To Grandmother's House We Go:
A Deeper Look At Grandmother Involvement in the Lives of Teen Mothers and Their Children

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Abstract

Although the phenomenon of adolescent parenthood is well documented, little is known about the effects of grandmother involvement on teen mother and child outcomes. Extended family support may be an important predictor of optimal child outcomes. This poster explores how grandmother support and involvement in both the teen mothers' lives and in one home visiting program are related to the teen mothers' parenting behaviors. The quality of the mother-grandmother relationship, in addition to grandmother involvement in the Healthy Families Massachusetts home visiting program, are related to the young mothers' emotional availability towards their own children. The level of grandmother involvement in the program is relatively consistent among all families. However, young mothers' own reports of the involvement of and support provided by their own mothers, in a more general sense, is quite different among varying groups of young mothers. Examining both of these facets of grandmother involvement and support is necessary in fully understanding the role of grandmothers in the lives of their teenage daughters as young mothers.

Review of Literature

- Previous literature has examined the relations between young mother-grandmother dyads and maternal emotional availability according to specific factors pertaining to young mothers:
  - Residential Status: As the number of years spent living with one's mother increased, adolescent mothers were less cognitively stimulating to their children (Unger & Cooley, 1991).
  - Racial Background: Grandmother co-residence was associated with lower levels of social withdrawal for Black children and higher levels of aggression and social withdrawal among White children (East & Felice, 1996).
  - Age at Pregnancy: Older adolescent mothers receiving high levels of emotional support and residing in their family homes showed lower maternal warmth and child responsiveness than younger mothers (Unger & Cooley, 1992).
  - Early Childhood Relationships: Mothers' representations of their early attachment experiences, as measured by the Adult Attachment Interview, have been shown to affect their emotional availability such that those with more positive representations were more emotionally available to their child (Biringen, Brown, Donaldson, Green, Krcmarik, & Lovas, 2000).

- Approximately 3.9 million children are cared for in 2.5 million grandparent-headed households (Koser, 2001).
- While there is extensive research regarding the teen mother's relationship with her mother (the grandmother), there remains a paucity of studies on the role of the grandmother in family support programs that include extended family (Cooley & Unger, 1991).
- From an ecological perspective, family support programs, such as the Healthy Families Massachusetts home visiting program, often include extended family in their system of support for teen parents in the belief that promoting health of all family members will positively support the teen mother (Dunst, 1994).
- In addition, welfare reform policy mandates that teen mothers <18 years must reside at home or under adult supervision in order to receive federal funds (Coley & Chase-Lansdale, 1998). This perspective assumes that the residence of a teen mother can enhance opportunities for positive self-development and outcomes for her children (Kalil, 1998).

Research Questions: Mother-Grandmother Relationships

- What is the relation between the quality of young mothers' current relationships with their own mother and their emotional availability to their own children?
- What is the relation between the quality of young mothers' relationships with their own mothers during childhood and their emotional availability to their own children?
- What roles do the covariates of maternal age, maternal ethnicity, maternal living situation, and neighborhood conditions play in these relations?

Healthy Families Massachusetts

- Healthy Families Massachusetts, a program of the Massachusetts Children's Trust Fund, provides home visits as a support system to first time mothers under the age of 21 and until their child is three years old.
- The program has the following 4 goals:
  - To prevent child abuse and neglect,
  - To achieve optimal health and development for young mothers' infants and children,
  - To encourage maximum educational achievement and economic self-sufficiency for mothers, and
  - To prevent repeat teen pregnancy.

Research Questions: Grandmother Involvement in the Program

- How many families had grandmothers who were involved in their home visits?
- What was the level of grandmother participation in the home visits?
- How did various levels of grandmother involvement in the home visiting program influence the teen mothers' emotional availability to their children?

Sample

- 361 young mothers, their infants, and their own mothers (also referred to as grandmothers) were recruited through the Tufts University Evaluation of the Healthy Families Massachusetts program.
- The sample of young mothers was diverse:
  - 47.6% White, 10.2% Black, 32.7% Hispanic, and 9.4% other
  - 38.5% 17 years and younger, 61.5% 18 years and older
  - 65.9% lived with their parents, 34.1% did not live with their parents
  - 24.3% completed high school, 75.7% did not complete high school

Sub-Study 1: Mother-Grandmother Relationships

Procedure

- Data were collected through a series of home visits with each of the young mothers in the Massachusetts Healthy Families Evaluation
- Visits took place at enrollment and 6, 12, and 18 months past each young mothers' enrollment in the Healthy Families Massachusetts program. Data resulted from the various components of these visits:
  - A semi-structured interview administered by Tufts University research assistants
  - The completion of various structured questionnaires and measures by the young mothers
  - Five-minute videotaped interactions of the mothers and their children during free play

Measures

Variable	Instrument(s)	Measure	Derivation
Young mothers' past relationship with their own mothers	■ **Parental Bonding Instrument (Time 2)**	■ Caring construct ■ Overprotection construct	■ Scale of 12 (nonoptimal) to 36 (optimal) ■ Scale of 13 (optimal) to 39 (nonoptimal)
Young mothers' current relationship with their own mothers	■ **Time 2 Research Interview question** ■ **Personal Network Matrix question (Time 2)** ■ **Level of Grandmother Involvement (Time 2)**	■ "How helpful is the involvement and advice of your mother?" ■ "To what extent can you depend on your mother for support?" ■ "How involved is your mother in the life of your child?"	■ Scale from 1-5 (1=not at all helpful, 5=really helpful) ■ Scale from 1-5 (1=not at all, 5=all the time) ■ Scale from 1-3 (1=not involved, 3=very involved)
Emotional Availability of young mothers to their children	■ **Emotional Availability scales (Time 2 & Time 3)**	■ Sensitivity ■ Structuring, Nonintrusiveness, and Nonhostility	■ Scale from 1=extremely insensitive to 9=highly sensitive ■ Scales from 1=extremely non-optimal structuring to 5=optimal

A cumulative measure of current young mother-grandmother relationships was formed by combining the T2 research interview question, the PNM question, and the level of grandmother involvement question.
A cumulative measure of young mother-grandmother relationships was formed by combining the PBI care and overprotection constructs.

Results

Descriptives

- T2 Research Interview: "How helpful is your mothers' involvement and advice?"
  - 3.8% reported not at all, 8% reported between not at all and somewhat helpful, 22.9% reported somewhat helpful, 13.3% reported between somewhat and really helpful, and 59.2% reported really helpful
- Personal Network Matrix: "To what extent can you depend on your mother for support?"
  - 5.5% reported not at all, 12.0% reported between not at all and all of the time, 12% reported occasionally, 23.6% reported between occasionally and all of the time, and 46.9% reported all of the time
- T2 Research Interview: "How involved is your mother in the life of your child?"
  - 48.7% reported very involved, 38.1% reported somewhat involved, and 13.1% not involved

- Parental Bonding Instrument
  - With a range of 12 (less caring) to 36 (more caring), the mean score of the care construct was 29.78.
  - With a range of 13 (less overprotective) to 39 (more overprotective), the mean score on the overprotection construct was 23.47.

Correlational Analyses Among Subsamples of Young Mothers

Subsample of Mothers	Related Variables	Results
Living without parents	PNM question x T2 Structuring	r=.362, p<.05, n=40
White, living with parents	Grandmother level of involvement x T2 Sensitivity	r=.401, p<.05, n=26
Hispanic, living with parents	Current support/involvement of grandmothers x T2 Sensitivity	r=-.454, p<.05, n=21
White, 17 years and younger	PBI care/overprotection of grandmothers x T3 Nonhostility	r=.455, p<.05, n=23
Hispanic, 17 years and younger	Current support/involvement of grandmother x T2 Nonhostility	r=-.544, p<.05, n=16
White, 18 years and older	PBI care x T3 Sensitivity	r=-.365, p<.05, n=39
Hispanic, 18 years and older	PBI overprotection x T3 Nonintrusiveness	r=.479, p<.05, n=18
Living with parents, 18 years and older	Grandmother level of involvement x T2 Structuring	r=-.401, p<.05, n=32
Living without parents, 18 years and older	PNM question x T2 Structuring	r=.374, p<.05, n=28

- Relations between the measures of the current and past relationships between young mothers and their own mothers and young mothers' emotional availability to their child were examined among various subsamples of young mothers.
- Subsamples were created according to young mothers' age (17 years and younger, 18 years and older), ethnicity (White, Black, Hispanic), living situation (living with parents, living without parents), and neighborhood conditions.
- A complex pattern of significant correlations resulted (examples shown above) depending upon the factors characterizing each subsample of young mothers.
- As a result, the covariates of maternal age, maternal ethnicity, maternal living situation, and neighborhood conditions were entered into hierarchical regression analyses to more thoroughly investigate the role of their interactions.

Hierarchical Multiple Regression

Variables Entered	R Square	F Change	Sig. F Change
White, Black, Hispanic (as dummy variables)	.015	.418	.741
Maternal Age	.087	6.390	.013*
Maternal Living Situation	.095	.666	.417
Neighborhood Conditions	.102	.628	.430
Current Relationship	.120	1.586	.212
Past Relationship	.121	.090	.765

Dependent variable: T3 Sensitivity, n=80

- 12.1% of the variance in maternal sensitivity (T3) was accounted for by all of the predictor variables when considered together.
- Of these predictor variables, young mothers' age accounted for 7.2% of the 12.1% of variance.
- The covariate of maternal age had a stronger relation to the outcome of maternal sensitivity than young mothers' current and past relationships with their own mothers.

Hierarchical Multiple Regression Interaction

Variables Entered	R Square	F Change	Sig. F Change
Hispanic	.012	1.072	.303
Current Relationship	.019	.646	.424
Past Relationship	.029	.975	.326
Hispanic X Current Relationship	.030	.053	.818
Hispanic X Past Relationship	.100	6.822	.011*
Current X Past Relationship	.103	.210	.648

Dependent variable: T3 Nonintrusiveness, n=86

- 7% of the 10.3% of the variance in maternal nonintrusiveness (Time 3) was accounted for by the interaction between young mothers' ethnicity, specifically pertaining to Hispanic mothers, and the quality of young mother-grandmother past relationships.
- The relation between the quality of young mothers' past relationships with their own mothers and maternal nonintrusiveness (T3) depends on maternal ethnicity such that the relation is different for Hispanic mothers than for non-Hispanic mothers. Hispanic mothers whose past relationships with their own mothers were more positive were more intrusive with their own children than non-Hispanic mothers.

Sub-Study 2: Grandmother Involvement in the Program

Measures

- Grandmother involvement in the Healthy Families Massachusetts program was defined as participation or attendance during the home visit.

Construct	Data Source	Description
Program Participation	Participant Data System (PDS)	State-administered management information system that measures program intensity or number of home visits

Results

- Of the 361 families in the total sample, 12 families did not have any home visits.
- Among 349 families that had home visits, the number of home visits for each family varied from having at least 1 visit to as many as 115 visits.
- In order to better compare families who had few visits versus those who had many, the families were grouped into quartiles based on the total number of home visits they had.

Group 1 Families with 1-11 visits (n=97)	**Group 2** Families with 12 – 23 visits (n=84)
Group 3 Families with 24 – 42 visits (n=81)	**Group 4** Families with 43 – 115 visits (n=87)

- Among 249 families that had home visits AND a grandmother who participated in them, grandmother involvement ranged from attendance at only 1 visit to as many as 67 visits.
- The percent of home visits that the grandmother participated in was calculated for each of the 249 families. The median percent of visits that the grandmother participated in among 249 families was 21.05%.
- Levels of involvement were created based on lack of involvement, and percent of involvement below or above the median.

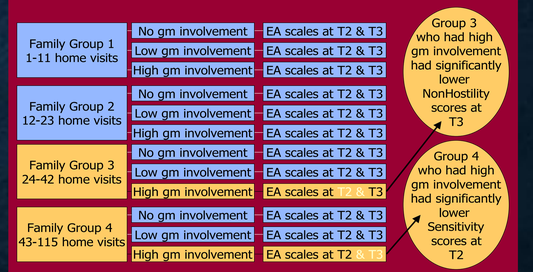
Level 1	No grandmother involvement	0% of visits
Level 2	Low grandmother involvement	1-21.05% of visits
Level 3	High grandmother involvement	21.05-100% of visits

- Of the 349 families that had home visits, 71.3% of the families had grandmothers involved in the program an average of 19.7% of the time.

Families	No grandmother involvement in home visits	Low grandmother involvement in home visits	High grandmother involvement in home visits	Mean grandmother involvement in home visits
Group 1 1-11 visits	45.4% n=44	18.6% n=18	36.1% n=35	19.17% N=87
Group 2 12-23 visits	27.4% n=23	32.1% n=27	40.5% n=34	19.81% N=81
Group 3 24-42 visits	23.5% n=19	39.5% n=32	37% n=30	22.09% N=84
Group 4 43-115 visits	16.1% n=14	54.0% n=47	29.9% n=26	19.46% N=97

- Regardless of the number of visits a family had, the mean percent of grandmother involvement in home visits was similar across all family groups.
- Families that had 43-115 visits and high grandmother involvement in the program had significantly lower Sensitivity scores than families with either low grandmother involvement or no grandmother involvement at Time 2. $F(2,34)=6.29$, $p<.01$

- Families that had 24-43 visits and high grandmother involvement in the program had significantly lower Non-Hostility scores than families with no grandmother involvement at Time 3. $F(2,34)=3.74$, $p<.05$



Discussion

Mother-Grandmother Relationships

- Correlational analyses revealed a lack of significant relations between the quality of young mother-grandmother relationships, during childhood and currently, and young mothers' emotional availability to their own children.
- In accordance with past literature (East & Felice, 1996, Unger & Cooley, 1992, and Black & Nitz, 1996), hierarchical multiple regression analyses revealed that the relation between maternal emotional availability and young mother-grandmother relationships is greatly moderated by background and contextual variables, particularly maternal age, maternal ethnicity, and young mothers' living situations.
- In general, for mothers 17 years old and younger, those who characterized their own mothers as more supportive and involved, in their childhood and presently, were more emotionally available to their children.
- An exception to this finding was evident with the group of Hispanic mothers. Regardless of age, Hispanic mothers who characterized their own mothers as more helpful, supportive, and overprotective were less emotionally available to their children.
  - Differences among mothers of varying ethnicities point to the differing cultural beliefs regarding optimal parenting strategies.
  - Previous research has indicated that children of poor minority parents who employ authoritarian parenting strategies are often better adjusted than those whose parents employ authoritative parenting strategies (Baldwin, Baldwin, & Cole, 1990).
  - Research (Ruiz, Roosa, & Gonzales, 2002) has also documented that behaviors of Hispanic parents have less of an effect on children's self-esteem as compared to European-American parents.
- In general, mothers 18 years old and older (regardless of ethnicity) who characterized their own mothers as being currently more dependable and involved and being previously (during their childhood) more caring and less overprotective were less emotionally available with their children. This concurs with previous literature citing older mothers as less sensitive with their children (Shapiro & Mangelsdorf, 1994, and Wakschlag, Chase-Lansdale, & Brooks-Gunn, 1996).
  - However, for older mothers living without their parents, more positive reflections on the current relationships with their mothers were related to greater emotional availability.

Grandmother Involvement in the Program

- There were no significant results among those families who had less than 24 home visits. Therefore, the findings reflect that having low levels of grandmother involvement in the program has neither a positive nor a negative impact on the young mothers' emotional availability with her child.
- In families who have many home visits, there is a negative impact on two aspects of the young mother's emotional availability to her child when the grandmother has high levels of involvement in those visits.
- Because the standards for Healthy Families Massachusetts recommend the inclusion of the extended family based on the ecological perspective of family support theory, future research would benefit from further defining what grandmother involvement in programs mean. This inquiry would enable those who implement such programs to better understand the conditions in which grandmother involvement in a program is beneficial and in which conditions it is harmful.

Future Directions

- Future research should examine the impact of grandmothers on young mother-infant dyads with respect to young mothers' ethnicity, age, and living situation, as well as other demographic and contextual variables.
- Subsequent studies would benefit greatly by including large enough samples of young mothers, based on these specific factors, so that findings may be more meaningfully and accurately interpreted. Such studies will yield a better understanding of the particular situations and the particular individuals for whom grandmother support and involvement is beneficial and for whom it is detrimental.
- Family support programs for young mothers often include extended family in their vision of family support; however, further research is needed that looks at the actual role of grandmothers in the home visits. Future analyses of data from the Massachusetts Healthy Families Evaluation will yield some preliminary results in this inquiry.
- In addition, further analyses, specifically of the families with high grandmother involvement, should be done to better understand what aspect of the grandmother involvement negatively impacted young mothers' sensitivity and nonhostility scales.