings, and checked the box if interested in a summary of the survey results (see Appendix E for a copy of the postcard). Participants were eligible for only one entry and one chance to win, and needed not request summary results to enter. At the end of the data collection period, a random drawing selected five winners from 131 entries. Winners were contacted and given one of three gift card options: Target, Meijer, or Starbucks. Gift cards were sent along with a thank you card for participating in the study.
Confidentiality was maintained for all documents related to the study. Questionnaires and returned raffle entries were secured in a locked file in a graduate associate's office throughout the study. Upon completion of the study questionnaires and raffle entries were maintained in a locked file cabinet in the primary researcher's office for three years.

Instrument

Part I: Stepgrandmother Questionnaire

Stepgrandmothers' perceptions of their role behavior and role meaning were assessed using Henry and Ceglian's (2001) Grandparenting and Stepgrandparenting Questionnaire (GSQ) modified for the current study. Henry and Ceglian crafted the GSQ based on Robertson's (1971, 1977) study of grandmothers. Four subscales comprise the 23-item questionnaire (i.e., Instrumental Role Behavior, Expressive Role Behavior, Social Role Meanings, and Personal Role Meanings). Two published studies have used the GSQ. Henry, Ceglian, and Matthews (1992) assessed the middle generation's perceptions of grandparental role behavior and role meaning. Sixty-two women in remarried families completed the questionnaires “to assess their parents' and stepparents' relationship with grandchildren and stepgrandchildren” (Henry & Ceglian, 2001, p. 48). Cogswell and Henry (1995) modified the GSQ to assess grandparental role behavior and meaning from the perspective of college age grandchildren. Henry and Ceglian (2001) suggested that with further modifications the GSQ could be used with grandparents.
The current study was the first to revise the GSQ to assess stepgrandparent role behavior and role meaning from the perspective of long-term stepgrandmothers (see Appendix F for a copy of the modified GSQ). The questionnaire was slightly modified in four ways. First, the title was changed to the Stepgrandmother Questionnaire to focus respondents only on relations with a stepgrandchild. Secondly, question items were worded in the first person to illicit stepgrandmother self-perception of her role behavior and role meaning associated with an identified stepgrandchild (i.e., “This grandparent regularly spends a week or more with the grandchild” became “I regularly spend a week or more with this stepgrandchild”). Thirdly, to facilitate the identification of a stepgrandchild (not a grandchild), question items that included the word “grandchild” were changed to “stepgrandchild” (see above). Lastly, questionnaire responses were directionally modified to create consistency between questionnaire responses in Part II and Part III. The 5-point Likert scale used by Henry and Ceglian (2001) ranging from 1 (strongly agree) to 5 (strongly disagree) was modified directionally to 1 (strongly disagree) to 5 (strongly agree). Higher scores on the current version indicated higher levels of role behavior and role meaning. Item 15 was reversed scored during analysis.

The Instrumental Role Behavior (IRB) subscale consisted of nine Likert-type items asking stepgrandmothers about the amount of time and activities shared with a specific stepgrandchild. Responses ranged from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicated more instrumental role behaviors while lower scores indicated fewer instrumental role behaviors. Sample items included: “I have told this stepgrandchild about family history or customs,” and “I often babysit with this stepgrandchild.” Items 1-9 on the questionnaire comprised the IRB subscale.
The Expressive Role Behavior (ERB) subscale consisted of four Likert-type items asking stepgrandmothers about the degree of involvement with stepgrandchildren in the areas of helping or advising. Responses ranged from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicated more expressive role behaviors while lower scores indicated fewer expressive role behaviors. A sample item included: "I have advised this stepgrandchild on work plans or schooling." Items 10-13 on the questionnaire comprised the ERB subscale.

The Social Role Meaning (SRM) subscale consisted of five Likert-type items assessing social norms stepgrandmothers associated with their stepgrandchild relationship. Responses ranged from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicated more social role meaning while lower scores indicated less social role meaning. Sample items included: "I think it is important for this stepgrandchild to respect his/her elders," and "I set a good example for this stepgrandchild of what is morally right." Items 14-18 on the questionnaire comprised the SRM subscale.

The Personal Role Meaning (PRM) subscale consisted of five Likert-type items assessing the fulfillment of personal needs stepgrandmothers associated with their stepgrandchild relationship. Responses ranged from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicated more personal role meaning while lower scores indicated less personal role meaning. Sample items include: "I would be very lonely without this stepgrandchild," and "I feel young again because of my relationship with this stepgrandchild." Items 19-23 on the questionnaire comprised the PRM subscale.
Part II: Stepgrandchildren and Grandchildren Questions

The stepgrandchildren and grandchildren questions were developed for this study to gather sociodemographic information specifically related to the identified stepgrandchild and other step/grandchildren. Questions included information regarding age and gender of the identified stepgrandchild, distance traveled for visits; frequency of contact between both step/grandmothers and step/grandchildren; and the number of stepgrandchildren, grandchildren, and great-step/grandchildren. A single item assessed the stepgrandmother’s perceived level of relationship satisfaction with the identified stepgrandchild.

Part III: Demographic and Relationship Questions

The demographic and relationship questions were developed specifically for this study to gather relevant information regarding sociodemographic data and information about six dyadic relationships. Questions elicited responses regarding demographic data, including age, gender, education, race and ethnicity, health and work status of stepgrandmothers, grandmothers, and stepchildren. Twelve single items probed six dyadic relationships before and after the birth of the stepgrandchild, including husband support of stepgrandmother role, husband-former spouse friendliness, father-adult child closeness, stepgrandmother-grandmother friendliness, stepgrandmother-adult stepchild closeness, biological mother-child closeness.

Demographic questions. Items were drawn from existing questionnaires or constructed by the researcher. The Grandparenting Study Questionnaire (AARP, 2002)
was the source of eight questions used verbatim pertaining to distance traveled to see the stepgrandchild, frequency of visits, year born, level of education, and employment status. The item pertaining to the number of step/grandchildren was slightly modified to parcel out the total number of stepgrandchildren, grandchildren, and great-grandchildren.

The National Survey of Families and Households (Sweet, Bumpass, & Call, 1988) was the source of two questions adapted to stepgrandmother health and their perception of the biological grandmother health. “Compared with people your age, how would you describe your health?” was modified to “Compared with other people her age, how would you describe the biological mother’s health?” Three response options were added to the original 5-point Likert scale ranging from 1 (very poor) to 5 (excellent). They included “Don’t know,” “Biological mother is deceased,” and “How long has the biological mother been deceased?” Items inquiring about race and ethnicity were gleaned from a study by Bradley (2005) related to stepmother role identity.

Six questions were developed by the researcher. To determine marital status respondents were asked to check all categories that applied and the number of months and years for each response—married, widowed, separated, divorced, and “remarried to a man other than my stepchildren’s father.” Closed ended questions with a fill-in-the-blank response style requested current age (in months and years) of the stepgrandchild, and the age (years) of the stepchild at time of father’s marriage to the stepmother. Gender of the stepgrandchild and the stepchild were elicited. Distinguishing the residency of each stepchild while under the age of 18 (residential, non-residential, shared-residential) allowed the researcher to categorize subjects accordingly.
Relationship questions. Husband’s support for his spouse’s roles as stepmother and stepgrandmother was measured by two single items developed by the researcher. Stepgrandmothers were asked to rate their perceptions of their husband’s support of her roles from 1 (very unsupportive) to 5 (very supportive), e.g., “On the scale below, how would you rate your husband’s support for your role as a stepmother?” and “On the scale below, how would you rate your husband’s support for your role as a stepgrandmother?”

Friendliness of the husband-former spouse relationship before and after the stepgrandchild’s birth was assessed with two single items modified from the National Survey of Families and Households (Sweet et al., 1988). Stepgrandmothers were asked to rate their responses from 1 (very unfriendly) to 5 (very friendly) to the questions, “How would you describe your husband’s relationship with his former spouse before the birth of your stepgrandchild?” and “How would you describe your husband’s relationship with his former spouse since the birth of your stepgrandchild?”

Closeness of the father-adult child relationship before and after the stepgrandchild’s birth was assessed by two single items modified from the National Survey of Families and Households (Sweet et al., 1988). Stepgrandmothers were asked to rate their responses from 1 (not at all close) to 5 (extremely close) to two questions, “How close was your husband’s relationship to your stepchild before the birth of your stepgrandchild?” “Don’t know” was added to the response set for this item. “How close has your husband’s relationship to your stepchild been since the birth of your stepgrandchild?” This item also includes response options, “Stepchild is deceased” and “Don’t know.”
Friendliness of the stepgrandmother-biological grandmother relationship before and after the stepgrandchild’s birth was assessed with two single items modified from the National Survey of Families and Households (Sweet et al., 1988). Stepgrandmothers were asked to rate their response from 1 (very unfriendly) to 5 (very friendly) to the question, “How would you describe your relationship with the biological mother before the birth of your stepgrandchild?” and “How would you describe your relationship with the biological mother since the birth of your stepgrandchild?”

Closeness of the stepgrandmother-adult stepchild relationship before and after the stepgrandchild’s birth was assessed by two single items modified from the National Survey of Families and Households (Sweet et al., 1988). Stepgrandmothers were asked to rate their responses from 1 (not at all close) to 5 (extremely close) to the questions, “How close was your relationship to your stepchild before the birth of your stepgrandchild?” and “How close has your relationship to your stepchild been since the birth of your stepgrandchild?” The latter item included the response, “Stepchild is deceased.”

Closeness of the biological grandmother-adult child relationship before and after the stepgrandchild’s birth was assessed by two single items modified from the National Survey of Families and Households (Sweet et al., 1988). Stepgrandmothers were asked to rate their responses from 1 (not at all close) to 5 (extremely close) to the questions. “How close was your stepchild’s relationship to his/her biological mother before the birth of your stepgrandchild?” This item includes the response, “Don’t know.” “How close has your stepchild’s relationship to his/her biological mother been since the birth of your stepgrandchild?” This item included the responses, “Stepchild is deceased” and “Don’t know.”
Quality of the stepgrandmother-stepgrandchild relationship was measured by one item slightly modified from the Kansas Family Life Satisfaction Scale (Schumm et al., 1986). Stepgrandmothers were asked to rate their response from 1 (extremely dissatisfied) to 7 (extremely satisfied) to the question, “How satisfied are you with your relationship with your stepgrandchild?”

Qualitative questions. Two qualitative questions asked respondents to describe highlights and challenges of being a stepgrandmother. Questions were intended to provide the opportunity for stepgrandmothers to describe their experience in their own words.

Psychometrics

The psychometric properties of the Grandparenting and Stepgrandparenting Questionnaire (GSQ) (Henry & Ceglian, 2001) and the modified version used for this study are discussed in this section. Briefly, the subscales comprising the GSQ were adapted from the results of Robertson’s (1971, 1977) factor analysis, which ascertained the clustering of grandparenting behaviors, attitudes and expectations along two dimensions including four factors. These factors were adapted by Henry and Ceglian to construct the four subscales of the GSQ. Although sufficient internal consistency reliability alphas have been determined for the four subscales of the GSQ, no validity studies have been conducted with the instrument. Due to the modifications to the GSQ for the current study of long-term stepgrandmothers, it was determined a validity study should be conducted. Results of the current study’s factor analysis indicated several
changes to three of four subscales for the modified GSQ used with long-term stepgrandmothers. These revised subscales were adopted for the analysis in the current study as the new loadings represented the population being analyzed. This section explains the history of the psychometric properties of the GSQ, the modified GSQ and consequently the revised factor loadings used for the analysis of the hypotheses in this study.

*Grandparenting and Stepgrandparenting Questionnaire (GSQ)*

*Validity.* Henry and Ceglian (2001) adapted Robertson’s (1971, 1977) conceptions of grandmother role behavior and role meaning to create the Grandparenting and Stepgrandparenting Questionnaire. The content of the GSQ was based on Robertson’s binary image factor analysis, which extracted four factors along two dimensions (role meaning and role behavior). Two factors were correlated with the role behavior dimension—Instrumental Role Behavior (IRB) contained eight items and Expressive Role Behavior (ERB) contained four items. Two factors were correlated with the role meaning dimension—Social Role Meaning (SRM) consisted of six items and Personal Role Meaning (PRM) consisted of six items. These 23 items comprising four subscales (IRB, ERB, SRM, PRM) were adapted by Henry and Ceglian (2001) for the Grandparenting and Stepgrandparenting Questionnaire (GSQ).

The GSQ was used in two studies examining the middle generation and adult grandchildren’s perceptions of grandparent role behavior and role meaning with first families and inherited stepfamilies (Cogswell & Henry, 1995; Henry et al., 1992). Even though Henry and Ceglian (2001) stated “further modifications permit direct use with
grandparents,” the validity of the modified GSQ for the current study of long-term stepgrandmothers, was uncertain.

Reliability. Strong internal consistency reliabilities (Cronbach’s alphas) were reported in previous studies using the four subscales of the Grandparenting and Stepgrandparenting Questionnaire. Henry, Ceglian and Matthews (1992) reported Cronbach alpha coefficients for each of the subscales: Instrumental Role Behavior (α = .94), Expressive Role Behavior (α = .91), Social Role Meaning (α = .91), and Personal Role Meaning (α = .93). In a study of grandchildren’s perception of grandparental support Cogswell and Henry (1995) reported Cronbach’s alpha coefficients ranging from .93 to .99 on the Instrumental Role Behaviors scale, .83 to .99 on the Expressive Role Behaviors scale, .80 to .95 on the Social Role Meanings scale and .87 to .98 on the Personal Role Meanings scale. Internal scale variations represent Cronbach’s alpha coefficients for each grandparent and grandparent figure in the study (Cogswell & Henry, 1995; Henry et al., 1992).

Modified Grandparenting and Stepgrandparenting Questionnaire

Validity. Due to the current study’s modifications to Henry and Celgian’s (2001) Grandparenting and Stepgrandparenting Questionnaire (GSQ) and no record of previous validation studies of the instrument, it was determined that a factor analysis was merited to determine the instrument validity with the current study’s population of long-term stepgrandmothers. It was uncertain if the subscales would remain constant as a result of wording revisions and use with the population in the current study. The purpose for
conducting a factor analysis on the modified GSQ was to determine the validity of the subscales for use with long-term stepgrandmothers.

A sample size commensurate with a minimum of five observations per variable was recommended (Gorsuch, 1983) resulting in a minimum target sample size of 115 respondents. A sample of 122 was obtained for the current study, which closely matched the sample size \((n = 125)\) obtained for Robertson’s (1971) original factor analysis which determined the item loadings for the subscales (Instrumental Role Behavior, Expressive Role Behavior, Social Role Meaning, and Personal Role Meaning).

To determine the number of factors the current sample could identify, Velicer’s MAP (minimum average partial) was conducted. Velicer’s MAP has been found to be more accurate than other methods for estimating the number of major factors present in the population given only the current sample (Zwick & Velicer, 1986). Velicer’s method used principal component analysis to extract four factors; the oblimin rotation was then applied with \(\tau = 0\) at a saturation of .40. A four factor model was retained.

An image factor analysis with direct oblimin rotation was used to assess loadings of the 23 items on four factors comprising the subscales of the modified Grandparenting and Stepgrandparenting Questionnaire. Direct oblimin was selected based on the assumption that the 23 items and four factors were highly correlated (Tabachnick & Fidell, 2001). A relatively low, but satisfactory, suppression level of .40 (Costello & Osborne, 2005) was used, which was similar to Robertson (1971, 1977). Data converged in 16 iterations on four factors, albeit with slightly different loadings than the factor analysis conducted by Robertson.
Factor loadings from the analysis of the 23 reworded items on the modified GSQ were expected to reflect the items and factors adapted by Henry and Ceglian (2001) from Robertson’s (1971, 1977) original work. It was expected that items 1-9 would load on Instrumental Role Behavior (IRB). Results of the current study’s factor analysis indicated that items 1-3 and 6-8 loaded as expected (see Table 4). Item 4 loaded on Expressive Role Behavior (ERB) instead of IRB. Item 5 cross loaded on IRB at .401 and ERB at .454. Item 9 did not satisfactorily load on IRB, or any other factor, at the minimum value .40.

It was expected that items 10-13 would load on the Expressive Role Behavior (ERB) factor. Items 11-13 loaded as expected and above a value of .60; however, three changes were observed with the factor. As noted above, item 4 loaded on Expressive Role Behavior instead of IRB. Item 5 cross loaded satisfactorily on IRB at .401 and ERB at .454. Item 10 did not satisfactorily load on ERB, or any other factor, at the minimum value .40.

It was expected that items 14-18 would load on factor Social Role Meaning (SRM). Only three items, items 16-18, loaded as expected. Item 14 and item 15 did not satisfactorily load on SRM, or any other factor, at the minimum value .40. It was expected that items 19-23 would load on factor Personal Role Meaning. All items loaded as expected on PRM and above a value of .50.

Results from the factor analysis of the 23 items from the modified GSQ indicated that a four factor model was valid. Item loadings were similar to those adapted by Henry and Ceglian (2001) with the exception of six items. Of these six items, four items (9, 10, 14, and 15) did not load at the minimum suppression level of .40. These items were
Table 4

Image Factor Analysis Results of the Modified Grandparenting and Stepgrandparenting Questionnaire

<table>
<thead>
<tr>
<th>Factor</th>
<th>IRB-R</th>
<th>ERB-R</th>
<th>SRM-R</th>
<th>PRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I regularly spend a week of more with this stepgrandchild.</td>
<td>.587</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I often take this stepgrandchild on trips such as shopping, the zoo, movies, circus, etc.</td>
<td>.635</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I have taken this stepgrandchild to church or other religious function.</td>
<td>.415</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I have told this stepgrandchild about family history or customs.</td>
<td></td>
<td></td>
<td></td>
<td>.462</td>
</tr>
<tr>
<td>5. I have taught this stepgrandchild how to do things he/she does well, such as cooking, sewing, fishing, mechanics, etc.</td>
<td>.401</td>
<td>.454</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I often babysit with this stepgrandchild.</td>
<td></td>
<td>.697</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I often engages in home recreation activities with this stepgrandchild such as reading stories, playing indoor or outdoor games, etc.</td>
<td>.680</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I often drop in just to visit or play with the stepgrandchild.</td>
<td></td>
<td>.446</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I regularly give this stepgrandchild money or gifts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I have advised this stepgrandchild on religious matters.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I have helped this stepgrandchild with emergencies, such as sickness, financial troubles, troubles with parents and friends.</td>
<td></td>
<td>.696</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I have advised this stepgrandchild on work plans or schooling.</td>
<td></td>
<td></td>
<td>.845</td>
<td></td>
</tr>
<tr>
<td>13. I have advised this stepgrandchild on personal problems.</td>
<td></td>
<td></td>
<td>.851</td>
<td></td>
</tr>
<tr>
<td>14. I believe happiness is found when all family members, including this stepgrandchild, work together as a group.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I spend more holidays with friends than with this stepgrandchild.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. I think it is important for this stepgrandchild to “respect his/her elders.”</td>
<td></td>
<td></td>
<td></td>
<td>.589</td>
</tr>
<tr>
<td>17. I would tell this stepgrandchild to always remember that love and companionship are more important to a successful marriage than money.</td>
<td></td>
<td></td>
<td></td>
<td>.532</td>
</tr>
<tr>
<td>18. I set a good example for this stepgrandchild of what is morally right.</td>
<td></td>
<td></td>
<td></td>
<td>.404</td>
</tr>
<tr>
<td>19. I expect future generations of my family to be carried on by this stepgrandchild.</td>
<td></td>
<td></td>
<td></td>
<td>.523</td>
</tr>
<tr>
<td>20. I would be very lonely without this stepgrandchild.</td>
<td></td>
<td></td>
<td></td>
<td>.700</td>
</tr>
<tr>
<td>21. I believe I should be able to give this stepgrandchild whatever I can and not be worried about spoiling him/her.</td>
<td></td>
<td></td>
<td></td>
<td>.568</td>
</tr>
<tr>
<td>22. I feel young again because of my relationship with this stepgrandchild.</td>
<td></td>
<td></td>
<td></td>
<td>.601</td>
</tr>
<tr>
<td>23. I believe this stepgrandchild brings a deep sense of emotional fulfillment to my life.</td>
<td></td>
<td></td>
<td></td>
<td>.655</td>
</tr>
</tbody>
</table>

Image Factor Analysis, Direct Oblimin with Kaiser Normalization, converged on 16 rotations, Suppression level .40
subsequently dropped from the statistical analysis of the hypotheses along with item 5 as it appeared to equally cross load on factors IRB and ERB, thus clouding interpretability. The new factor loading of item 4 was retained on the factor ERB. Item 4, telling stepgrandchildren about family history and customs, may be an advising role begun in stepmotherhood, which includes acting as a family carpenter building relations between children and their fathers (Vinick & Lanspery, 2000).

The following revised subscales based on the factor analysis with the current population of long-term stepgrandmothers were used for the statistical analyses of the study hypotheses. Instrumental Role Behavior-\(R\) consisted of six items, items 1-3 and 6-8. Expressive Role Behavior-\(R\) consisted of four items, item 4 and items 11-13. Social Role Meaning-\(R\) consisted of three items, items 16-18. Personal Role Behavior was retained and consisted of the original five items, items 19-23. These 18 items accounted for 62.55\% of the total factor variance. The revised subscales were used as dependent variables in the analyses of the study hypotheses.

**Reliability.** Internal consistency reliability alphas associated with the new subscales (IRB-\(R\), ERB-\(R\), and SRM-\(R\) subscales) and the retained PRM were assessed for the current study. Cronbach's alpha coefficient for Instrumental Role Behavior-\(R\) was .90, Expressive Role Behavior-\(R\) was .87, Social Role Meaning-\(R\) was .65, and Personal Role Meaning was .85. Three subscales (IRB-\(R\), ERB-\(R\), and PRM) maintained satisfactory internal consistency. The SRM-\(R\) subscale was below the commonly accepted lower threshold of .70 for internal consistency with a coefficient alpha of .65.
Procedures

Participants were recruited through convenience and snow ball sampling. Participants completed an anonymous 54-item survey returned at on-site locations or via mail. Upon receipt surveys were coded with a number and the recruitment method in order to track response rates. Optional raffle entry postcards were shuffled and stored separately from questionnaires.

Returned surveys were evaluated for completeness and to determine if inclusion criteria were met. Surveys were distributed to 242 potential respondents; 178 were returned, of which 17 were returned incomplete, and 39 were complete but did not qualify. Non-qualified respondents were stepgrandmothers whose stepchildren were over 18 years of age at time of her remarriage to their father or inherited stepgrandmothers. Of the 39 complete, non-qualified returned surveys, 37 women had married the father of their stepchildren when the children were over 18 years of age. One survey appeared to be returned from an inherited stepgrandmother. Overall response rate was 73.5%. Valid response rate as a percentage of total distributed was 50.4% (see Table 3).

Survey data were processed to detect and resolve any errors before data entry. Karweit and Meyers (Karweit & Meyers, 1983) described five options either singly or in combination for resolving detected errors.

1. Consult the original interview or questionnaire to determine if the error is due to mistranscription.
2. Contact the respondent again to clarify the response or to obtain missing data.
3. Estimate or impute a response to solve the error by various imputation techniques.
4. Discard the response or designating it as bad or missing data.

5. Discard the entire case. (p. 395)

The researcher used each of these strategies with the exception of contacting respondents, due to the anonymity of the research design. The researcher discarded entire cases only if criteria were not met, or data other than inclusion criteria were substantially missing.

Surveys which met criteria were imputed using random hot-deck imputation (RHDI). Vriens and Melton (2002) briefly outline the steps of RHDI:

First, complete records are separated from incomplete records. Next, the complete records are sorted so that records with similar attributes are grouped together. Grouping is done on the basis of general background variables (e.g., work-site size, job function, type of purchase influence). Then a random number is generated for each complete record within each group. The same treatment is applied for the incomplete records. The incomplete records are weaved among the complete records, and the recipient record receives data from the nearest complete record in the file. (p. 1)

Marker, Judkins, and Winglee (2002) recommend imputation procedures noting the following advantages: “reasonably low cost, reduced non-response bias on univariate statistics, reduced variance due to use of partially compete records, univariate plausibility, ease of use by secondary analysts, and cross-user consistency” (p. 329). General background variables used to conduct an RHDI with the current data set were age of the stepgrandchild and the stepgrandmother. These variables have been found to mediate grandmother role behaviors and role meaning as well grandmother-grandchild relationships (Henry et al., 1992; Kennedy, 1991; Robertson, 1977).
Once imputed, data were coded into the analytic software package SPSS 15.0 (Statistical Package for Social Sciences) for analysis. All analyses were based on a data set of 122 returned surveys that met criteria, and were complete or imputed using RHDI.

Two short answer qualitative questions asked respondents about the highlights and challenges of stepgrandmothering. Responses were used as anecdotal evidence to compliment the quantitative findings.

Null Hypotheses

H1a: There are no statistically significant associations between the level of instrumental role behavior and (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse relationship friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult child closeness, and (f) biological grandmother-adult child closeness.

H1b: There are no statistically significant associations between the level of expressive role behavior and (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse relationship friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult child closeness, and (f) biological grandmother-adult child closeness.

H1c: There are no statistically significant associations between the level of social role meaning and (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse relationship friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult child closeness, and (f) biological grandmother-adult child closeness.
H1d: There are no statistically significant associations between the level of personal role meaning and (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse relationship friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult child closeness, and (f) biological grandmother-adult child closeness.

H2a: There are no statistically significant differences in the levels of instrumental role behavior between stepgrandmothers whose stepchildren (as minors) lived in non-residential, residential, and shared-residential arrangements.

H2b: There are no statistically significant differences in levels of expressive role behavior between stepgrandmothers whose stepchildren (as minors) lived in non-residential, residential, and shared-residential arrangements.

H2c: There are no statistically significant differences in levels of social role meaning between stepgrandmothers whose stepchildren (as minors) lived in non-residential, residential, and shared-residential arrangements.

H2d: There are no statistically significant differences in levels of personal role meaning between stepgrandmothers, whose stepchildren (as minors) lived in non-residential, residential, and shared-residential arrangements.

H3: There are no statistically significant associations between the levels of stepgrandmother-stepgrandchild relationship satisfaction and (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse relationship friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult child closeness, and (f) biological grandmother-adult child closeness.
Statistical Analyses

It was proposed that six dyadic relationships in the linked family system would be significantly associated with the level of role behavior, role meaning and stepgrandmother-stepgrandchild relationship satisfaction. It was further proposed that there would be a significant difference between residency status of the middle generation as minors and long-term stepgrandmother role behavior and role meaning.

Multiple linear regression was the statistical technique used to separately regress five dependent variables (Instrumental Role Behavior-$R$, Expressive Role Behavior-$R$, Social Role Meaning-$R$, Personal Role Meaning and stepgrandmother-stepchild relationship satisfaction) on six independent variables: (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse relationship friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult child closeness, and (f) biological grandmother-adult child closeness. Multiple linear regression provided the statistical flexibility to investigate complex relationships (Tabachnick & Fidell, 2001) associated with the long-term stepgrandmother role behavior, role meaning, and stepgrandmother-stepgrandchild relationship satisfaction.

One-way ANOVA was conducted to examine differences between the middle generation’s residency status as minors and stepgrandmother role behavior and role meaning. Independent variables included non-residential, residential, and shared-residential arrangement of the middle generations as minors. Dependent variables were stepgrandmother role behavior (instrumental and expressive) and role meaning (social and personal).
CHAPTER IV

RESULTS

The current study was designed to investigate various factors within the linked family system which may be associated with, or influence, long-term stepgrandmother role behavior, role meaning, and relationship satisfaction. The dependent variable role behavior was assessed with two revised subscales from the current study's factor analysis: Instrumental Role Behavior- and Expressive Role Behavior-. The dependent variable role meaning was assessed with one revised subscale from the current study's factor analysis, Social Role Meaning-, and one subscale retained from the GSQ, Personal Role Meaning. The dependent variable stepgrandmother-stepgrandchild relationship satisfaction was assessed with a single 7-point Likert scale item.

Independent variables included six dyadic relationships and residential arrangement of the middle generation as minors. Relationships were measured by single items on the basis of closeness, friendliness, and support. Stepgrandmother-adult stepchild closeness, biological grandmother-adult child closeness, and father-adult child closeness were rated by stepgrandmothers on a 5-point Likert scale ranging from 1 (not at all close) to 5 (extremely close). Stepgrandmother-biological grandmother friendliness and husband-former spouse friendliness were rated by stepgrandmothers on a 5-point Likert scale ranging from 1 (very unfriendly) to 5 (very friendly). Spousal support for the stepgrandmother role was rated by stepgrandmothers on a 5-point Likert scale ranging
from 1 (very unsupportive) to 5 (very supportive). Multiple linear regression assessed the dependent variables (IRB-\( R \), ERB-\( R \), SRM-\( R \), PRM) on the six relationship variables to determine which, if any, associations existed.

The independent variable, residential arrangement, was categorized into the options "more than 50% with biological mother" (non-residential), "more than 50% with biological father/stepmother" (residential), and "split fairly equally between stepmother/father and biological mother households" (shared-residential). One-way ANOVA assessed mean group differences between residential arrangement and levels of Instrumental Role Behavior (IRB-\( R \)), Expressive Role Behavior (ERB-\( R \)), Social Role Meaning (SRM-\( R \)) and Personal Role Meaning (PRM).

SPSS Software was used to conduct all the analyses in the study. Multiple linear regression assessed Hypotheses 1a-d and Hypothesis 3. One-way ANOVA assessed Hypotheses 2a-d. Results were reported at an alpha = .05 with sufficient power of .60 to reject the null hypotheses.

Descriptive Statistics of Dependent Variables

Stepgrandmother Role Behavior and Role Meaning

The subscales used to measure role behavior and role meaning had response items ranging on a 5-point Likert scale from 1 (strongly disagree) to 3 (occasionally agree) and 5 (strongly agree). Means and distribution frequencies of the subscale levels were reported. Lower mean scores indicated less item agreement with fewer demonstrated
behaviors and lower levels of role attribution, while higher mean scores indicated more item agreement with more demonstrated behaviors and higher levels of role attribution.

**Instrumental Role Behavior-R.** IRB-R consisted of six items assessing stepgrandmother agreement with the amount of time and activities shared with a specific stepgrandchild, e.g., “I often take this stepgrandchild on trips such as shopping, the zoo, movies, circus, etc.” Stepgrandmothers on average tended to “disagree” \( (M = 2.43, SD = 1.12) \) with the items describing the amount of time and activities shared with a specified stepgrandchild. Almost 84% of the stepgrandmothers “strongly” disagreed (27%), disagreed (22.1%), or only “occasionally” agreed (34.4%) with the statements. A smaller percentage agreed (13.1%) and an even smaller percentage “strongly” agreed (3.3%). The vast majority of the stepgrandmothers demonstrated fairly low amounts of time and shared activities with the identified stepgrandchild (see Table 5 for the descriptive statistics of Instrumental Role Behavior-R).

**Expressive Role Behavior-R.** ERB-R consisted of four items assessing stepgrandmother agreement with the degree of involvement in the areas of helping or advising a specific stepgrandchild, e.g., “I have helped this stepgrandchild with emergencies, such as sickness, financial troubles, troubles with parents and friends.” Stepgrandmothers on average tended to “occasionally agree” \( (M = 2.52, SD = 1.09) \) with the items describing the degree of helping or advising behaviors. Slightly over four-fifths of stepgrandmothers “strongly” disagreed (19.7%), disagreed (31.1%), or only “occasionally” agreed (30.3%) with the items describing the degree of involvement in the areas of helping or advising a specified stepgrandchild. Few stepgrandmothers agreed
(14.8%) or "strongly" agreed (4.1%) with the statements. A vast majority of stepgrandmothers demonstrated fairly low levels of helping or advising behaviors (see Table 5 for the descriptive statistics for Expressive Role Behavior-R).

### Table 5

Descriptive Statistics of IRB-R, ERB-R, SRM-R and PRM

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree n (%)</th>
<th>Disagree n (%)</th>
<th>Occasionally agree n (%)</th>
<th>Agree n (%)</th>
<th>Strongly agree n (%)</th>
<th>M</th>
<th>SD</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRB-R</td>
<td>33 (27.0%)</td>
<td>27 (22.1%)</td>
<td>42 (34.4%)</td>
<td>16 (13.1%)</td>
<td>4 (3.3%)</td>
<td>2.43</td>
<td>1.12</td>
<td>122</td>
</tr>
<tr>
<td>ERB-R</td>
<td>24 (19.7%)</td>
<td>38 (31.1%)</td>
<td>37 (30.3%)</td>
<td>18 (14.8%)</td>
<td>5 (4.1%)</td>
<td>2.52</td>
<td>1.09</td>
<td>122</td>
</tr>
<tr>
<td>SRM-R</td>
<td>1 (0.8%)</td>
<td>0 (0.0%)</td>
<td>13 (10.7%)</td>
<td>64 (52.5%)</td>
<td>44 (36.1%)</td>
<td>4.23</td>
<td>.70</td>
<td>122</td>
</tr>
<tr>
<td>PRM</td>
<td>10 (8.2%)</td>
<td>22 (18.0%)</td>
<td>40 (32.8%)</td>
<td>42 (34.4%)</td>
<td>8 (6.6%)</td>
<td>3.13</td>
<td>1.05</td>
<td>122</td>
</tr>
</tbody>
</table>

Social Role Meaning-R. SRM-R consisted of three items assessing agreement with the social norms stepgrandmothers attributed to the role, e.g., "I set a good example for this stepgrandchild of what is morally right." Stepgrandmothers on average overwhelmingly agreed ($M = 4.23$, $SD = .70$) with the attribution of social norms to the stepgrandmother role. Over 88% of the stepgrandmothers agreed (52.5%) or "strongly" agreed (36.1%) with the statements. A very small percentage only "occasionally" agreed (10.7%), disagreed (0.00%), or "strongly" disagreed (0.8%) with the statements. Overwhelmingly, stepgrandmothers attributed social norms and expectations to the stepgrandmother role (see Table 5 for descriptive statistics of Social Role Meaning-R).
Personal Role Meaning. PRM consisted of five items assessing agreement with the fulfillment of personal needs associated with the role, e.g., “I would be very lonely without this stepgrandchild.” Stepgrandmothers on average “occasionally agree” ($M = 3.13$, $SD = 1.05$) with statements assessing fulfillment of personal needs through the role. Many stepgrandmothers either “strongly” agreed (6.6%) or agreed (34.4%) with the statements, and a large percentage “occasionally” agreed (32.8%) that the relationship with the stepgrandchild fulfilled personal needs. A smaller percentage disagreed (18.0%) or “strongly” disagreed (8.2%) with the statements. Those that disagreed were a small percentage of the stepgrandmothers surveyed compared to the majority, who attributed some personal meaning to the role (see Table 5 for descriptive statistics of Personal Role Meaning).

Stepgrandmother-Stepgrandchild Relationship Satisfaction

Stepgrandmother-stepgrandchild relationship satisfaction as perceived by stepgrandmothers was rated on a 7-point Likert scale of 1 (extremely dissatisfied) to 7 (extremely satisfied). Stepgrandmothers on average rated their level of stepgrandmother-stepgrandchild relationship satisfaction as “satisfied” ($M = 4.93$, $SD = 1.82$). Nearly 65% of stepgrandmothers who participated in this study were in some degree satisfied with their stepgrandchild relationship. That is, 23.8% were “extremely satisfied,” 21.3% were “very satisfied,” and 19.7% were “satisfied.” Almost 15% were “neutral.” There were, however, about 20% of the respondents who were in some degree dissatisfied with their stepgrandchild relationship (see Table 6 for descriptive statistics of stepgrandmother-stepgrandchild relationship satisfaction).
Table 6

Percentages of Stepgrandmother-Stepgrandchild Relationship Satisfaction

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely dissatisfied</td>
<td>8</td>
<td>6.6</td>
<td>6.6</td>
</tr>
<tr>
<td>Very dissatisfied</td>
<td>9</td>
<td>7.4</td>
<td>13.9</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>8</td>
<td>6.6</td>
<td>20.5</td>
</tr>
<tr>
<td>Neutral</td>
<td>18</td>
<td>14.8</td>
<td>35.2</td>
</tr>
<tr>
<td>Satisfied</td>
<td>24</td>
<td>19.7</td>
<td>54.9</td>
</tr>
<tr>
<td>Very satisfied</td>
<td>26</td>
<td>21.3</td>
<td>76.2</td>
</tr>
<tr>
<td>Extremely satisfied</td>
<td>29</td>
<td>23.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>122</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Descriptive Statistics of Independent Variables

*Stepgrandmother-Adult Stepchild Closeness*

Perceptions of stepgrandmother-adult stepchild closeness were measured on a 5-point Likert scale ranging from 1 (not at all close) to 5 (extremely close) with an additional response item “stepchild is deceased.” Stepgrandmothers on average perceived their relationship with the middle generation as moderately “close” ($M = 3.61$, $SD = 1.19$). Almost 65% of the respondents rated their relationship with their adult stepchild with some degree of closeness. Nonetheless there were still almost 34% of the respondents who perceived the relationship as “not at all close” (6.6%), “somewhat close” (14.8%) or at best “neutral” (12.3%) (see Table 7 for descriptive statistics of stepgrandmother-adult stepchild closeness).
### Table 7

Descriptive Statistics of Stepgrandmother-Adult Stepchild Closeness, Biological Grandmother-Adult Child Closeness, and Father-Adult Child Closeness

<table>
<thead>
<tr>
<th></th>
<th>Not at all close</th>
<th>Somewhat close</th>
<th>Neutral</th>
<th>Close</th>
<th>Extremely close</th>
<th>M</th>
<th>SD</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stepgrandmother-Adult</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stepchild closeness</td>
<td>8 (6.6%)</td>
<td>18 (14.8%)</td>
<td>15 (12.3%)</td>
<td>51 (41.8%)</td>
<td>28 (23.0%)</td>
<td>3.61</td>
<td>1.19</td>
<td>122†</td>
</tr>
<tr>
<td><strong>Biological-mother-adult</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>child closeness</td>
<td>17 (13.9%)</td>
<td>25 (20.5%)</td>
<td>14 (11.5%)</td>
<td>25 (20.5%)</td>
<td>25 (20.5%)</td>
<td>3.15</td>
<td>1.43</td>
<td>122††</td>
</tr>
<tr>
<td><strong>Father-adult child closeness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7 (5.7%)</td>
<td>10 (8.2%)</td>
<td>15 (12.3%)</td>
<td>57 (46.7%)</td>
<td>29 (23.8%)</td>
<td>3.77</td>
<td>1.09</td>
<td>122†††</td>
</tr>
</tbody>
</table>

† N includes “adult stepchild deceased” 2 (1.6%)
†† N includes “don’t know” 8 (6.6%) and “bio/adoptive mom deceased” 8 (6.6%)
††† N includes “don’t know” 3 (2.5%) and “biological father deceased” 1 (0.8%)

**Biological Mother-Adult Child Closeness**

Stepgrandmother perceptions of biological mother-adult child closeness was measured on a 5-point Likert scale ranging from 1 (not at all close) to 5 (extremely close) with the additional response item “don’t know” and “biological/adoptive mother deceased.” Stepgrandmothers on average perceived biological grandmothers’ relationships with the middle generation as “neutral” (M = 3.15, SD = 1.43). This mean rating was the result of a fairly equal distribution of stepgrandmothers perceptions of biological grandmother-adult child relationship closeness across the scale range. Some stepgrandmothers indicated no knowledge of the level of biological grandmother-adult
child closeness (6.6%), or that the biological grandmother was deceased (7%) (see Table 7 for descriptive statistics of stepgrandmother-adult stepchild closeness).

**Father-Adult Child Closeness**

Stepgrandmother perceptions of father-adult child closeness was measured on a 5-point Likert scale ranging from 1 (not at all close) to 5 (extremely close) with the additional response item “don’t know” and “husband-biological father deceased.” Stepgrandmothers on average perceived biological fathers’ relationships with the middle generation as the closest of all the relationships measured ($M = 3.77, SD = 1.09$). Stepgrandmothers rated over 70% of the relationships between biological fathers and adult children as “close” (46.7%) or “extremely close” (23.8%). Less than 14% were perceived as “somewhat close” (8.2%) or “not at all close” (5.7%). Just 12.3% were viewed as “neutral.” Few stepgrandmothers indicated they did not know the level of closeness of the relationship (2.5%). One biological father was described as deceased (see Table 7 for the descriptive statistics for father-adult child closeness).

**Stepgrandmother-Biological Grandmother Friendliness**

Perceptions of stepgrandmother-biological grandmother friendliness were measured on a 5-point Likert scale ranging from 1 (very unfriendly) to 5 (very friendly) with the additional response item “not applicable.” Stepgrandmothers on average perceived their relationship with biological grandmothers as “neither friendly nor unfriendly” ($M = 3.29, SD = 0.94$) and significantly more friendly than husband-former spouse friendliness ($M = 2.89, SD = 1.14$) $F(4, 96) = 15.17, p < .0001$ (see Appendix H,
Table H1 for ANOVA output). Most respondents rated their relationship with the biological grandmother as “neither friendly nor unfriendly” (38.5%) followed by “friendly” (27.9%). Just over 7% of stepgrandmothers viewed the relationships as “very friendly.” Less than 15% rated relations negatively with 9.0% as “unfriendly” and 4.1% as “very unfriendly.” Thirteen percent indicated “not applicable” (see Table 8 for descriptive statistics of stepgrandmother-biological grandmother friendliness).

**Husband-Former Spouse Friendliness**

Stepgrandmother perceptions of husband-former spouse friendliness was measured on a 5-point Likert scale ranging from 1 (very unfriendly) to 5 (very friendly) with the additional response item “don’t know” and “former spouse deceased.” Stepgrandmothers on average perceived the friendliness between husbands and former spouses as moderately neutral ($M = 2.89, SD = 1.14$). Most respondents viewed the relationship as “neither friendly nor unfriendly” (36.9%) followed by “friendly” (20.5%). Almost 6% perceived the relationship between husbands and former spouses as “very friendly.” Over a quarter of the relationships were rated negatively with 10.7% as “unfriendly” and 15.6% as “very unfriendly.” Just over 8% of the former spouses were deceased. A small percentage of the stepgrandmothers (2.5%) indicated they did not know the level of husband-former spouse friendliness (see Table 8 for husband-former spouse friendliness).
Table 8

Descriptive Statistics of Stepgrandmother-Biological Grandmother Friendliness and Husband-Former Spouse Friendliness

<table>
<thead>
<tr>
<th></th>
<th>Very unfriendly n (%)</th>
<th>Unfriendly n (%)</th>
<th>Neither friendly nor unfriendly n (%)</th>
<th>Friendly n (%)</th>
<th>Very friendly n (%)</th>
<th>M</th>
<th>SD</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stepgrandmother</td>
<td>5 (4.1%)</td>
<td>11 (9.0%)</td>
<td>47 (38.5%)</td>
<td>34 (27.9%)</td>
<td>9 (7.4%)</td>
<td>3.29</td>
<td>0.94</td>
<td>122†</td>
</tr>
<tr>
<td>Biological mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>friendliness</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Husband</td>
<td>19 (15.6%)</td>
<td>13 (10.7%)</td>
<td>45 (36.9%)</td>
<td>25 (20.5%)</td>
<td>7 (5.7%)</td>
<td>2.89</td>
<td>1.14</td>
<td>122‡</td>
</tr>
<tr>
<td>former spouse friendliness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

† N includes “not applicable” 16 (13.1%)
‡ N includes “former spouse deceased” 10 (8.2%) and “don’t know” 3 (2.5%)

Spousal Support (for Stepgrandmother Role)

Stepgrandmothers perceptions of spouses’ support for the stepgrandmother role were measured on a 5-point Likert scale ranging from 1 (very unsupportive) to 5 (very supportive). Stepgrandmothers on average perceived their spouses as “supportive” ($M = 4.09$, $SD = 1.29$). Most respondents rated spouses as “very supportive” (54.1%) followed by “supportive” (23.8%). Nine percent of respondents viewed spouses neutrally as “not supportive or unsupportive.” While 3.3% of the stepgrandmothers perceived their spouses as “unsupportive,” almost 10% perceived their spouses as “very unsupportive.”
Hypotheses Results

*Hypotheses 1a-d: Stepgrandmother Role Behavior and Role Meaning Predicted by Six Dyadic Relationships*

Four hypotheses (H1a-d) were analyzed using multiple linear regression to assess the level of role behavior (instrumental and expressive) and role meaning (personal and social) on six dyadic relationships: (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult child closeness, and (f) biological grandmother-child closeness. Four subscales were used as dependent variables: Instrumental Role Behavior-revised (IRB-R), Expressive Role Behavior-revised (ERB-R), Social Role Meaning-revised (SRM-R) and Personal Role Meaning (PRM). Three of the subscales were revised (noted as -R) based on the current study's factor analysis results. Six dyadic relationships were the independent variables.

Results of the evaluation of the regression assumptions for the four dependent variables (IRB-R, ERB-R, SRM-R, PRM) indicated normality, linearity, and homoscedasticity with the exception of one outlier observed on both the IRB-R and the ERB-R residuals scatterplots. Further analysis of the item determined the outlier would be retained in the analyses. A collinearity diagnostic was conducted to determine whether or not a serious problem existed with multicollinearity. A Condition Index greater than .30 indicates a serious problem of collinearity (Myers & Well, 2003). A Condition Index of 20.707 based on the current data revealed no serious problem with multicollinearity (e.g., Appendix G, Table G1).
**H1a: Instrumental Role Behavior.** Null hypothesis: There are no statistically significant associations between the level of instrumental role behavior and (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse relationship friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult child closeness, and (f) biological grandmother-adult child closeness.

The revised Instrumental Role Behavior (IRB-R) subscale consisted of six items that asked stepgrandmothers about the amount of time and activities shared with a specific stepgrandchild. Results of the multiple linear regression revealed that the overall regression model was significant, $F(6, 85) = 5.60, p < .0001$ (e.g., Appendix G, Table G2). One independent variable, stepgrandmother-adult stepchild closeness, was significantly associated with Instrument Role Behavior-R ($t = 3.75, p < .0001$) as shown in Table 9. Therefore, Hypothesis 1a was rejected. A significant association was detected among stepgrandmother instrumental role behavior and stepgrandmother-adult stepchild closeness.

**H1b: Expressive Role Behavior.** Null hypothesis: There are no statistically significant associations between the level of expressive role behavior and (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult child closeness, and (f) biological grandmother-adult child closeness.

The revised Expressive Role Behavior (ERB-R) subscale consisted of four items that asked stepgrandmothers about the degree of involvement with stepgrandchildren in the areas of helping or advising. Results of the multiple linear regression indicated that
Table 9

Multiple Linear Regression of IRB-R on Six Dyadic Stepfamily Relationships

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<th>p-value</th>
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<td>Stepgrandmother-biological grandmother friendliness</td>
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<td>Stepgrandmother-adult stepchild closeness</td>
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<td>.889</td>
<td>.532***</td>
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<tr>
<td>Father-adult child closeness</td>
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<td>.894</td>
<td>-.027</td>
<td>-.196</td>
</tr>
<tr>
<td>Biological grandmother-adult child closeness</td>
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<td>.529</td>
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<tr>
<td>Spousal support</td>
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<td>.571</td>
<td>-.026</td>
<td>-.265</td>
</tr>
</tbody>
</table>

***p < .0001

the overall regression model was significant, $F(6, 85) = 5.58, p < .0001$ (e.g., Appendix G, Table G3). Two independent variables were significantly associated with levels of stepgrandmother helping and advising behaviors. Stepgrandmother-adult stepchild closeness was positively correlated with levels of ERB-R ($t = 2.72, p = .008$) revealing a trend that stepgrandmothers with closer relationships with adult stepchildren demonstrate greater levels of expressive role behaviors with stepgrandchildren. Biological grandmother-adult child closeness was negatively associated with levels of stepgrandmother helping and advising behaviors ($t = -2.79, p = .007$) revealing a trend that stepgrandmothers demonstrated lower levels of expressive role behaviors with
stepgrandchildren when biological-grandmothers had closer relationships with adult children (see Table 10 for the regression analysis of ERB-R on six dyadic relationships). Therefore, Hypothesis 1b was rejected. A significant association was detected among stepgrandmother expressive role behavior and stepgrandmother-adult stepchild closeness and biological grandmother-adult child closeness.

Table 10

| Multiple Linear Regression of ERB-R on Six Dyadic Stepfamily Relationships |
|---------------------------------|----------------|----------------|----------------|----------------|
|                                 | Unstandardized | Standardized   |                |                |
|                                 | Coefficients   | Coefficients  | t-value        | p-value        |
|                                 | B              | SE             | β               |                |
| (Constant)                      | 8.082          | 2.428          | 3.329           | .001           |
| Husband-former spouse friendliness | .622          | .540           | .147            | 1.152          | .253           |
| Stepgrandmother-biological grandmother friendliness | -.095          | .668           | -.019           | -.142          | .887           |
| Stepgrandmother-adult stepchild closeness | 1.577          | .579           | .387**          | 2.725          | .008           |
| Father-adult child closeness    | .059           | .582           | .014            | .102           | .919           |
| Biological grandmother-adult child closeness | -.959          | .344           | -.29**          | -2.785         | .007           |
| Spousal support                 | -.251          | .372           | -.066           | -.676          | .501           |

**p < .01

H1c: Social Role Meaning. Null hypothesis: There are no statistically significant associations between the level of social role meaning and (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse
friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult child closeness, and (f) biological grandmother-adult child closeness.

The revised Social Role Meaning (SRM-R) subscale consisted of three items assessing social norms stepgrandmothers attributed to their stepgrandmother role. Results of the multiple linear regression revealed that the overall regression model was not significant, $F(6, 85) = 1.67, p = .139$ (see Appendix G, Table G4). Even though the overall regression model was not significant, one independent variable was predictive of social role meaning. Stepgrandmother-adult stepchild closeness was significantly associated with levels of SRM-R ($t = 2.421, p = .018$) (see Table 11) revealing a trend that stepgrandmothers who reported closer relationships with adult stepchildren attributed greater levels of social norms and expectations to the stepgrandmother role, than those who were less close to the middle generation. Therefore, Hypothesis 1c was rejected. Even though the overall regression model was not significant, a significant association was detected among the level of social norms and expectations attributed to the role and stepgrandmother-adult stepchild closeness.

*H1d: Personal Role Meaning.* Null hypothesis: There are no statistically significant associations between the level of personal role meaning and (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult child closeness, and (f) biological grandmother-adult child closeness.

The Personal Role Meaning (PRM) subscale consisted of five items assessing the fulfillment of personal needs stepgrandmothers associated with their stepgrandmother
Table 11

Multiple Linear Regression of SRM-i? on Six Dyadic Stepfamily Relationships

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>p-value</th>
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<td>B</td>
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<td>Stepgrandmother-biological grandmother friendliness</td>
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<td>.075</td>
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<td>Stepgrandmother-adult stepchild closeness</td>
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<td>.157</td>
<td>.065</td>
</tr>
<tr>
<td>Father-adult child closeness</td>
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<td>-.094</td>
<td>.065</td>
</tr>
<tr>
<td>Biological grandmother-adult child closeness</td>
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<td>.070</td>
<td>.039</td>
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<tr>
<td>Spousal support</td>
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<td>-.017</td>
<td>.042</td>
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</tbody>
</table>

* p < .05

role. Results of the multiple linear regression revealed that the overall regression model was significant, $F(6, 85) = 6.38, p < .0001$ (e.g., Appendix G, Table G5). One independent variable, stepgrandmother-adult stepchild closeness, was significantly associated with Personal Role Meaning ($t = 3.75, p = .001$) as shown in Table 12.

Stepgrandmother-adult stepchild closeness was positively correlated with levels of PRM revealing a trend that stepgrandmothers attributed greater levels of personal fulfillment to the stepgrandmother role when their relationships were closer with adult stepchildren. Therefore, Hypothesis 1d was rejected. A significant association was detected among stepgrandmother personal role meaning and stepgrandmother-adult stepchild closeness.

Anecdotal evidence from the current study exemplifies these findings. One woman writes, “My step-daughter and I are very close even after I divorced her father. . . . I love
being able to take on the role of grandmother!” On the other end of the continuum another stepgrandmother states, “I love my grandkids [I] just don’t get to see them because of my stepkids.”

Table 12

Multiple Linear Regression of PRM on Six Dyadic Stepfamily Relationships

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<th>p-value</th>
</tr>
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<td>Husband-former spouse friendliness</td>
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<td>2.451</td>
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<tr>
<td>Stepgrandmother-biological grandmother friendliness</td>
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<td>.675</td>
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<td>.966</td>
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<tr>
<td>Stepgrandmother-adult stepchild closeness</td>
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<td>5.84</td>
<td>481***</td>
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<tr>
<td>Father-adult child closeness</td>
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<td>.588</td>
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<td>Biological grandmother-adult child closeness</td>
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<tr>
<td>Spousal Support</td>
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<td>3.75</td>
<td>.006</td>
<td>.065</td>
</tr>
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</table>

***p = .001

Hypotheses 2a-d: Influence of Residential Arrangement of Middle Generation as Minors on Stepgrandmother Role Behavior and Role Meaning

Residential arrangement of the middle generation while minors was hypothesized to make a significant difference in stepgrandmother role behavior and role meaning. One-way ANOVA was used to analyze four hypotheses (H2a-d) to determine if significant differences existed between stepgrandmother levels of role behavior (instrumental and expressive) and role meaning (social and personal) whose stepchildren lived in
residential, non-residential, or shared-residential arrangements as minors. Results indicated a significant difference between types of residential arrangement of minor stepchildren and stepgrandmother personal role meaning.

_H2a: Instrumental Role Behavior and Residential Arrangement._ Null hypothesis:
There are no statistically significant differences in the levels of instrumental role behavior between stepgrandmothers whose stepchildren (as minors) lived in non-residential, residential, and shared-residential arrangements.

The revised Instrumental Role Behavior (IRB-R) subscale consisted of six items that asked stepgrandmothers about the amount of time and activities shared with a specific stepgrandchild. Instrumental Role Behavior-R subscale mean scores were compared between arrangements. One-way ANOVA revealed no significant differences in the level of instrumental role behavior for stepgrandmothers who had non-residential, residential, or shared-residential arrangements of the middle generation as minors \(F(2, 1) = 2.39, p = .10\) (see Appendix H, Table H2). Therefore, Hypothesis 2a was retained. No significant mean difference between stepgrandmother IRB-R and residential arrangement.

_H2b: Expressive Role Behavior and Residential Arrangement._ Null hypothesis:
There are no statistically significant differences in levels of expressive role behavior between stepgrandmothers whose stepchildren (as minors) lived in non-residential, residential, and shared-residential arrangements.

The revised Expressive Role Behavior (ERB-R) subscale consisted of four items that asked stepgrandmothers about the degree of involvement with stepgrandchildren in the areas of helping or advising a specific stepgrandchild. Expressive Role Behavior-R
subscale mean scores were compared with residential arrangements. One-way ANOVA revealed no significant differences between the level of expressive role behavior for stepgrandmothers, who had non-residential, residential, or shared-residential arrangement of the middle generation as minors $F(2, 1) = .973, p = .381$ (see Table H2). Therefore, Hypothesis 2b was retained. No significant mean difference was detected between expressive role behavior and residential arrangements.

$H2c$: Social Role Meaning and Residential Arrangement. Null hypothesis: There are no statistically significant difference in levels of social role meaning between stepgrandmothers whose stepchildren (as minors) lived in non-residential, residential, and shared-residential arrangements.

The revised Social Role Meaning (SRM-R) subscale consisted of three items assessing social norms stepgrandmothers associated with their stepgrandchild relationship. Social Role Meaning-R subscale mean scores were compared between residential arrangement. One-way ANOVA revealed no significant differences between the level of social role meaning for stepgrandmothers, who had non-residential, residential, or shared residential arrangements with the middle generation as minors $F(2, 1) = 2.52, p = .08$ (see Table H2). Therefore, Hypothesis 2c was retained. No significant mean difference was detected between social role meaning and residential arrangement.

$H2d$: Personal Role Meaning and Residential Arrangement. Null hypothesis: There are no statistically significant differences in levels of personal role meaning between stepgrandmothers, whose stepchildren (as minors) lived in non-residential, residential, and shared-residential arrangements.
The Personal Role Meaning (PRM) subscale consisted of five items assessing the fulfillment of personal needs stepgrandmothers associated with their stepgrandchild relationship. Personal Role Meaning subscale mean scores were compared between residential arrangement. One-way ANOVA revealed that a significant difference existed in the level of personal role meaning of stepgrandmothers who had non-residential, residential, or shared-residential arrangement of stepchildren as minors $F(2, 108) = 5.00, p = .008$ (see Table H2). Therefore, Hypothesis 2d was rejected. A significant mean difference was detected between personal role meaning and residential arrangements.

**Hypothesis 3: Perceived Stepgrandmother-Stepgrandchild Relationship Satisfaction Predicted by Six Dyadic Relationships**

Null hypothesis: There are no statistically significant associations between the levels of stepgrandmother-stepgrandchild relationship satisfaction and (a) spousal support, (b) stepgrandmother-biological grandmother friendliness, (c) husband-former spouse friendliness, (d) stepgrandmother-adult stepchild closeness, (e) father-adult child closeness, and (f) biological grandmother-adult child closeness.

Results of the multiple linear regression revealed that the overall regression model was significant $F(6, 85) = 5.05, p = .001$ (e.g., Appendix G, Table G6). One independent variable, stepgrandmother-adult stepchild closeness, was significantly associated with stepgrandmother-stepgrandchild relationship satisfaction ($r = 3.42, p = .001$) (see Table 13). Therefore, Hypothesis 3 was rejected. A significant association was detected among stepgrandmother-stepgrandchild relationship satisfaction and stepgrandmother-adult stepchild closeness.
Table 13

Multiple Linear Regression of Stepgrandmother-Stepgrandchild Relationship Satisfaction on Six Dyadic Stepfamily Relationship Variables

<table>
<thead>
<tr>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<th>p-value</th>
</tr>
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<td>1.935</td>
<td>.056</td>
</tr>
<tr>
<td>Husband – former spouse friendliness</td>
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<td>.209</td>
<td>.116</td>
</tr>
<tr>
<td>Stepgrandmother–biological grandmother friendliness</td>
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<td>.259</td>
<td>-.103</td>
</tr>
<tr>
<td>Stepgrandmother-adult stepchild closeness</td>
<td>.768</td>
<td>.224</td>
<td>.493***</td>
</tr>
<tr>
<td>Father – adult child closeness</td>
<td>-.171</td>
<td>.226</td>
<td>-.107</td>
</tr>
<tr>
<td>Biological mother-adult child closeness</td>
<td>.004</td>
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<td>.003</td>
</tr>
<tr>
<td>Spousal support</td>
<td>.247</td>
<td>.144</td>
<td>.171</td>
</tr>
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</table>

***p = .001

Post Hoc Analyses

H1b: Expressive Role Behavior and Adult Stepchild Closeness

Multiple linear regression revealed stepgrandmother-adult stepchild closeness and biological grandmother-adult child closeness were significantly associated with reported levels of stepgrandmother advising and helping behaviors. A one-way ANOVA comparing mean levels of expressive role behavior and mean levels of stepgrandmother-adult stepchild closeness revealed a significant difference between the ERB-R level means $F(4, 115) = 6.17, p < .0001$ (see Appendix H, Table H3). Results of Bonferroni
pairwise comparisons revealed three significant mean differences. Mean ERB-R levels for stepgrandmother's reporting closeness levels of "extremely close" differed significantly from stepgrandmothers reporting closeness levels of "not at all close" \( (p = .005) \), "somewhat close" \( (p = .002) \), and "neutral" \( (p = .031) \). These mean differences reveal a firm trend that stepgrandmothers who reported "extremely close" relationships with the middle generation demonstrated significantly greater levels of helping and advising stepgrandchildren than those stepgrandmothers who reported relationships that were "neutral" to "not at all close."

Biological grandmother-adult child closeness was found to be inversely and significantly correlated with levels of stepgrandmother helping and advising behaviors \( (t = -2.785, p = .007) \) (see Table 10). Further analysis with one-way ANOVA comparing mean levels of expressive role behavior and mean levels of biological grandmother-adult child closeness revealed no significant differences between the level means \( F(4, 115) = 1.70, p = .155 \) (see Appendix H, Table H4). However, an examination of ERB-R level means suggested an inverse trend with biological grandmother-adult child closeness. As the mean levels of biological grandmother-adult child closeness generally increased the mean levels of stepgrandmother helping and advising behaviors tended to decreased. This was reflected in anecdotal evidence describing some of the challenges to the stepgrandmother role. One stepgrandmother wrote, "I'd like to be able to be more involved in [our] stepgrandson's life, but [the] biological [grand]mother makes it difficult at times."
Stepgrandmother-Adult Stepchild Closeness

To gain a better understanding of stepgrandmother-adult stepchild closeness within the context of the linked family system, a multiple linear regression was conducted with the six dyadic relationships. Stepgrandmother-adult stepchild closeness was regressed on the remaining five dyadic relationships: (a) biological grandmother-adult child closeness, (b) father-adult child closeness, (c) stepgrandmother-biological mother friendliness, (d) husband-former spouse friendliness, and (e) spousal support. All regression assumptions were met. Results of the multiple linear regression revealed that the overall regression model was significant $F(5,86) = 24.00, p < .0001$ (see Appendix G, Table G7). Three relationships were significantly associated with stepgrandmother-adult stepchild closeness. Stepgrandmother-biological grandmother friendliness ($t = 4.48, p < .0001$) (see Table 1.4) and father-adult child closeness ($t = 8.20, p < .0001$) were positively correlated, while biological grandmother-adult child closeness ($t = -3.28, p = .002$) was negatively correlated with stepgrandmother-adult stepchild closeness.

These relationships were exemplified by anecdotal evidence from two qualitative questions pertaining to highlights and challenges of being a stepgrandmother. Concerns regarding stepgrandmother-biological grandmother friendliness were common. One stepgrandmother wrote, “The biological grandmother is a challenge in my case. . . . She tries to sabotage my relationship with the stepchild and stepgrandchildren as much as possible.” Another is equally challenged, “Having the biological grandmother clearly state where my spot is in the ‘pecking order.’ She will be gracious as long as everything is done her way.” While another warmly wrote, “She [the biological grandmother] is
extremely friendly. . . . She will be invited to my daughter’s wedding this summer—all
my step-children and stepgrandchildren will be in the wedding.”

Table 14

Multiple Linear Regression of Stepmother-Adult Stepchild Closeness on Five Dyadic
Stepfamily Relationships

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<th>p-value</th>
</tr>
</thead>
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<td>( t )  ( p )-value</td>
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<td></td>
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<td>.422</td>
<td>.674</td>
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<td>Husband – former spouse</td>
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<td>.100</td>
<td>-.118</td>
<td>-1.230</td>
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<td>friendliness</td>
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<td></td>
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<td>.403***</td>
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<tr>
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<td>closeness</td>
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<td>Spousal support</td>
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<td>.069</td>
<td>.096</td>
<td>1.299</td>
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</table>

*** \( p < .0001 \)
** \( p < .01 \)

Stepgrandmothers identified father-adult child closeness as another factor influencing
her relationship with the middle generation. One stepgrandmother wrote, “It is difficult as
their father’s mother [the biological grandmother] lives in [the] same town and she
always comes first over their grandfather.” Another wrote, “I wish our relationship with
our stepson was stronger. I’d like to be more involved in [my] stepgrandson’s life.” And
still another reflected a common implicit closeness of the father-adult child relationship,
“My husband and I have been made Godparents to this precious baby. We are honored!”
Biological grandmother-adult child closeness was negatively correlated with stepgrandmother-adult stepchild closeness. As stepgrandmothers perceived biological grandmother-adult child relationships to be closer, they perceived their own relationships with the adult stepchild to be more distant. One stepgrandmother wrote, “I’m dealing with a stepdaughter who blames me for something but won’t give me an idea. She won’t even talk to her father about it. (From other sources—it was something her mother told her).” Another wrote, “A challenge is that we don’t have the closeness that my husband’s daughter has with her mom and husband. Therefore, we are sometime left out of the loop and it’s hard to get the relationship you want.”

H2d: Personal Role Meaning and Residential Arrangement

One-way ANOVA revealed that a significant difference existed in the level of personal role meaning of stepgrandmothers who had non-residential, residential, or shared residential arrangements with stepchildren as minors \( F(2, 108) = 5.00, p = .008 \) (see Table H1). Bonferroni pairwise comparisons of mean PRM levels for residential arrangement revealed a significant mean difference between stepgrandmothers reporting shared-residential arrangements of stepchildren as minors and stepgrandmothers reporting non-residential arrangements of stepchildren as minors \( (p = .008) \). No significant mean differences in PRM were detected between stepgrandmothers with residential and non-residential arrangements, or stepgrandmothers with residential and shared-residential arrangements.
Sociodemographic Variables, Role Behavior, and Role Meaning

The literature on stepfamilies and grandparenting has suggested several factors which may mediate stepgrandmother role behavior and role meaning. Post hoc analysis for this study investigated eight factors that may mediate stepgrandmother role behavior and role meaning. Two factors suggested from the stepfamily literature included the age of the middle generation at the time of parental remarriage and the gender of adult stepchildren. Six factors suggested from the step/grandparenting literature included: (a) stepgrandmother age, (b) proximity to the stepgrandchild, (c) frequency of visits to the stepgrandchild, (d) number of step/grandchildren, (e) age, and (f) gender of the identified stepgrandchild. For a summary of one-way ANOVAs between each sociodemographic variable and the role behavior and role meaning subscales see Table 11.

Results of the one-way ANOVAs revealed significant findings on the levels of stepgrandmother instrumental and expressive role behavior, and social and personal role meaning with four sociodemographic variables (frequency, proximity, and age and gender of stepgrandchild). Significant mean differences for various frequencies of visits with the identified stepgrandchild were found on levels of stepgrandmother instrumental role behavior $F(7, 114) = 8.58, p < .0001$, expressive role behavior $F(7, 114) = 4.90, p < .0001$, social role meaning $F(7, 114) = 2.77, p = .011$, and personal role meaning $F(7, 114) = 5.99, p < .0001$ (see Table 15). Bonferroni pairwise comparisons of mean IRB-R levels for frequency of stepgrandmother visits revealed that women who reported visiting their stepgrandchild at least "once a week" demonstrated significantly greater instrumental role behaviors (e.g., taking stepgrandchildren to the movies, etc.) than
Table 15
Summary of One-way ANOVA Analysis Between Sociodemographic Variables and Role Behavior and Role Meaning Subscales

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Instrumental Role Behaviors-Revised&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Expressive Role Behaviors-Revised&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Social Role Meaning-Revised&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Personal Role Meaning (Retained)&lt;sup&gt;††&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>F</td>
<td>p</td>
<td>df</td>
</tr>
<tr>
<td>Stepgrandmother</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>2</td>
<td>1.21</td>
<td>.303</td>
<td>2</td>
</tr>
<tr>
<td>Proximity</td>
<td>4</td>
<td>2.25</td>
<td>.067</td>
<td>4</td>
</tr>
<tr>
<td>Frequency</td>
<td>7</td>
<td>8.58</td>
<td>.000**</td>
<td>7</td>
</tr>
<tr>
<td>Stepgrandchildren</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5</td>
<td>1.14</td>
<td>.344</td>
<td>1</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>2.05</td>
<td>.155</td>
<td>5</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>1.02</td>
<td>.315</td>
<td>1</td>
</tr>
<tr>
<td>Middle Generation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>.051</td>
<td>.822</td>
<td>1</td>
</tr>
<tr>
<td>Age at time of parental remarriage</td>
<td>2</td>
<td>1.29</td>
<td>.280</td>
<td>2</td>
</tr>
</tbody>
</table>

<sup>1</sup> Revised subscales based on factor analysis from the current study.
<sup>††</sup> Retained subscale loadings from the GSQ (Henry & Ceglian, 2001)
<sup>a</sup>Total number of stepgrandchildren and grandchildren
Stepgrandmothers who reported visiting "once every few months" ($p < .0001$), "about once a year" ($p < .0001$), "less than once a year" ($p < .0001$), and "never" ($p = .002$). Stepgrandmothers who reported living with their stepgrandchild or visiting their stepgrandchild "about once a month" or more demonstrated the highest levels of shared time and activities.

Results of Bonferroni pairwise comparisons of mean ERB-$R$ levels for frequency of stepgrandmother visits revealed that women who reported visiting their stepgrandchild "at least once week" demonstrated significantly greater expressive role behaviors (e.g., helping with an emergency or advising a stepgrandchild), than stepgrandmothers who reported visiting "about once every few months" ($p = .001$) or "never" ($p = .018$). Stepgrandmothers who reported living with their stepgrandchild or visiting their stepgrandchild "every couple of weeks" or more demonstrated the highest levels helping and advising behaviors.

Bonferroni pairwise comparisons of mean SRM-$R$ levels for frequency of stepgrandmother visits revealed no significant differences between stepgrandmothers reporting various frequencies of visits with stepgrandchildren and the level of social norms and expectations stepgrandmothers attributed to their role. Stepgrandmothers who ranged in visiting stepgrandchildren from "at least once a week" to "never" attributed similar levels of social role meaning to the stepgrandmother role.

Results of Bonferroni pairwise comparisons of mean PRM levels for frequency of stepgrandmother visits revealed that women who reported visiting their stepgrandchild "at least once week" attributed significantly greater personal role meaning (e.g., personal fulfillment) to the stepgrandmother role, than stepgrandmothers who reported visiting
"about once every few months" ($p < .0001$), "about once a year" ($p = .006$), and "less than once a year" ($p < .0001$). Stepgrandmothers who reported visiting their stepgrandchild "at least once a week" attributed the highest levels of personal fulfillment to the stepgrandmother role. This finding was reflected in this stepgrandmother’s comment, “I enjoy my stepgranddaughter very much. We are very close and did visit a lot. Since I moved last year we don’t visit as much but we do talk on the phone at least once a week.”

Significant mean differences for proximity reported by stepgrandmothers was found on levels of stepgrandmother expressive role behavior $F(7, 114) = 2.81, p = .029$, social role meaning $F(7, 114) = 2.91, p = .025$, and personal role meaning $F(7, 114) = 3.38, p = .012$ (see Table 15). Bonferroni pairwise comparisons of mean ERB-$R$ levels for proximity revealed no significant mean differences between ERB-$R$ and proximity. Most respondents perceived similar levels of helping and advising stepgrandchildren regardless of proximity. “I adore all of my stepgrandchildren just the same as my biological grandchildren. [I’m] not able to see any of them very much, because all seven of my children and stepchildren live a distance away and in very different directions. However, I keep in contact with all of them equally.”

Bonferroni pairwise comparisons of mean SRM-$R$ levels for proximity revealed that women who reported living a distance of 11-50 miles from their stepgrandchild attributed significantly more social norms and expectation to the stepgrandmother role than stepgrandmothers who reported living more than 100 miles away ($p = .023$). Most respondents attributed similar levels of social norms and expectations to the stepgrandmother role regardless of proximity. “Unfortunately we live 100 miles apart, but one of the highlights is when they come running and calling out Grandpa and Grandma.”
Results of Bonferroni pairwise comparisons of mean PRM levels for proximity revealed that women who reported living a distance of 51-100 miles from their stepgrandchild attributed significantly less personal fulfillment to the stepgrandmother role than stepgrandmothers who reported living 10 miles or less \((p = .017)\) and 11-50 miles \((p = .040)\). Respondents who lived within 50 miles of their stepgrandchild identified higher levels of personal role meaning to the stepgrandmother role than those stepgrandmothers living over 50 miles. “I love being able to spend about a day per week [with her] since she was born—all other grandchildren live a long distance. I have a special loving bond with her. . . . My heart swells looking at her.”

Significant mean differences for stepgrandchild age were found on levels of stepgrandmother expressive role behavior \(F(7, 114) = 2.84, p = .019\) and personal role meaning \(F(7, 114) = 2.30, p = .050\) (see Table 15). Bonferroni pairwise comparisons of mean ERB-R levels for ages of stepgrandchildren revealed that women reported significantly more helping and assistance behaviors towards infants through age 6 than with stepgrandchildren between ages of 18 and 22 \((p < .010)\). Most respondents reported little variation in their level of helping and advising towards their stepgrandchildren regardless of age. Bonferroni pairwise comparisons of mean PRM levels for ages of stepgrandchildren revealed no significant mean differences in levels of personal role meaning and age of stepgrandchild.

Lastly, a significant mean difference for stepgrandchild gender was indicated for levels of stepgrandmother social role meaning \(F(7, 114) = 5.07, p = .026\) (see Table 15). An evaluation of the mean differences between stepgrandsons \((n = 60)\) and stepgranddaughters \((n = 62)\) indicated a higher mean for stepgrandsons at 13.78 \((SD = \ldots\)
1.39) than for stepgranddaughters at 13.11 (SD = 1.86). Results revealed that stepgrandmothers attributed statistically significant higher levels of social role meaning for stepgrandsons than for stepgranddaughters. Anecdotal examples included, “I worry for my stepgrandson, because ‘daddy’ was so young when he became a father,” and “The stepgrandchild’s mother has moved many times, and has been involved with several relationships since she has divorced his father. The stepdaughter is very protective of my stepgrandson.”

Summary

Data in this study were analyzed using multiple linear regression and one-way ANOVA. The study proposed a total of nine hypotheses. Five hypotheses concerned the association of stepgrandmother role behavior, role meaning and relationship satisfaction with six dyadic relationships in the linked family system; four hypotheses proposed that differences in stepgrandmother role behavior and role meaning would be influenced by the residential arrangement of the middle generation as minors. The independent variable, stepgrandmother-adult stepchild closeness, was significantly associated with the level of instrumental role behavior, expressive role behavior, social role meaning, personal role meaning and stepgrandmother-stepgrandchild relationship satisfaction. Biological mother-adult child closeness was significantly associated with stepgrandmother expressive role behavior. Post hoc analysis indicated stepgrandmothers, who had shared-residential living arrangements of the middle generation as minors, attributed significantly higher levels of personal role meaning to the stepgrandmother role than stepgrandmothers, who had non-residential living arrangements with the middle
generation as minors. Additionally, frequency, proximity, age and gender of stepgrandchild appear to have some influence on stepgrandmother role behavior and role meaning. Further discussion, conclusions and implications of the findings are found in Chapter V.
CHAPTER V

DISCUSSION

Summary of Methodology

This study recruited long-term stepgrandmothers to participate in a pencil and paper questionnaire regarding grandparenting and stepfamily relationships. Long-term stepgrandmothers were recruited through convenience sampling at on-site locations and snowball sampling through word of mouth, flyers, newspaper and newsletter articles, a national stepfamily website and blogs. Participants qualified as long-term stepgrandmothers, if they (a) became stepmothers when stepchildren (the middle generation) were minors; and (b) subsequently their stepchildren have fathered, given birth to, or adopted a child. Qualified participants received a 54-item questionnaire to return either on-site or through the mail. The questionnaire was constructed in three parts. Part I included 23 items revised from Henry and Ceglian’s (2001) Grandparenting and Stepgrandparenting Questionnaire comprised of four subscales measuring stepgrandmother role behavior (instrumental and expressive) and role meaning (social and personal). Part II obtained stepgrandchild demographic information and inquired about stepgrandmother-stepgrandchild relationship satisfaction with a specific stepgrandchild. Part III solicited stepgrandmother, biological grandmother, and adult stepchild demographic information and assessed stepgrandmothers’ perceptions of relationship closeness, friendliness and support among various members in the linked
family system, as well as residential arrangements of the middle generation as minors. A factor analysis of the modified Grandparenting and Stepgrandparenting Questionnaire provided three revised subscales (and one retained subscale) for the current study's analyses. Multiple linear regression was conducted to determine if any of the relationships in the linked family system were associated with stepgrandmother role behavior, role meaning and her relationship satisfaction with the stepgrandchild. One-way ANOVA was conducted to assess if there were any differences in stepgrandmother role behavior or role meaning due to residential arrangements of the middle generation as minors.

Findings and Interpretations of Hypotheses

The challenge to the stepgrandmother role is enacting an already ambiguous role of grandparent within the complex relationship dynamics of a long-term stepfamily (Cherlin & Furstenberg, 1986). By applying Jacobson's (1987) typology of a linked family system stepgrandmother role behavior, role meaning, and satisfaction were investigated by examining dynamic variables, such as relationships, and the quality of interactions among significant persons (stepgrandmothers, grandfathers, biological grandmothers, and the middle generation). The purpose of this study was to measure the association of six dyadic relationships and the residence of the middle generation as minors with stepgrandmother role behavior, role meaning and satisfaction in long-term stepfamilies.

Previous researchers have noted that the middle generation mediates the grandparenting role with grandchildren in first families and inherited stepfamilies.
(Robertson, 1971, 1977; Rossi & Rossi, 1990; Sanders & Trygstad, 1989; Whitebeck et al., 1993), and that closer relations between adult children and grandparents are associated with greater emotional closeness and frequency of visits with grandchildren (Hodgson, 1992). The current study provides evidence that the middle generation (adult stepchild) also mediates the stepgrandmother role. Stepgrandmothers in the current study, who had significantly closer relationships with adult stepchildren demonstrated more role behaviors, attributed more personal and social role meaning, and had higher levels of relationship satisfaction with stepgrandchildren.

In the current study biological grandmother-adult child closeness was significantly associated with stepgrandmother expressive role behavior. Stepgrandmothers, who demonstrated more helping and advising behaviors, perceived biological grandmothers as having significantly less close relationships with adult children. More distant relationships between adult children and biological grandmothers may create more opportunities for stepgrandmothers to engage in behavior, which might otherwise be fulfilled by the biological grandmother. Fewer grandchildren, due to lower birth rates, and more grandparents due to longer life expectancy and remarriage, may also limit the amount of assistance any grandparent can provide to a specific grandchild (Rossi & Rossi, 1990). A common challenge expressed by many stepgrandmothers was “sharing [stepgrandchildren] with multiple sets of grandparents.” More distant relations between biological grandmothers and adult children may provide stepgrandmothers more access to help and advise stepgrandchildren especially with multiple grandparents competing for time.
Jacobson's (1987) typology suggests that the quality of interactions between significant persons of the linked family system influence one another's behavior. More specifically, researchers have found in the early years of stepfamily formation that stepmother-stepchild relationships are influenced by several key stepfamily dyads comprised of biological parents, stepparents and stepchildren (Seltzer, 1994). In post hoc analyses for the current study the nature and quality of the five dyadic stepfamily relationships were used to predict contributions to stepgrandmother-adult stepchild closeness. Of the dyadic combinations possible three were significantly associated with stepgrandmother-adult stepchild relationship closeness, including relationship closeness between fathers and adult children, friendliness between stepgrandmothers and biological grandmothers, and closeness between biological grandmothers and adult children.

A closer relationship between biological fathers and adult children predicted a closer relationship between stepgrandmothers and adult stepchildren. The significant association of the father-adult child closeness with stepgrandmother-adult child closeness supports recent research with adult stepchildren that suggests stepmother-stepchild relationships in the early years of stepfamily formation are mediated by the biological father (Schmeeckle et al., 2006).

Friendlier relations between stepgrandmothers and biological grandmothers predicted closer relationships between stepgrandmothers and adult stepchildren. Previous researchers have noted that more positive relations between stepmothers and biological mothers within the first decade of stepfamily formation were associated with reduced stepmother-stepchild conflicts (Whiting et al., 2007). Results of the current study found a significant association between stepgrandmother-biological grandmother friendliness and
stepgrandmother-adult stepchild closeness. Stepgrandmothers, who had friendlier relationships with the biological grandmother, had closer relationships with the adult stepchild. It seems likely that friendliness between stepmothers and biological mothers remains salient in long-term stepfamilies as these "mothers" negotiate the "grandmother" role.

Lastly, more distant biological grandmother-adult child relationships predicted closer stepgrandmother-adult stepchild relationships. This may be due to the matri-focal kinship ties that prioritize connection to biological mothers (Johnson, 1998) and subsequently to the biological grandmothers in the mid-late years of the stepfamily life cycle. As biological (grand)mothers are less close with their adult children, step(grand)mothers may be encouraged and find opportunity to develop closer ties.

With fairly broad consensus previous researchers have found six factors that mediate the grandparent role, including age of the grandmother, number and age of grandchildren, frequency of visits, and proximity to the stepgrandchildren (Cherlin & Furstenberg, 1985; Robertson, 1971, 1977; Rossi & Rossi, 1990; Sanders & Trygstad, 1989; Whitebeck et al., 1993). These factors were examined in the current study along with residency of the middle generation as minors, gender of adult stepchild and gender of stepgrandchild. It was hypothesized that residency of the middle generation as minors would not be associated with stepgrandmother role behavior (instrumental and expressive) or role meaning (social and personal). Results of the current study confirm some of the previous research while adding residential arrangement of the middle generation as minors and gender of the stepgrandchild as mediating factors for further investigation of the long-term stepgrandmother role.
The stepgrandmother level of personal role meaning was significantly higher for stepgrandmothers with shared-residential arrangements than for non-residential arrangements. There was no difference between shared-residential and residential, or residential and non-residential. This finding is similar to that found by Bauserman (2002) in which joint custody children were shown to be better adjusted than sole custody children. The current finding hints that residential arrangements of the middle generation as minors may be influential in the personal role meaning long-term stepgrandmothers attribute to their role. It is also likely that the closeness of their relationship with the middle generation may indirectly impact their role meaning.

Stepgrandmothers in the current study attributed significantly more social norms and expectations to the role with stepgrandsons than with stepgranddaughters. These norms and expectations include respect for elders, an emphasis on love and companionship rather than money, and setting a good example for the stepgrandchild for what is morally right. Anecdotal evidence from the current study’s participants reflect an emphasis on these areas with stepgrandsons more so than stepgranddaughters. This may be in an attempt to instill social values of marriage, commitment and companionship in males while attempting to override any stigma of divorce(s) by the grandparents, or socially deviant life choices of the middle generation (serial partnerships, drug and alcohol abuse, etc.).

Frequency of visits and proximity to stepgrandchildren were common themes addressed by the stepgrandmother respondents in this study. Stepgrandmothers who had contact “at least once a week” with their stepgrandchild demonstrated significantly more role behaviors and attributed significantly more personal and social role meaning than
those stepgrandmothers who visited with their stepgrandchildren “once every few months” or less. However, for those stepgrandmothers who visited less than “once a month” there was very little difference in their perceived level of role behavior and role meaning. These findings suggest that more frequent contact of “once a month” (or more) makes a significant difference in stepgrandmothers’ perceptions of their role behavior and role meaning only in relation to stepgrandmothers who visit less than “once every few months.” There is little difference between all other stepgrandmother visitation patterns and levels of role behavior and role meaning.

Significantly more role meaning attribution was also found with stepgrandmothers living within 50 miles of the stepgrandchild than those living over 100 miles. These findings suggest that proximity makes a difference in stepgrandmothers’ perception of the level of personal fulfillment, and expectations and norms attributed to their role.

In the current study, stepgrandmother age and the number of (step)grandchildren did not result in any significant differences in perceptions of role behavior or role meaning, where as the age of the stepgrandchild did. The level of stepgrandmother helping and advising behaviors, and stepgrandmother personal role meaning, were significantly different based on stepgrandchild age. Stepgrandmothers demonstrated more helping and advising behaviors for children infancy through age 6 than for young adults ages 18-22. Given the developmental tasks and needs of each of these groups these results are not unexpected. Stepgrandchild age was also shown to be significant on personal role meaning, although no more specific findings by age were obtainable.
Findings and Interpretations of the Factor Analysis

Results of the factor analysis for the slightly modified role behavior and role meaning subscales of the Grandparenting and Stepgrandparenting Questionnaire (Henry & Ceglian, 2001) revealed many similarities and some differences with Robertson’s (1971, 1977) original factor loadings. Similarities seem to reflect some continuity in grandparenting role behavior and role meaning with Robertson’s grandmothers of more than 35 years ago and the current study’s long-term stepgrandmothers. Differences in the item loadings suggest dissimilarity with how first family grandmothers and long-term stepgrandmothers may enact their role and attribute meaning. Research with stepmothers during the first decade of stepfamily formation have noted that the stepmother role is ambiguous with conflicted expectations—“a mothering kind of role, but not a mother” (Ganong & Coleman, 2004, p. 136). Results of the current study’s factor analysis suggest that the long-term stepgrandmother role may be nuanced in behavior and meaning in an attempt to reconcile role ambiguity and the complex interplay of intergenerational relationships within the linked family system.

Differences in factor loadings found in the current study may also be indicative of demographic, social, and ideological changes over the past quarter of century. Uhlenberg and Kirby (1998) suggest that changes in educational status, marital status and longer life expectancies in the 20th century have influenced the grandparenting role and grandparents interactions with grandchildren. Long-term stepgrandmothers in the current study strongly resemble demographic changes in grandparents associated with the latter quarter of the 20th century. As a group of mostly Euro-American women, the study
sample was well educated, mostly employed, relatively young, and married. This is in contrast to Robertson’s (1971, 1977) sample of mostly older, non-working, widowed women with low educational backgrounds, who were also of Euro-American heritage. Robertson described the portion of her sample which was younger, married, working and well-educated as having a *symbolic* style of grandparenting; they attached high levels of social norm expectations to their role and engaged in fewer role behaviors with grandchildren. The current sample as a whole resembled the characteristics of this style—high levels of normative expectations and low levels of role behaviors. As the long-term stepgrandparenting population ages, it is expected that the role behaviors and role meaning associated with the role may become more varied, and that the role of stepgrandmother will evolve over generations (Hodgson, 1998).

**Limitations**

This section highlights the limitations related to the design, methodology, and findings of this study. First, the design protocol did not include follow-up procedures for non-response. This was due in part to the survey distribution method. At on-site locations participants had the option to complete the survey in-person or take it with them. Participants who opted to complete the survey at home and return it by mail anonymously departed on-site locations with the survey. No contact information was obtained for follow-up reminders. The limitation to this distribution strategy was an inability to follow-up with potential respondents once they left the site. In order maintain consistent procedures, no follow-ups were made with any potential respondents whether contact
information was provided or not. Utilizing recommended survey follow-up procedures may increase response rates and provided a larger sample for further analyses.

Second, the factor analysis results of the modified Grandparenting and Stepgrandparenting Questionnaire should be viewed with caution. Although the current study's factor loadings were similar to the original factor loadings discerned by Robertson (1971, 1977), low saturation levels (< .60) and few variables per subscale (4–8) may have been better analyzed with a sample size ranging from 300–400 (Guadagnoli & Velicer, 1988). With a smaller sample size (e.g., n = 122) more error may have been introduced into the model, which may have been the reason for under defined or redefined components. Other possible reasons for the changes in factor loadings may be due to changes in the construct of grandparenting over the past 35 years, or potential differences in the characteristics of stepgrandparenting in long-term stepfamilies from first families.

Third, the term “stepgrandmother” was at times confusing to potential respondents and referrals. Anecdotal evidence from participants strongly suggests that the construct of “stepgrandmother” may be a misnomer. Many women consider themselves “grandmothers” and identified as such. The term “step” was often dropped when entering grandmotherhood from stepmotherhood. Additionally, some women adopted their stepchildren due to lack of involvement or death of the biological mother. In these families, the term “step” was dropped and stepmothers were addressed as “mom” and subsequently “grandma.” As a result some stepgrandmothers may not have self-identified for the study.

Anecdotal evidence from some respondents included:
Comment 1: “I do not feel that my stepgrandchildren consider me as their step-grandmother. I am simply ‘Grandma Mary’—I am the grandma who loves them just like all their other grandmas.”

Comment 2: “Our family does NOT use the term ‘step’ to describe any of our family members. Our grandchildren have learned that we can all get along and enjoy one another without the designation of grandmother versus stepgrandmother.”

Comment 3: “Since I have been a member of this family since before the birth of my stepgrandchildren, I think of myself, and they think of me, as a grandmother—no distinction of being a step.”

Comment 4: “Until this survey, I didn’t consider myself a stepgrandmother. Just a grandmother.”

Comment 5: “We never considered the term ‘step’ in our family as we melded into one and all the children (and grandchildren) were and are treated equally.”

Fourth, as with any self-administered questionnaire responses may have been biased by participant personality, environmental effects, or sensitivity to the questions (Bradburn, 1983). Respondents may have biased their responses to portray a certain image to the researcher. Respondents may have skipped items for which they may have experienced some discomfort or felt as if there was not a satisfactory response choice. Additionally, some of those who experienced high levels of distress from the survey may not have completed or returned the survey.

Fifth, the survey was constructed by and piloted by educated, Euro-American women. Additionally, recruitment was conducted by graduate level, Euro-American women at locations predominated by educated, Euro-Americans. Consequently, the
sample respondents reflected the biases in survey construction and participant recruitment. Respondents were 81% Euro-American with almost 75% having at least some college education.

Sixth, single items were used as independent measures of relationship closeness, friendliness, support and satisfaction. Single item measures may be susceptible to varying interpretation, which may affect consistency of responses (Bohrnstedt, 1983). Single items may not have been sufficient to capture the constructs of friendliness, closeness, support and satisfaction.

Seventh, comparisons between residential arrangements of the middle generation as minors were based on varying group sizes—non-residential \( (n = 58) \), residential \( (n = 43) \), and shared-residential \( (n = 10) \). Additionally, there was a group that was not defined by any of these categories \( (n = 11) \). This may have been related to how residence was defined in the study. Some women adopted their stepchildren and thus did not identify with any of the descriptions in these categories. Others may have had stepchildren that lived with persons other than biological mothers and fathers. This unidentified group was therefore not part of the comparison of differences in role behavior and role meaning based on residential arrangements of the middle generation as minors.

Eighth, although the sample included a continuum of perceptions regarding various relationships within the linked family system, respondents were generally more positive about these relationships, e.g., almost 65% of the respondents were satisfied to extremely satisfied with their stepgrandchild relationship. An unknown percentage of dissatisfied stepgrandmothers and potential referrals may have opted out of the study. Some persons who admittedly opted-out occasionally provided information regarding the
reason. Common anecdotal evidence for qualified participants who opted-out included: (a) poor relationship with stepchild, (b) stepgrandchild lives too far away, (c) little to no relationship with the stepgrandchild, and (d) divorced from father of my stepchildren. Similar reasons were given by potential referrals who knew a stepgrandmother. These referrals included stepchildren, stepchildren’s spouses, friends, or other linked family system members. Adult stepchildren typically did not refer stepgrandmothers with whom they had a poor relationship.

Ninth, the cross sectional and correlational design of the study invited problems with interpretation. Cross sectional data provided only a snapshot of long-term stepfamily relationships and stepgrandmother role behavior and role meaning. Unfortunately, this study design made it difficult to attribute causality or to understand why participants responded as they did at the time of the study.

Recommendations for Future Research

The following are recommendations for future research.

1. Future researchers should consider social norms and expectations of the stepgrandmother role as defined by long-term stepgrandmothers, and how these norms and expectations influence her role enactment within the linked family system.

2. This study found closeness of relationships between stepgrandmothers and the middle generation to be significantly associated with stepgrandmother role enactment, role meaning and stepgrandchild relationship satisfaction.
Researchers may want consider factors which contribute to closeness (and distance) between stepgrandmothers and the middle generation.

3. Further investigations may want consider the influence of the middle generation’s residential arrangement as minors on the quality of relationships with stepgrandmothers in the mid-late stage of the stepfamily life cycle.

4. This study investigated grandparenting from the long-term stepgrandmother’s perspective. Future research on the stepgrandparent role in long-term stepfamilies should consider the perspectives of other members of the linked family system, including biological grandparents, the middle generation, and stepgrandchildren.

5. Researchers may want consider investigating similarities and differences between long-term stepgrandmothers, inherited stepgrandmothers, later-life stepgrandmothers and biological grandmothers.

6. Over half of the women who participated in this study did not have biological grandchildren of their own. Researcher may want consider how the experience of long-term stepgrandmothers may be similar or different for women, who are long-term stepgrandmothers “only” and “combined” (both stepgrandmother/biological grandmother).

7. This study examined long-term stepfamilies mostly from the perspective of well-educated, Euro-American women from the upper Midwest. Researchers are encouraged to explore long-term stepfamilies from different racial and socio-economic backgrounds.
8. It is recommended that researchers conduct a replication study of the factor analysis of the modified Grandparenting and Stepgrandparenting Questionnaire (Henry & Ceglian, 2001) with a larger population of long-term stepgrandmothers in order to validate the item loadings for each of the subscales used in the current study’s analysis.

9. Stepfamilies are the result of complex interwoven relationships that develop over time. As the first large cohort of stepfamilies progresses through the later-life stages of the stepfamily life cycle, it will be increasingly important to investigate the individuals within, and the system as a whole, in order to provide appropriate family and individual counseling treatment and intervention.

Implications

Results from the current study suggest that closer relationships between stepgrandmothers and the middle generation help to facilitate the stepgrandmother role. This extends previous research that found the middle generation mediates biological grandmothers and inherited stepgrandmothers relationships with (step)grandchildren (Henry et al., 1992; Robertson, 1977; Sanders & Trygstad, 1989). It also extends early stepfamily research which found the stepmother-stepchild relationship to be one of the more important relationship in early stepfamily formation (Crosbie-Burnett, 1984). The current study’s findings imply that the stepmother-stepchild relationship is equally important in the mid-late stage of the stepfamily life cycle as stepmothers transition to stepgrandmothers and stepchildren transition to the middle generation. Affinity seeking in
the earlier years of stepfamily formation and affinity maintaining strategies (Ganong et al., 1999) between stepgrandmothers and adult stepchildren are recommended to help facilitate the stepgrandmother role in the linked family system.

Findings from the current study suggest that the stepgrandmother-adult stepchild relationship may depend on the closeness of relationships between the biological grandparents and the middle generation as well as stepgrandmother-biological grandmother friendliness. These relationships have also been found to be instrumental in stepmother-stepchild relationships in the earlier years of stepfamily formation (Ganong et al., 1999; Vinick & Lanspery, 2000; White, 1994; Whiting et al., 2007). Professionals who work with stepfamilies should assess the quality of these relationships within the stepfamily system in order to suggest individual as well as systemic interventions to facilitate positive relations between step(grand)mothers and stepchildren throughout the stepfamily life cycle.

Educational and therapeutic interventions may be needed to help stepgrandmothers and biological grandmothers understand that “grandparenting” in stepfamilies is likely a shared role amongst multiple sets of (step)grandparents who may find the role equally as salient. Helping (step)grandmothers to redefine roles and relationships according to linked family circumstances (King, Russell, & Elder, 1998) may help to make room for all to fulfill “grandparenting” roles.

Lastly, in addition to the factors previously found to mediate grandparenting, practitioners and researchers may want to consider the gender of the stepgrandchild, especially stepgrandsons, as well as residential arrangement of stepchildren as minors. Evidence from the current study suggests that stepgrandmothers may be particularly
concerned with environmental risks and the socialization of stepgrandsons as an important part of their role definition. Additionally, residence of the middle generation as minors may provide clinicians with informative background clues regarding the opportunities for stepmother-stepchild bonding in the early years of stepfamily formation which may impact current relationship closeness, and subsequently the stepgrandmothers role salience and access to stepgrandchildren. Practitioners and researchers may want to clarify the relevance of these factors as unique contributors to the stepgrandmother role.

In summary, the current study provides preliminary findings for the relationships influencing the long-term stepgrandmother role in the mid-late stage of the stepfamily life cycle. Findings suggest that key relationships in the early years of stepfamily formation remain salient to stepgrandmother role in the later years. By highlighting the dynamics of long-term stepfamily relationships from the perspective of stepgrandmothers, practitioners and researchers can more accurately depict the roles and relationships within the long-term stepfamily.
REFERENCES


Appendix A

Cover Letter
Thank you for your interest in the study "Long-term Stepgrandmother Relationships," which aims to examine stepgrandmother relationships and their impact on stepgrandmother role enactment, role meaning, and her relationship with her stepgrandchild. The study is being conducted by Alan Hovestadt, Ed.D. and Mary-Catherine Kane, M.A. from Western Michigan University, Department of Counselor Education and Counseling Psychology as part of the dissertation requirements for Ms. Kane.

The packet contains a consent form, a 54-item questionnaire, a raffle entry/request summary of the study results and with a postage-paid, pre-addressed return envelope. Please read through the consent form and keep the copy for your records.

The 54-item questionnaire will take approximately 25 minutes to complete. Participation in this study is entirely voluntary. Do not place your name anywhere on the survey, the responses are considered anonymous. You may choose not to answer any question and simply leave it blank. A completed, returned survey indicates your consent to the study. If you choose not to participate in this survey, please return the incomplete questionnaire along with the raffle entry form in the postage-paid, pre-addressed envelope.

You may complete the raffle entry form to enter one of five drawings for a $20 cash award. Entry forms also include a box to check if you are interested in receiving a summary of the survey results. Simply complete the form if you are interested in entering the raffle and check the box if requesting a summary of the study results. You are eligible for only one entry and one chance to win, and need not request summary results to enter.

Thank you for your time and energy for this research. Your participation will provide much needed information to stepfamilies and clinicians about the long-term stepgrandmother role and the relationships that impact it.

If you have any questions or comments regarding the survey or the research, please give me a call at (269) 387-3732.

Thank you,

Mary-Catherine Kane, M.A.
Doctoral Candidate
Western Michigan University
Appendix B

Informed Consent: Mail and In-Person
Informed Consent

You are invited to participate in a research project entitled “Long-term Stepgrandmother Relationships” designed to investigate stepgrandmother relations with stepgrandchildren. The study is being conducted by Alan Hovestadt, Ed.D. and Mary-Catherine Kane, M.A. from Western Michigan University, Department of Counselor Education and Counseling Psychology. This research is being conducted as part of the dissertation requirements for Mary-Catherine Kane.

The study is comprised of a three-part questionnaire totaling 54 items. Response types include rating scales and fill-in-the-blank describing your current stepgrandmothering situation. It will take approximately 25 minutes to complete. Participation in this study is entirely voluntary. Your replies will be completely anonymous, so do not put your name anywhere on the survey. You may choose not to answer any question and simply leave it blank. If you choose not to participate in this survey, you may return the incomplete questionnaire along with the consent form and the raffle entry to the researcher in the postage paid return envelope. Returning a completed survey indicates your consent for use of the answers you supply.

There is no reason to believe that you will receive any direct harm from your participation in this research. There may be a slight possibility that some questions could create some discomfort. For example, considering the answer to a particular question may possibly increase your awareness of some unsatisfactory aspect of your situation. If these feelings are creating discomfort, you may call the Center for Counseling and Psychological Services at (269) 387-4805 or Gryphon Place at (269) 381-4357.

Each survey packet includes an entry into one of five drawings for a $20 cash award. Entry forms include a box to check if you are interested in receiving a summary of the survey results. Complete the entry form if you are interested in participating in one of the drawings, and check the box if you would like a summary of the survey results. Raffle entry can be mailed separately. Participants are eligible for only one entry and one chance to win, and need not request summary results to enter.

If you have any questions or concerns about this study, you may contact Mary-Catherine Kane at (269) 387-3732 or Dr. Alan Hovestadt at (269) 387-4817. You may also contact the chair of the Human Subjects Institutional Review Board (269) 387-8293 or the Vice President for Research (269) 387-8298 with any concerns you may have.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this project if the stamped date is more than one year old.
You are invited to participate in a research project entitled "Long-term Stepgrandmother Relationships" designed to investigate stepgrandmother relations with stepgrandchildren. The study is being conducted by Alan Hovestadt, Ed.D. and Mary-Catherine Kane, M.A. from Western Michigan University, Department of Counselor Education and Counseling Psychology. This research is being conducted as part of the dissertation requirements for Mary-Catherine Kane.

The study is comprised of a three-part questionnaire totaling 54 items. Response types include rating scales and fill-in-the-blank describing your current stepgrandmothering situation. It will take approximately 25 minutes to complete. Participation in this study is entirely voluntary. Your replies will be completely anonymous, so do not put your name anywhere on the survey. You may choose not to answer any question and simply leave it blank. If you choose to not participate in this survey, you may return the incomplete questionnaire along with the consent form and the raffle entry to the drop box located on the table. Returning a completed survey indicates your consent for use of the answers you supply.

There is no reason to believe that you will receive any direct harm from your participation in this research. There may be a slight possibility that some questions could create some discomfort. For example, considering the answer to a particular question may possibly increase your awareness of some unsatisfactory aspect of your situation. If these feelings are creating discomfort, you may call the Center for Counseling and Psychological Services at (269) 387-4805 or Gryphon Place at (269) 381-4357.

Each survey packet includes an entry into one of five drawings for a $20 cash award. Entry forms include a box to check if you are interested in receiving a summary of the survey results. Complete the entry form if you are interested in participating in one of the drawings, and check the box if you would like a summary of the survey results. Drop the raffle entry in the drop box on the table. Participants are eligible for only one entry and one chance to win and need not request summary results to enter.

If you have any questions or concerns about his study, you may contact Mary-Catherine Kane at (269) 387-3732 or Dr. Alan Hovestadt at (269) 387-4817. You may also contact the chair of the Human Subjects Institutional Review Board (269) 387-8293 or the Vice President for Research (269) 387-8298 with any concerns you may have.

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Appendix C

Referral and Recruitment Scripts: In-Person and Over-Phone
In-Person Referral Script

The following script will be read to referrals by the researcher in person before distributing the survey packet.

"Hello. My name is (name of student researcher/assistant). I would like to invite women to participate in a study that aims to learn more about the stepgrandmother-stepgrandchild relationship, as well as three people who may influence that relationship, namely the spouse, the biological grandmother, and the adult stepchild. This research is being conducted by myself with Dr. Alan Hovestadt as a requirement for the completion of a doctoral degree in Counseling Psychology at Western Michigan University.

Inclusion criteria include 1) being a stepgrandmother, 2) that the stepchildren were under the age of 18 when she married the stepchildren's father, and 3) the adult stepchildren now have biological/adopted children of their own.

I will send the participant a survey packet in the mail including, a consent form, a 54-item questionnaire and a card to enter a $20 raffle and request a summary of the research results. Response items for the questionnaire include rating scales and fill-in the blanks that describe your current stepgrandparenting situation. It will take approximately 25 minutes to complete. She can return completed questionnaire and the entry form in the self-address stamped envelope. Keep consent form for her records. If she prefers not to participate, she may return the packet including the questionnaire, the consent form, and the blank raffle entry in the self-addressed stamped envelope. Please let me know if you have any questions or concerns.

If you would be willing to provide an email address or phone number, and who referred her to the study, I will contact her for participation. Just fill out the index card with her name, email or phone number and who referred her."
In-Person Recruitment Script

The following script will be read to potential participants by the researcher/assistants in person before distributing the survey packet.

"Hello. My name is (name of student researcher/assistant). I would like to invite you to participate in a study that aims to learn more about the stepgrandmother-stepgrandchild relationship, as well as three people who may influence that relationship, namely the spouse, the biological grandmother, and the adult stepchild. This research is being conducted by Mary-Catherine Kane, M.A. with Dr. Alan Hovestadt as a requirement for the completion of a doctoral degree in Counseling Psychology at Western Michigan University. If you choose to participate, you will be presented with a three part questionnaire totaling 54 items. Response items include rating scales and fill-in the blanks that describe your current stepgrandparenting situation. It will take approximately 25 minutes to complete."

"Inclusion criteria include 1) being a stepgrandmother, 2) that your stepchildren were under the age of 18 when you married their father, and 3) your adult stepchildren now have biological/adopted children of their own."

"Please take a moment to read over this consent form and consider whether or not you would be willing to participate. Keep the consent form for your records. Return the completed questionnaire to the drop box labeled 'Completed Questionnaires', and the raffle entry to the 'Raffle Entry' box. If you prefer not to participate, you may return the packet including the consent form, the blank raffle entry and the questionnaire to the "Completed Questionnaire" box. Please let me know if you have any questions or concerns."

Researcher/assistant will then give the subject the research packet including a consent form, a questionnaire, and a raffle entry. Thank subject for their consideration of the project whether or not they choose to participate.

Not a Long-term Stepgrandmother

"I appreciate your interest in this study. Thank you for stopping by our table. If you know someone who may be interested in receiving more information about our study, please give them this phone number."
Over-Phone Recruitment Script

The following script will be read to potential participants by the researcher/assistant over-the-phone before distributing the survey packet.

"Hello. My name is (name of student researcher/assistant). I would like to invite you to participate in a study that aims to learn more about the stepgrandmother-stepgrandchild relationship, as well as three people who may influence that relationship, namely the spouse, the biological grandmother, and the adult stepchild. This research is being conducted by Mary-Catherine Kane, M.A. with Dr. Alan Hovestadt as a requirement for the completion of a doctoral degree in Counseling Psychology at Western Michigan University. If you are willing to participate, I will send you a survey packet.

"Inclusion criteria include 1) being a stepgrandmother, 2) that your stepchildren were under the age of 18 when you married their father, and 3) your adult stepchildren now have biological/adopted children of their own.

If you'd like, I will send you a survey packet in the mail including, a consent form, a 54-item questionnaire and a card to enter a $20 raffle and request a summary of the research results. Response items for the questionnaire include rating scales and fill-in the blanks that describe your current stepgrandparenting situation. It will take approximately 25 minutes to complete. Upon receipt of the packet, please read through the consent form. Return completed questionnaire and the entry form in the self-address stamped envelope. Keep consent form for your records. If you prefer not to participate, you may return the packet including the questionnaire, the consent form, and the blank raffle entry in the self-addressed stamped envelope. Please let me know if you have any questions or concerns."

Researcher/assistant will then either send a research packet in the mail or simply thank the subject for their consideration of the project whether or not they choose to participate.

Voluntarily opted out of study

"Thank you for calling me and expressing interest in this study. If you know someone who may be interested in the study, please give them my phone number (269-387-3732) for more information."
Appendix D

WMU Human Subjects Institutional Review Board Approval
STERN MICHIGAN UNIVERSITY

Date: July 10, 2007

To: Alan Hovestadt, Principal Investigator
   Mary-Catherine Kane, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number: 07-07-07

This letter will serve as confirmation that your research project entitled "Long-term Stepgrandmother Relationships" has been approved under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: July 10, 2008
Appendix E

Raffle Postcard
Mary-Catherine Kane, M.A., TLLP
Long-term Stepgrandmother Study
Western Michigan University
3326 Kohrman Hall
Kalamazoo, MI 49008-5322

Raffle Entry

Name: ________________________________

Street address: ________________________________

City, State, Zip: ________________________________

Phone: (____) ________________________________

Email: ________________________________

☐ I would like to receive a summary of the study results.
Appendix F

Survey: Parts I, II, III
You are invited to participate in a research project entitled "Long-term Stepgrandmother Relationships" designed to investigate stepgrandmother relations with stepgrandchildren. The study is being conducted by Alan Hovestadt, Ed.D. and Mary-Catherine Kane, M.A. from Western Michigan University, Department of Counselor Education and Counseling Psychology. This research is being conducted as part of the dissertation requirements for Mary-Catherine Kane.

The study is comprised of a three-part questionnaire totaling 54 items. Response types include rating scales and fill-in-the-blank describing your current stepgrandmothering situation. It will take approximately 25 minutes to complete. Participation in this study is entirely voluntary. Your replies will be completely anonymous, so do not put your name anywhere on the survey. You may choose not to answer any question and simply leave it blank. Returning a completed survey indicates your consent for use of the answers you supply.

Thank you for taking the time to complete the survey.
**STEPGRANDMOTHER QUESTIONNAIRE**

Original Developers: Carolyn S. Henry and Cindi Penor Cegilian  
Modified by: Mary-Catherine Kane

**DIRECTIONS:** Select a stepgrandchild. Answer each question about your relationship with this stepgrandchild. Please circle the number that represents how you feel about your relationships with this stepgrandchild using the response choices listed below.

<table>
<thead>
<tr>
<th>1 = Strongly disagree</th>
<th>2 = Disagree</th>
<th>3 = Occasionally disagree (D)</th>
<th>4 = Agree</th>
<th>5 = Strongly agree (SA)</th>
</tr>
</thead>
</table>

<p>| 1. | I regularly spend a week or more with this stepgrandchild. |
| 2. | I often take this stepgrandchild on trips such as shopping, the zoo, movies, circus, etc. |
| 3. | I have taken this stepgrandchild to church or other religious functions. |
| 4. | I have told this stepgrandchild about family history or customs. |
| 5. | I have taught this stepgrandchild how to do things he/she does well, such as cooking, sewing, fishing, mechanics, etc. |
| 6. | I often babysit with this stepgrandchild. |
| 7. | I often engage in home recreation activities with this stepgrandchild such as reading stories, playing indoor or outdoor games, etc. |
| 8. | I often drop in just to visit or play with the stepgrandchild. |
| 9. | I regularly give this stepgrandchild money or gifts. |
| 10. | I have advised this stepgrandchild on religious matters. |
| 11. | I have helped this stepgrandchild with emergencies, such as sickness, financial troubles, troubles with parents and friends. |</p>
<table>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 = Strongly disagree (SD)</td>
<td>2 = Disagree (D)</td>
<td>3 = Occasionally agree (OA)</td>
<td>4 = Agree (A)</td>
</tr>
<tr>
<td>12.</td>
<td>I have advised this stepgrandchild on work plans or schooling.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td>I have advised this stepgrandchild on personal problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>I believe happiness is found when all family members, including this stepgrandchild, work together as a group.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15.</td>
<td>I spend more holidays with friends than with this stepgrandchild.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16.</td>
<td>I think it is important for this stepgrandchild to respect his/her elders.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17.</td>
<td>I would tell this stepgrandchild to always remember that love and companionship are more important to a successful marriage than money.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18.</td>
<td>I set a good example for this stepgrandchild of what is morally right.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19.</td>
<td>I expect future generations of my family to be carried on by this stepgrandchild.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20.</td>
<td>I would be very lonely without this stepgrandchild.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21.</td>
<td>I believe I should be able to give this stepgrandchild whatever I can and not be worried about spoiling him/her.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22.</td>
<td>I feel young again because of my relationship with this stepgrandchild.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23.</td>
<td>I believe this stepgrandchild brings a deep sense of emotional fulfillment to my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Part II
STEPGRANDCHILDREN AND GRANDCHILDREN QUESTIONS

Directions: Answer the following questions about the stepgrandchild you identified for the above questions.

24. Age of stepgrandchild  ____ years  ____ months

25. Gender of stepgrandchild  ____ Male  ____ Female

26. What is the distance you need to travel to see your stepgrandchild?
   ____ 10 miles or less
   ____ 11-50 miles
   ____ 51-100 miles
   ____ More than 100 miles
   ____ My stepgrandchild lives with me

27. On average, how often do you see your stepgrandchild?
   ____ At least once a week
   ____ Once every couple of weeks
   ____ About once a month
   ____ Once every few months
   ____ About once a year
   ____ Less than once a year
   ____ Never
   ____ My stepgrandchild lives in my household
   ____ Don’t know

28. How satisfied are you with your relationship with your stepgrandchild?
   ____ Extremely dissatisfied
   ____ Very dissatisfied
   ____ Dissatisfied
   ____ Neutral
   ____ Satisfied
   ____ Very satisfied
   ____ Extremely satisfied
29. How many total grandchildren do you have, including:

   _____ Stepgrandchildren
   _____ Grandchildren
   _____ Great-step/grandchildren

---

**Part III**

**DEMOGRAPHIC AND RELATIONSHIP QUESTIONS**

I. **SELF**

*Directions: Answer the following questions about yourself.*

30. What year were you born? ____

31. What is your current marital status (check all that apply)?

   _____ Married to the father of my stepchild(ren)  Years married? ____
   _____ Widowed from the father of my stepchild(ren)  Years married? ____
   _____ Separated from the father of my stepchild(ren)  Years married? ____
   _____ Divorced from the father of my stepchild(ren)  Years married? ____
   _____ Married to a man other than my stepchild(ren)'s father  Years/mos remarried? ____

32. Compared with other people your age, how would you describe your health?

   _____ Very poor
   _____ Poor
   _____ Fair
   _____ Good
   _____ Excellent
33. What was the last grade of school you completed?

   ___ Some high school or less
   ___ High school graduate
   ___ Some college
   ___ College graduate
   ___ Graduate work/degree
   ___ Don't know

34. What is your current employment status?

   ___ Retired and no longer working
   ___ Retired, but working part-time
   ___ Retired, but working full-time
   ___ Employed full-time (never been retired)
   ___ Employed part-time (never been retired)
   ___ Self-employed
   ___ Unemployed
   ___ Homemaker
   ___ Don't Know

35. What is your race/ethnicity? Please check racial category and add ethnic identity if relevant:

   ___ African American (please specify: ________________________)
   ___ Asian American (please specify: ________________________)
   ___ European American (please specify: ________________________)
   ___ Latina (please specify: ________________________)
   ___ Native American (please specify: ________________________)
   ___ Mixed race (please specify: ________________________)
   ___ Other (please specify: ________________________)
II. **Husband Information**

*Directions:* Answer the following questions about your husband (father of your adult stepchild).

36. How would you rate your husband's support for your role as a stepmother?

   ______ Very unsupportive
   ______ Unsupportive
   ______ Not supportive or unsupportive
   ______ Supportive
   ______ Very supportive

37. How would you rate your husband's support for your role as a stepgrandmother?

   ______ Very unsupportive
   ______ Unsupportive
   ______ Not supportive or unsupportive
   ______ Supportive
   ______ Very supportive

38. How would you describe your husband's relationship with his former spouse before the birth/adoptions of your stepchild's first child?

   ______ Very unfriendly
   ______ Unfriendly
   ______ Neither friendly, nor unfriendly
   ______ Friendly
   ______ Very friendly
   ______ Former wife is deceased
   ______ Don't know

39. How would you describe your husband's relationship with his former spouse since the birth/adoptions of your stepchild's first child?

   ______ Very unfriendly
   ______ Unfriendly
   ______ Neither friendly, nor unfriendly
   ______ Friendly
   ______ Very friendly
   ______ Former wife is deceased
   ______ Don't know
40. How close was your husband’s relationship to your stepchild (his child) before the birth/adoPTION of your stepgrandchild?

- Not at all close
- Somewhat close
- Neutral
- Close
- Extremely close
- Don’t know

41. How close has your husband’s relationship to your stepchild (his child) been since the birth/adoPTION of your stepgrandchild?

- Not at all close
- Somewhat close
- Neutral
- Close
- Extremely close
- Stepchild is deceased
- Don’t know

III. BIOLOGICAL GRANDMOTHER INFORMATION

Directions: Answer the following questions about your husband’s former spouse. This is the biological mother of your stepchild and the biological grandmother to your stepgrandchild.

42. Compared with other people her age, how would you describe the biological grandmother’s health.

- Very poor
- Poor
- Fair
- Good
- Excellent
- Don’t know
- Biological mother is deceased

How long has the biological grandmother been deceased? ____ years, ____ months
43. How would you describe your relationship with the biological grandmother before the birth/adoption of your stepgrandchild?

- [ ] Very unfriendly
- [ ] Unfriendly
- [ ] Neither friendly, nor unfriendly
- [ ] Friendly
- [ ] Very friendly
- [ ] Not applicable

44. How would you describe your relationship with the biological grandmother since the birth/adoption of your stepgrandchild?

- [ ] Very unfriendly
- [ ] Unfriendly
- [ ] Neither friendly, nor unfriendly
- [ ] Friendly
- [ ] Very friendly
- [ ] Not applicable

45. What is the distance the biological grandmother travels to see the stepgrandchild you described in this study?

- [ ] 10 miles or less
- [ ] 11-50 miles
- [ ] 51-100 miles
- [ ] More than 100 miles
- [ ] My stepgrandchild lives with her
- [ ] Don't know
- [ ] Not applicable

46. On average, how often does the biological grandmother see your stepgrandchild?

- [ ] At least once a week
- [ ] Once every couple of weeks
- [ ] About once a month
- [ ] Once every few months
- [ ] About once a year
- [ ] Less than once a year
- [ ] Never
- [ ] My stepgrandchild lives in her household
- [ ] Don't know
- [ ] Not applicable
IV. **STEPCHILD INFORMATION**

*Directions:* Answer the following questions about your adult stepchild, who is the parent of the stepgrandchild you identified for this study.

47. Age of stepchild at time of your marriage to his/her father. ____ years old

48. Gender of stepchild
   - [ ] Male
   - [ ] Female
   - [ ] Transgender

49. What is the race/ethnicity of your stepchild? Please check racial category and add ethnic identity if relevant:
   - [ ] African American (please specify: __________________________)
   - [ ] Asian American (please specify: __________________________)
   - [ ] European American (please specify: __________________________)
   - [ ] Latino/a (please specify: __________________________)
   - [ ] Native American (please specify: __________________________)
   - [ ] Mixed race (please specify: __________________________)
   - [ ] Other (please specify: __________________________)

50. Household of stepchild while under the age of 18?
   - [ ] More than 50% with biological mother, with weekend/holiday visitation to stepmother/father’s household
   - [ ] Split fairly equally between stepmother/father’s and biological mother’s households
   - [ ] More than 50% with stepmother/father, with weekend/holiday visitation to biological mother’s household
   - [ ] Not applicable
51. How close was your relationship to your stepchild before the birth/adoptions of your stepgrandchild?

   _____ Not at all close
   _____ Somewhat close
   _____ Neutral
   _____ Close
   _____ Extremely close

52. How close has your relationship to your stepchild been since the birth/adoptions of your stepgrandchild?

   _____ Not at all close
   _____ Somewhat close
   _____ Neutral
   _____ Close
   _____ Extremely close
   _____ Stepchild is deceased

   How long has your stepchild been deceased? _____ years, _____ months

53. How close was your stepchild’s relationship to his/her biological mother before the birth/adoptions of your stepgrandchild?

   _____ Not at all close
   _____ Somewhat close
   _____ Neutral
   _____ Close
   _____ Extremely close
   _____ Don't know

54. How close has your stepchild’s relationship to his/her biological mother been since the birth/adoptions of your stepgrandchild?

   _____ Not at all close
   _____ Somewhat close
   _____ Neutral
   _____ Close
   _____ Extremely close
   _____ Don’t know
   _____ Stepchild is deceased
Describe a highlight of being a stepgrandmother.

Describe a challenge of being a stepgrandmother.
Appendix G

Condition Index and Tables of Regression Analyses
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Eigenvalue</th>
<th>Condition Index</th>
<th>Husband - former spouse friendliness</th>
<th>Step grandmother - biological grandmother friendliness</th>
<th>Step grandmother - adult stepchild closeness</th>
<th>Father - adult child closeness</th>
<th>Biological grandmother - adult child closeness</th>
<th>Spousal support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6.576</td>
<td>1.000</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>2</td>
<td>.176</td>
<td>6.120</td>
<td>.00</td>
<td>.01</td>
<td>.00</td>
<td>.03</td>
<td>.02</td>
<td>.44</td>
</tr>
<tr>
<td>3</td>
<td>.095</td>
<td>8.313</td>
<td>.01</td>
<td>.31</td>
<td>.05</td>
<td>.00</td>
<td>.00</td>
<td>.19</td>
</tr>
<tr>
<td>4</td>
<td>.061</td>
<td>10.344</td>
<td>.01</td>
<td>.02</td>
<td>.05</td>
<td>.08</td>
<td>.17</td>
<td>.13</td>
</tr>
<tr>
<td>5</td>
<td>.050</td>
<td>11.494</td>
<td>.05</td>
<td>.38</td>
<td>.23</td>
<td>.07</td>
<td>.06</td>
<td>.00</td>
</tr>
<tr>
<td>6</td>
<td>.027</td>
<td>15.568</td>
<td>.67</td>
<td>.01</td>
<td>.02</td>
<td>.29</td>
<td>.07</td>
<td>.19</td>
</tr>
<tr>
<td>7</td>
<td>.015</td>
<td>20.707</td>
<td>.25</td>
<td>.28</td>
<td>.65</td>
<td>.52</td>
<td>.67</td>
<td>.05</td>
</tr>
</tbody>
</table>

Dependent Variables: TRB-R, ERB-R, SRM-R, PRM
Table G2

Standard Regression Analysis of Instrumental Role Behavior-R (IRB-R) with Six Dyadic Relationships. Model Summary (a) and ANOVA (b).

Model Summary (a)

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.532(a)</td>
<td>.283</td>
<td>.233</td>
<td>1.05375</td>
</tr>
</tbody>
</table>

*a Predictors: (Constant), Stepgrandmother-biological grandmother friendliness, Biological grandmother-adult child closeness, Father-adult child closeness, Husband-former spouse friendliness, Stepgrandmother-adult stepchild closeness, Spousal support

ANOVA (b)

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>37.331</td>
<td>6</td>
<td>6.222</td>
<td>5.603</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>94.382</td>
<td>85</td>
<td>1.110</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Total</td>
<td>131.713</td>
<td>91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a Predictors: (Constant), Stepgrandmother-biological grandmother friendliness, Biological grandmother-adult child closeness, Father-adult child closeness, Husband-former spouse friendliness, Stepgrandmother-adult stepchild closeness, Spousal support

b Dependent Variable: IRB-R

*** $p < .0001$
Table G3

Standard Regression Analysis of Expressive Role Behavior-\( R \) (ERB-\( R \)) with Six Dyadic Relationships. Model Summary (a) and ANOVA (b).

### Model Summary (a)

<table>
<thead>
<tr>
<th>Model</th>
<th>( R )</th>
<th>( R^{2} )</th>
<th>Adjusted ( R^{2} )</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.532(a)</td>
<td>.283</td>
<td>.232</td>
<td>1.02914</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), Stepgrandmother-biological grandmother friendliness, Biological grandmother-adult child closeness, Father-adult child closeness, Husband-former spouse friendliness, Stepgrandmother-adult stepchild closeness, Spousal support

### ANOVA (b)

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>( F )</th>
<th>( p )-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>35.481</td>
<td>6</td>
<td>5.913</td>
<td>5.583</td>
</tr>
<tr>
<td>Residual</td>
<td>90.027</td>
<td>85</td>
<td>1.059</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>125.507</td>
<td>91</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), Stepgrandmother-biological grandmother friendliness, Biological grandmother-adult child closeness, Father-adult child closeness, Husband-former spouse friendliness, Stepgrandmother-adult stepchild closeness, Spousal support

b Dependent Variable: ERB-\( R \)

*** \( p < .0001 \)
## Table G4

Standard Regression Analysis of Social Role Meaning-$R$ (SRM-$R$) with Six Dyadic Relationships. Model Summary (a) and ANOVA (b).

### Model Summary (a)

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>$SE$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.325(a)</td>
<td>.105</td>
<td>.042</td>
<td>.46244</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), Stepgrandmother-biological grandmother friendliness, Biological grandmother-adult child closeness, Father-adult child closeness, Husband-former spouse friendliness, Stepgrandmother-adult stepchild closeness, Spousal support

### ANOVA (b)

<table>
<thead>
<tr>
<th>Model</th>
<th>$SS$</th>
<th>$df$</th>
<th>$MS$</th>
<th>$F$</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>2.141</td>
<td>6</td>
<td>.357</td>
<td>1.669</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>18.177</td>
<td>85</td>
<td>.214</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>20.319</td>
<td>91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), Stepgrandmother-biological grandmother friendliness, Biological grandmother-adult child closeness, Father-adult child closeness, Husband-former spouse friendliness, Stepgrandmother-adult stepchild closeness, Spousal support
b Dependent Variable: SRM-$R$
Table G5

Standard Regression Analysis of Personal Role Meaning (PRM) with Six Dyadic Relationships. Model Summary (a) and ANOVA (b).

**Model Summary (a)**

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>$SE$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.557(a)</td>
<td>.311</td>
<td>.262</td>
<td>.83121</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), Stepgrandmother-biological grandmother friendliness, Biological grandmother-adult child closeness, Father-adult child closeness, Husband-former spouse friendliness, Stepgrandmother-adult stepchild closeness, Spousal support

**ANOVA (b)**

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>26.458</td>
<td>6</td>
<td>4.410</td>
<td>6.382</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>58.728</td>
<td>85</td>
<td>.691</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>85.186</td>
<td>91</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), Stepgrandmother-biological grandmother friendliness, Biological grandmother-adult child closeness, Father-adult child closeness, Husband-former spouse friendliness, Stepgrandmother-adult stepchild closeness, Spousal support

b Dependent Variable: PRM

*** $p < .0001$
Table G6

Standard Regression Analysis of Stepgrandmother-Stepgrandchild Relationship Satisfaction on Six Dyadic Relationships. Model Summary (a) and ANOVA (b).

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.512(a)</td>
<td>.263</td>
<td>.211</td>
<td>1.59699</td>
</tr>
</tbody>
</table>

*a Predictors: (Constant), Stepgrandmother-biological grandmother friendliness, Biological grandmother-adult child closeness, Father-adult child closeness, Husband-former spouse friendliness, Stepgrandmother-adult stepchild closeness, Spousal support

ANOVA(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>$p$-value.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>77.219</td>
<td>6</td>
<td>12.870</td>
<td>5.046</td>
<td>.000(a)***</td>
</tr>
<tr>
<td>Residual</td>
<td>216.781</td>
<td>85</td>
<td>2.550</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>294.000</td>
<td>91</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a Predictors: (Constant), Stepgrandmother-biological grandmother friendliness, Biological grandmother-adult child closeness, Father-adult child closeness, Husband-former spouse friendliness, Stepgrandmother-adult stepchild closeness, Spousal support

b Dependent Variable: satisfaction

*** $p < .0001$
Table G7

Standard Regression Analysis of Stepgrandmother-Adult Stepchild Closeness and Five Dyadic Relationships. Model Summary (a) and ANOVA (b).

### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.763(a)</td>
<td>.582</td>
<td>.558</td>
<td>.76724</td>
</tr>
</tbody>
</table>

* a Predictors: (Constant), Stepgrandmother-biological grandmother friendliness, Biological grandmother-adult child closeness, Father-adult child closeness, Husband-former spouse friendliness, Stepgrandmother-adult stepchild closeness, Spousal support

### ANOVA (b)

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression 70.626</td>
<td>5</td>
<td>14.125</td>
<td>23.995</td>
<td>.000(a)***</td>
</tr>
<tr>
<td></td>
<td>Residual 50.624</td>
<td>86</td>
<td>.589</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>121.250</td>
<td>91</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* a Predictors: (Constant), Stepgrandmother-biological grandmother friendliness, Biological grandmother-adult child closeness, Father-adult child closeness, Husband-former spouse friendliness, Stepgrandmother-adult stepchild closeness, Spousal support

* b Dependent Variable: Stepgrandmother-adult stepchild closeness

*** $p < .0001$
Appendix H

Tables of One-way ANOVA: Residential Arrangement, Closeness and Friendliness
### Table H1

One-way ANOVA Mean Comparison of Stepgrandmother-Biological Grandmother Friendliness and Husband-Former Spouse Friendliness

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>33.982</td>
<td>4</td>
<td>8.496</td>
<td>15.159</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>53.800</td>
<td>96</td>
<td>.560</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>87.782</td>
<td>100</td>
<td></td>
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</tr>
</tbody>
</table>

### Table H2

One-way ANOVA Mean Comparisons of IRB-R, ERB-R, SRM-R and PRM Subscales and Residential Arrangement

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRB-R</td>
<td>Between Groups</td>
<td>218.573</td>
<td>2</td>
<td>109.286</td>
<td>2.386</td>
<td>.097</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>4946.671</td>
<td>108</td>
<td>45.803</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5165.243</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERB-R</td>
<td>Between Groups</td>
<td>40.103</td>
<td>2</td>
<td>20.052</td>
<td>.973</td>
<td>.381</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>2224.654</td>
<td>108</td>
<td>20.599</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2264.757</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SRM-R</td>
<td>Between Groups</td>
<td>14.007</td>
<td>2</td>
<td>7.004</td>
<td>2.528</td>
<td>.085</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>299.236</td>
<td>108</td>
<td>2.771</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>313.243</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRM</td>
<td>Between Groups</td>
<td>221.848</td>
<td>2</td>
<td>110.924</td>
<td>5.004</td>
<td>.008*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>2394.008</td>
<td>108</td>
<td>22.167</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2615.856</td>
<td>110</td>
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</tr>
</tbody>
</table>

* p < .01
Table H3

One-way ANOVA Mean Comparisons of ERB-R and Stepgrandmother-Adult Stepchild Closeness

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>433.294</td>
<td>4</td>
<td>108.324</td>
<td>6.170</td>
<td>.000***</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2019.072</td>
<td>115</td>
<td>17.557</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2452.367</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** P < .0001

Table H4

One-way ANOVA Mean Comparisons of ERB-R and Biological Grandmother-Adult Child Closeness

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>140.740</td>
<td>4</td>
<td>35.185</td>
<td>1.702</td>
<td>.155</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2087.722</td>
<td>101</td>
<td>20.671</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2228.462</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix I

Permission to Use Grandparenting and Stepgrandparenting Questionnaire
Mary-Catherine,

I am attaching the questionnaire and a second file describing the instrument. The second file was submitted to be included in the Handbook of Family Measurement Techniques and I think it is now part of that book (though I don't have the pgs numbers handy). However, if you reference that info, you will want to get the exact citation for which volume this is in -- the book follows.


You have permission to use the questionnaire in your research. Please send an abstract summarizing your findings if you use the questionnaire.

Thank you.

Carolyn S. Henry, Ph.D.
Professor, HDFS
Oklahoma State University
Stillwater, OK 74078-6122
(405) 744-8357
carolyn.henry@okstate.edu