

## **Predictors of Nurturant Parenting in Teen Mothers Living in Three Generational Families**

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**ABSTRACT:** Direct and indirect effects of grandparents on maternal nurturance in teen mothers (TM) living in three-generational families were explored with path analytic techniques in a sample of 107 working-class families. Perceived support from the teen's mother, grandparents' nurturance toward the baby, and the presence of the grandfather as a father figure in the home were hypothesized as increasing TM nurturance. TM nurturance was found to be positively predicted by grandparent nurturance and negatively predicted by TM perceived support from her mother. The strongest predictor of TM nurturance was grandfather nurturance toward the baby.

**KEY WORDS:** teen mothers, nurturant parenting.

The half million infants born annually to teen mothers in the U.S. are at risk for less than optimal cognitive and social development.<sup>1,2,3,4,5</sup> From preschool on, these children tend to be more distractible and impulsive, and perform worse on intelligence and academic ability tests than peers born to older mothers. The parenting style of teenage mothers seems likely to contribute to these problems.<sup>2,6,7,8</sup> When interacting with their infants, adolescent mothers tend to be less empathic, responsive, and expressive than older mothers.<sup>6,9,10,11</sup> Together,

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empathy, responsiveness, and expressivity have been construed as markers of *nurturant* parenting.<sup>12,13,14</sup>

Thus conceived, nurturance is likely to promote cognitive and socio-emotional development in young children.<sup>15,16,17,18,11</sup> Nurturant mothers engage in interactions with their children that enrich their development.<sup>19</sup> The current study focuses on an exploration of several factors which may directly or indirectly foster such behavior in adolescent mothers.

### Teen Parenting in Context

During their baby's first two years, many teens live in their parents' homes,<sup>20,21</sup> and their parents, particularly mothers, are likely to be their major support.<sup>22,23</sup> By 18 months postpartum, only 16% to 29% of biological fathers live with the baby or provide childcare.<sup>24,25,26</sup> Further, peer support tends to be less stable and dependable than parental support for teen mothers.<sup>27</sup>

Enhanced child development has been found when teen and baby lived in the home of the mother's parents during the child's early years,<sup>3</sup> yet not much is known about how this positive outcome is achieved. Teens living at home may obtain financial and material support that they otherwise would be lacking. At home, teens are also likely to receive childcare help and advice.<sup>28,29</sup> Sometimes grandmothers present in the home may take on the primary caregiving role.<sup>3</sup> Generally, grandmother involvement in childrearing is associated with increased emotional stability and warmth in teens' maternal interactions with their babies.<sup>28,30</sup> In addition, two-parent homes are likely to be better off financially than one-parent homes. Though their role has received less attention, grandfathers too may be influential.<sup>31,32</sup> It is also possible that grandparent nurturance of the infant is a significant factor in the child's development.

Grandparent nurturance toward their teen's baby may affect the teen for a number of reasons. Nurturant grandparents provide their teen a model<sup>33</sup> and are likely to encourage and reinforce such parenting in their teen, making suggestions about warm, appropriate ways to respond to the baby.<sup>28,34</sup> Nurturant working-class (grand)fathers may be particularly salient as such behavior may not be expected of them, and they may therefore be viewed as particularly supportive.<sup>35</sup> Father presence per se and support from fathers has been linked with

the quality of maternal parenting and thus may impact both the teen and her mother.<sup>30,36</sup>

Teens also are more likely to parent appropriately when families of origin provide instrumental support such as provision of child care, a task grandmothers often perform.<sup>23,37</sup> Instrumental support frees the teen to complete developmental tasks of adolescence by allowing her time to attend and complete high school, maintain contact with same aged peers, and pursue occupational goals.<sup>28,23</sup>

In addition, teens receiving high levels of emotional support have been found to be responsive mothers<sup>38,39,40</sup> with positive childrearing practices,<sup>41</sup> who respond to their infants with warmth and compassion.<sup>37</sup> The amount of support, particularly childcare, grandmothers provide is well documented. Yet, the relationship between amount of support provided and the teen's felt emotional support has not been studied although there is evidence that subjective measures of support are more predictive of the quality of parenting than objective measures.<sup>22</sup> For an overview of problems in this literature, see.<sup>28,42,43,22,23</sup>

## Hypotheses

Based on the literature, it was hypothesized that teen mother (TM) maternal nurturance will be directly and positively predicted by: (a) TM perception of support from her mother, the child's grandmother (GM); (b) GM and the teen's father, the child's grandfather (GF) nurturance toward the baby; and (c) The child's grandfather's (GF) presence. Additional hypotheses focused on the indirect impact on TM maternal nurturance due to the impact of (d) GM involvement in childcare on TM perception of support; and (e) GF presence and GF nurturance on GM nurturance. Figure 1 presents the model of direct and indirect effects to be tested in the current study.

Two additional questions were explored. First, we asked whether the above posited relationships would be evidenced in GM-headed families. It is possible, for example, that some combination of the generally reduced emotional and financial support available in single parent families would make them differ from two-grandparent families.<sup>37</sup> The impact of race and social class on the model described above were explored (see Franklin for a critique of lack of attention to these variables in previous work<sup>44</sup>). Thus, for example, African-American grandparents may be more involved in childcare than their

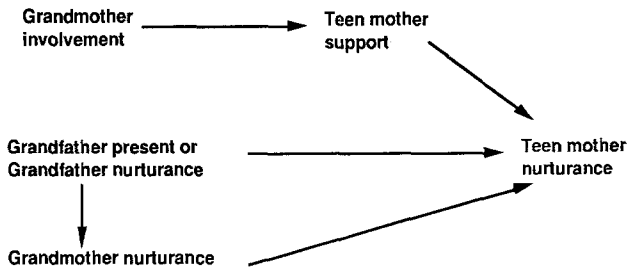


Figure 1. Theoretical Model.

white counterparts and have cultural values more conducive to grandparent involvement.<sup>45</sup>

## Methods

### *Sampling Procedure*

We sampled 3-generational families that included a teen mother, her baby, her mother, and her father or father figure (the child's grandparents). All families had at least one grandparent. All teens were 18 or younger when the baby was born. All target infants were first born (but not necessarily only) children. To reduce extraneous variability we sampled only families with non-low birth weight infants where the babies' father did not live in the home. Target infants were all within a month of their first or second birthday to facilitate analyses of the infant data (child data appear in Radin, Oyserman, Benn<sup>46</sup>). The families were located primarily through public schools in the seven metropolitan Detroit area counties that conducted programs for pregnant and parent teens. Participation included an individual home interview with each grandparent and teen, a ten minute videotaped play session for each with the baby, and an assessment of the child. If one of the grandparents refused to participate, the family was included in the study so long as the teen, the baby, and at least one grandparent took part.

Studies involving teen mothers, grandfathers, fathers and working-class families often report high refusal rates.<sup>47,35,14,48,39</sup> Further, three generational samples have proved exceedingly difficult to assemble,<sup>50</sup> with reported refusal rates of up to 80%. In the current study, despite

diligent efforts, there was a 50% refusal rate. Among participating families, one GM and twelve GFs refused to take part. In refusing, families and family members often cited lack of time; teens and grandparents had to balance work, school, and childcare. Another limiting factor was timing; interviews were conducted concurrently with child assessments, which had to occur within one month of the child's first or second birthday. This made rescheduling difficult. Possible differences between participating and refusing families could not be ascertained as no information could be collected until the family agreed to participate.

### *Subjects*

The total sample ( $n = 107$ ) included two-parent and one-parent subsamples (GF-present,  $n = 66$ , and GF-absent,  $n = 41$ ). GF was the teen's father (61%), stepfather (36%), or grandfather (3%). At the time of the interview, target babies were one (70%) or two (30%) years of age, approximately half were male and half female. Mean age of TM was 17.5, of GF, 45, and of GM, 42. Families were white in 62% of cases; the remaining 38% were primarily African-American.

Mean education was 10th or 11th grade for TM, and close to high school completion for grandparents. Four GFs and 35 GMs were not employed (16 in GF-present homes and 19 in GM-headed families). Subjects were primarily working class, though of relatively low income. Over half of the sample (57%) received some form of public assistance. Of these, only 2% received General Assistance (welfare) payments, but 53% received Medicaid and Aid For Families with Dependent Children (29%), suggesting that the presence of the teen and grandchild accounted for the assistance eligibility. Further information on sociodemographic characteristics of the sample can be found in Oyserman, Radin and Benn.<sup>31</sup>

### *Procedures*

A structured interview protocol, including scales to assess SES, GM involvement in childrearing, and TM perceived support in the family, was used. The presence of a GF in the home also was assessed. Interviews were with individuals and took place at home with same-gender interviewers. Nurturance was assessed through coding of videotaped play sessions with the baby, to be described below. In return for participation, each family member was given a gift for the baby and the choice of \$10 or a copy of the play session videotape.

### Measures

*Quantity of GM Caregiving* was assessed using a modification of the close-ended Paternal Involvement in Childcare Index (PICCI).<sup>51,52</sup> Internal reliability, construct, and predictive validity of the PICCI have been documented.<sup>53,49,54,55</sup> Cronbach alpha values for each subscale of the PICCI were between .73 and .86 in the current study. Test-retest reliability, assessed utilizing a separate sample of parents of preschoolers (n=102) showed the average correlation between items to be .72. The modified PICCI assessed the extent of TM, GM, and GF involvement in: 1) physical care; 2) socialization; 3) decision making about the child; 4) play with the child; 5) availability to the child; and 6) an overall estimate of participation in child rearing. The extent of GM involvement score, calculated as a mean of TM, GM, and GF views of GM involvement, correlated .97,  $p < .001$ , with the extent of GM involvement score calculated as a mean of TM and GM views. Because using the mean of three scores would result in dropping the 12 cases with no grandfather response, the GM involvement score used was the mean of TM and GM views. TM and GM views on GM involvement correlated .75,  $p < .001$ .

*Nurturance* was assessed by coding 10-minute play sessions with standard, age-appropriate toys, in which TM, GM, and GF each were asked to play with the baby. Sessions were set up in two 5-minute segments following Eyberg's description and instructions.<sup>56,57</sup> In the first 5-minute component, the adult was told to permit the child to lead the play. In the second 5 minutes, he or she was asked to lead the play and try to have the child follow.

Play sessions were videotaped and coded using an integration of categorization developed by Radin<sup>51,58</sup> and by Eyberg and colleagues.<sup>56,57</sup> Construct and predictive validity of Radin's methodology has been demonstrated in studies of nurturance of low-income, working-class, and middle-income parents with preschool children,<sup>59,60,58,61</sup> while construct validity of Eyberg's scheme has been demonstrated in clinical settings with children 2-7 years of age.<sup>55,56</sup> Nurturance was conceptualized as including parental expressions of affection, sensitivity to and consultation with the child. The nurturance scale was constructed from 16 of the 26 verbal and non-verbal behaviors coded. Examples of the nurturance items are praising the child, sharing with the child, and fully meeting child's explicit needs. Examples of other items coded were direct command without explanation and setting limits without explanation. Coding of discrete and continuous

behaviors follow Eyberg's description.<sup>55,56</sup> For a more detailed description of coding categories see Oyserman, Radin, Benn.<sup>31</sup>

Three coders, unaware of the operational definition of nurturance and the study's hypotheses, were trained until they reached a reliability level of 95% utilizing Cartwright's alpha.<sup>62</sup> Tapes of play sessions were distributed so that not more than one session with the same baby was given each coder. Every tenth tape was also coded by the graduate student master coder. Thus assessed, interrater reliability was never lower than 89%. After coding, nurturance was computed by summing the frequency of the 16 nurturant behaviors relative to all 26 behaviors coded for the adult in the session. Reliability was acceptable for GM (Cronbach's alpha = .56) and TM (.63), and low for GF (.37), perhaps due to the inclusion of categories which occurred at a low frequency (e.g. direct command with explanation). Thus for example, when Cronbach's alpha was computed for GF with only the 10 (of 16) nurturance categories with means of 1.0 or higher, the alpha was .56. However, the full 16-item measure was utilized in analyses as it contained all of the components of nurturance as theorized and therefore had greater face validity than would a more restricted measure containing only those few relatively high frequency categories. Nurturance scores for the first and second 5-minutes of play were moderately correlated ( $r = .54$  GM,  $.43$  GF, and  $.30$  TM,  $p < .001$  GM and  $p < .01$  GF and TM), suggesting stability of the measure across conditions.

*TM Perceived Support From GM* was assessed with a modified version of the Questionnaire of Social Support.<sup>39,63</sup> The number of affective situations (when feeling angry or upset, when feeling happy, and when wanting to share private feelings) for which the teen spontaneously mentioned her mother as someone with whom she could share the affect, and the frequency she rated herself as talking with her mother about everyday and about more serious issues, was assessed. Support was computed by averaging standardized ( $z$ ) scores of the three components, which correlated significantly with one another ( $.46 \leq r \leq .62$ ).

Table 1 presents the means and standard deviations for the dependent (TM nurturance) and independent variables (GF and GM nurturance, GM involvement in childcare, and TM felt support) for the total sample and the two subsamples.

*Family Socioeconomic Status* The Hollingshead Four-Factor Index of Social Status was used to assess SES.<sup>64</sup> Hollingshead Social Status scores are computed based on education and occupation.

**Table 1**  
Means and Standard Deviations (or Percent Occurrences) of the  
Dependent and Independent Variables

	<i>Total Sample</i>			<i>Two Grandparent Families</i>			<i>GM-only Families</i>		
	<i>x or %</i>	<i>s.d</i>	<i>n</i>	<i>x or %</i>	<i>s.d</i>	<i>n</i>	<i>x or %</i>	<i>s.d</i>	<i>n</i>
TM nurt (a)	0.71	0.13	107	0.74	0.11	66	0.66	0.13	41
GM nurt (a)	0.74	0.12	103	0.77	0.11	62	0.70	0.13	41
GF nurt (a)	0.76	0.12	52	0.76	0.12	52	—	—	—
GM invol (b)	33.87	8.06	105	33.08	6.94	64	35.11	9.50	41
TM supp (c)	0.00	1.00	105	0.09	1.06	66	0.14	0.89	41

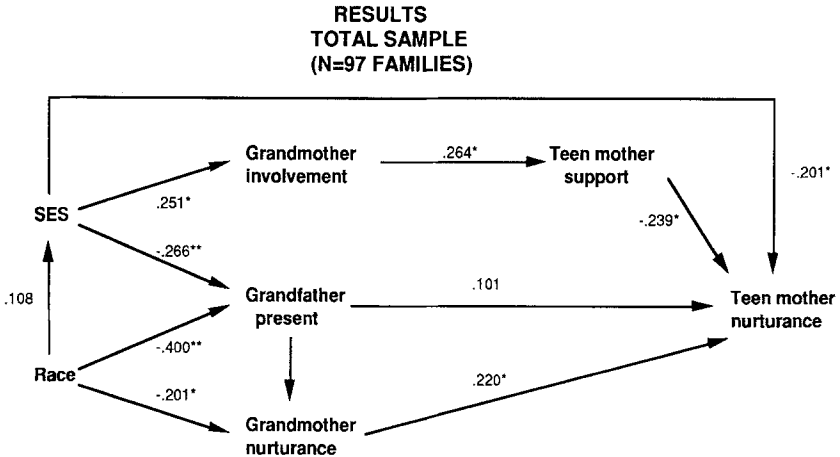
*Note:* TM = teen; GM = grandmother; GF = grandfather. Sample size varies due to lack of response to some items and refusal to participate. (a) Nurturance as measured in the play session (see text). (b) Quantity of GM involvement in childcare score (see text). (c) Teen's perception of support from her mother (see text).

### *Data Analysis*

Data analyses focused on path analyses of the total sample, two-grandparent, and GM-only households. GM-involvement, TM felt support, GM nurturance, and GF-presence were the endogenous variables for the total sample. For the two-grandparent families, GM involvement, TM perceived support, GM nurturance, and GF nurturance were the endogenous variables; for the GM-only families, GM involvement, TM perceived support, and GM nurturance were the endogenous variables. Pearson product moment correlation matrices on which analyses are based are available from the authors.

The possibility that demographic variables should be entered as exogenous variables in analysis of the total sample was explored by examining the correlation matrix (not shown). Race was related to GF-presence, SES, and GM nurturance, while SES was related to GF-presence, TM nurturance, and GM involvement in provision of childcare. Therefore race and SES were entered as exogenous variables in the total sample path analysis. SES was related to TM nurturance in the two-grandparent families and neither race nor SES were significantly related to the endogenous variables in the GM-only subsample. However, SES was included as an exogenous variable in both subsample analyses so that the same variables were used in both analyses (with the exception of GF nurturance). Exogenous variables





**Figure 2.** Results Total Sample. \* $p < .05$ ; \*\* $p < .01$ . Grandfather present (1 = absent, 2 = present). SES (1 = highest level, 5 = lowest level). Race (1 = non-minority, 2 = minority).

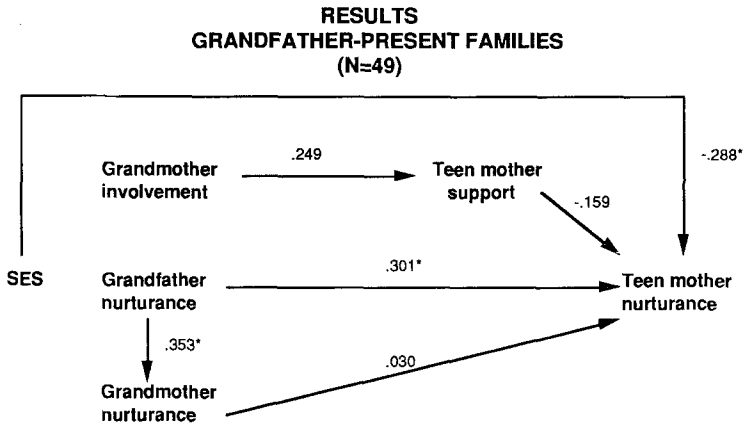
were entered into the paths as impacting on the variables they correlated with most highly.

## Results

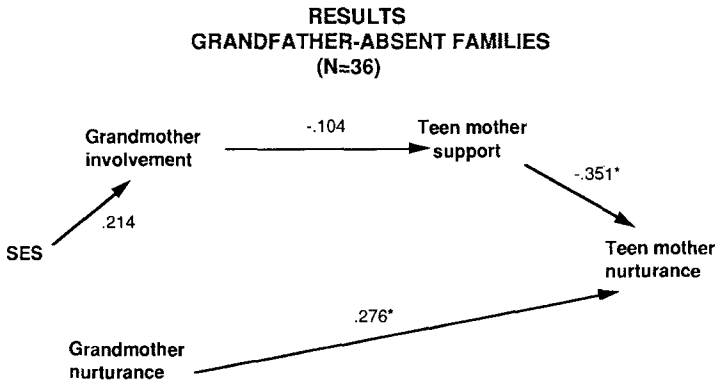
### *Path Analyses*

The basic hypothesized path structure was tested using the LISREL VII (Joreskog & Sorbom/SPSS, 1988) program. The path coefficients (standardized beta weights) for the total sample (Figure 2), GF-present (Figure 3), and GM-only (Figure 4) subsamples are presented in Figures 2 through 4.

First, the goodness of fit of the model to the data was considered. The chi-square statistic did not achieve significance at the .05 level in the total sample or in either of the sub-samples, indicating that the model did not deviate significantly from the data set.<sup>65</sup> For the total sample  $X^2 = 7.72$ ,  $n = 97$ ,  $p = .66$ ; for GF-present  $X^2 = 5.91$ ,  $n = 49$ ;  $p = .75$ ; for GM-only families  $X^2 = 1.18$ ,  $n = 36$ ,  $p = .98$ . The goodness of fit indices were .98, .96, and .98 respectively, and the adjusted goodness of fit indices were .94, .91, and .97 respectively,



**Figure 3.** Results Grandfather-Present Families. \* $p < .05$ . For SES (1 = highest level, 5 = lowest level).



**Figure 4.** Results Grandfather-Absent Families. \* $p < .05$ . For SES (1 = highest level, 5 = lowest level).

indicating very good fits of the models to the data.<sup>65</sup> The total coefficient of determination was .20 in the total sample, .10 in the GF-present, and .05 in the GM-only families, suggesting only a moderate amount of variance explained. Stability indices were .19, .23, and .20 respectively, indicating reasonable stability.<sup>65</sup>

As predicted, in the total sample, greater GM involvement in child-care led to increased TM perception of support (see Figure 2). How-

ever, contrary to prediction, TM support was negatively related to TM nurturance toward her infant. As can be seen, the size and valence of these path coefficients are similar in the subgroups to those in the total sample, although the path between teen felt support and nurturance is significant only in the GM-only subgroup.

As predicted, GM nurturance had a positive impact on TM nurturance in the total sample and in the GM-only families. Despite the strength of this relationship in the data for the total sample; in the GF-present subgroup GM nurturance was not significantly related to TM nurturance.

As to the impact of grandfathers, TMs in GF-present families were more nurturant than in GF-absent families,  $F(1,104) = 8.11, p < .01$ ; the same was true for GMs  $F(1,101) = 8.79, p < .01$ . Grandfather presence did not have a significant direct effect on TM nurturance, but GF-presence did lead to increased GM nurturance, which in turn led to increased TM nurturance. The total effect of GF-presence on TM nurturance was  $.203, p < .05$ . For the GF-present families, GF nurturance scores provided the strongest paths to TM nurturance and were strongly related to GM nurturance. The total effect of GF nurturance was  $.311, p < .05$ .

As to the possible effects of race and SES on the model in the total sample and of SES in each of the subsamples, the following effects were found. The total effect of race on TM nurturance was  $-.149, p < .01$ , with race being most strongly related to GF-absence ( $-.40, p < .01$ ), which had negative indirect impact on TM nurturance through its effect on GM nurturance. SES was also related to teen nurturance in the total sample and the 2-grandparent subsample, but not in the GM-only sample. Total effects of SES were  $-.217 (p < .05)$ ,  $-.288 (p < .05)$ , and  $.015$  in the total, GF-present, and GM-only samples respectively.

## Discussion

Before discussing these findings, limitations of the sample must be highlighted. Our sampling process, though systematic, focused on teens who were in school or had been in school at the time of their pregnancy. Thus, these teens may be more competent than their peers who drop out of school sooner. Also, we have no way of determining whether the families who refused to participate were unique in some way. In addition, it is possible that the impact of SES would

have been greater had a wider range of SES been represented in the sample. It is possible that the race and grandfather absence effects found are demographic markers for the more complex effects of chronic strain and structural racism. Finally, use of concurrent measures means that alternate interpretations as to the direction of effects are possible. Thus for example, it is conceivable that teens who are nurturant with their babies elicit nurturance in their own parents. Clearly some cyclical family dynamics are involved. Yet, in spite of these limitations, the interview and observational data collected in this study provide some initial insights into one part of these dynamics: influences on adolescent mothers' maternal nurturance in the context of her family of origin.

In the current study, SES and race impacted on teen nurturance in the total sample, with SES continuing to affect nurturance in two-grandparent families. Low SES has been said to be a marker indicating that the teen probably benefited from fewer resources as a child, lives in a relatively disadvantaged neighborhood with fewer community resources for her baby, and has lower educational aspirations and attainment.<sup>66</sup> Possibly all of these stressing conditions impacted on the teens in this study. Chronic stress may have been higher for the African-American teens.

Grandmother nurturance appeared to enhance teen nurturance in the total sample and GF-absent families, while grandfather nurturance had this positive role in two-grandparent families. That grandmother nurturance was not significantly related to teen nurturance in the two-grandparent subsample is particularly surprising both because it generally related to teen nurturance when one-parent families were included in analyses and because mean GM and GF nurturance scores were virtually identical (as were their standard deviations). Perhaps grandmother nurturance was overshadowed by grandfather nurturance because the presence of a warm, affectionate grandfather is unexpected in this population while teens expected such behavior of their mothers.<sup>35</sup>

An additional unexpected finding in the current study was the negative relationship between felt support and teen nurturance. Teen felt support was positively related to extent of grandmother involvement in childcare yet negatively related to teen maternal nurturance. Though support, particularly from grandmother, has been positively related to maternal nurturance toward the infant in previous studies<sup>37</sup> the possibility that support is detrimental to parenting was raised by Shapiro who found that teen mothers' perceived support was nega-

tively related to her maternal nurturance.<sup>67</sup> In trying to make sense of the negative relationship she found between teen maternal nurturance and teen perception of support in the family, Shapiro focused on the meaning of support to the teen in terms of the developmental separation-individuation task of adolescence.<sup>67</sup> She argued that teens receiving high levels of parental instrumental and emotional support are more dependent on their parents, leading to ambivalence about the support because it interferes with their struggle for independence.

Another way of framing this issue is to focus more specifically on the process of identity formation in adolescence, a process during which childhood identities must be reformulated to fit adult roles.<sup>68,69</sup> For teen mothers in the process of establishing such a sense of self and what is possible for the self, the realization that one cannot 'go it alone' and must remain to some degree dependent on one's parents may have negative impact on her ability to parent nurturantly. Support from parents may thus both reduce and induce difficulties for teens trying to cope with parenthood while attending school. The complex needs of an adolescent living with her parents and filling the roles of both student and mother are not easily reconciled and are deserving of further study. The current study suggests that while the role of support is complex, grandparent nurturance has positive effects on teen mother nurturance.

### Summary

In this study, teen nurturance with her baby was related to the nurturance her parents displayed toward the infant although the specific path of influence differed for teens living only with their mothers as compared to those living with their mothers and fathers. Specifically, the influence was especially great for the teen's father. Teen felt support from her mother was negatively related to teen nurturance with the baby. Low SES was related to less teen nurturance, perhaps because these teens experienced more chronic stress.

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