This study tested a conceptual model developed to explain the link between kinship support and the psychological well-being of economically disadvantaged African-American adolescents. The relationship of kinship support with both maternal and adolescent well-being and mothers' child-rearing practices was assessed in 51 African-American families whose incomes placed them at or below the poverty threshold. Findings revealed that kinship social support to mothers/female guardians was positively associated with adolescent psychological well-being, maternal well-being, and more adequate maternal parenting practices (acceptance, firm control and monitoring of behavior, autonomy granting). Maternal well-being and more adequate maternal parenting practices were positively related to adolescent well-being. Evidence of the mediational role of maternal well-being and parenting practices was revealed. When the effects of maternal well-being and parenting practices were controlled, significant relationships between kinship support and adolescent well-being were no longer apparent. (Contains 3 tables, 3 figures, and 43 references.) (Author/SLD)
Kinship Support and Maternal and Adolescent Well-Being in Economically Disadvantaged African-American Families

by

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The Mid-Atlantic Regional Educational Laboratory at Temple University
Center for Research in Human Development and Education
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Abstract

This study tested a conceptual model developed to explain the link between kinship support and the psychological well-being of economically disadvantaged African-American adolescents. The relationship of kinship support with maternal and adolescent well-being, and mothers' child-rearing practices was assessed in 51 African American families whose incomes placed them at or below the poverty threshold. Findings revealed that kinship social support to mothers/female guardians was positively associated with adolescent psychological well-being, maternal well-being, and more adequate maternal parenting practices (acceptance, firm control and monitoring of behavior, autonomy granting). Maternal well-being and more adequate maternal parenting practices were positively related to adolescent well-being. Evidence of the mediational role of maternal well-being and parenting practices was revealed. When the effects of maternal well-being and maternal parenting practices were controlled, significant relationships between kinship support and adolescent well-being were no longer apparent.
Kinship Support and Maternal and Adolescent Well-being in Economically Disadvantaged African-American Families

Economic distress, psychological well-being, and parenting

Economic disadvantage has been linked to a variety of forms of psychological distress in adults and children (Gibbs, 1986; Lempers, Clark-Lempers, & Simons 1989; Liem & Liem, 1978; McLoyd, 1990; Neff & Husaini, 1980). Among adults economic distress is positively related to depression (Dressler, 1985; Pearlin & Johnson, 1977), and other forms of psychiatric impairments (for a review and discussion, see Liem & Liem, 1978). Among children and adolescents economic hardship has been associated with depression (Gibbs, 1986; Lempers, Clark-Lempers, & Simons 1989), somatic complaints (McLoyd, cited in McLoyd, 1990), and conduct disorders (Myers & King, 1983).

Poverty and economic distress may impede the completion of important developmental tasks during adolescence. These tasks include the formation of satisfying emotional attachments, the development of autonomy and a clear sense of identity, and the development of skills and values necessary to function adequately as adults (e.g., Steinberg, 1990). As McLoyd (1990) suggests, economically disadvantaged families often live in neighborhoods marked by high crime rates, inadequate housing, and a high proportion of births to teenage mothers. Living in such circumstances may make it difficult for youngsters to accomplish developmental tasks.

Understanding the effects of poverty is especially important when examining the development of African-American adolescents, for several reasons. First, African-American adolescents have a higher rate of poverty than adolescents of any other racial or ethnic group in the United States (Sum & Fogg, 1991). Also, because they are more likely to live in single-parent households, African-American adolescents are likely to experience poverty of long duration (Sum & Fogg, 1991).

Taylor (1990) has argued that the conditions engendered by economic disadvantage (disappearing local economy, disintegrating community institutions, social isolation), may lead some segments of poor inner-city adolescents to embrace a "subculture of disengagement from the wider
society" (pp. 140). The impact of this subculture may be reflected in the levels of youth gang violence, out-of-wedlock births, drug use and abuse, and school related problems present in many disadvantaged inner-city communities.

In addition to the negative association with the psychological well-being of adults, children, and adolescents, economic hardship has also been linked to less adequate parenting practices. Lempers et al. (1989) found that economic hardship through its negative impact on parental nurturance and parent's disciplinary practices, was associated with depression/loneliness and delinquency/drug use among adolescents.

As McLoyd (1990) has discussed, poor parents are more likely than more economically advantaged parents to: value obedience in children over autonomy and independence, employ power assertive discipline techniques, and display fewer expressions of affection. Given the link between economic disadvantage, psychological distress, and less adequate parenting, it seems reasonable to assume that some of the problems often facing poor children are linked to parenting practices and behaviors compromised by the effects of poverty.

Economic distress and kinship support

In the present study we examined the possibility that kinship social support may enhance the psychological well-being of economically disadvantaged African-American adolescents through its positive effects on mothers' well-being and parenting practices. Anderson (1991) notes that social support to adolescents' family may prevent youngsters involvement in the "street culture" which can be a source of problematic behaviors in inner city communities. Research with African-American families has revealed a positive association between economic stress and extended kin support (Dressler, 1985). Dressler (1985) found that in a sample of African-American adults economic strain (e.g., difficulty paying bills, not enough money for health care, etc.) was associated with greater assistance from relatives.

Research has also shown that among black and white families facing economic hardship and

Conceptual model linking kinship support to adolescent well-being

The positive effects of kinship support on adolescent well-being may be mediated by maternal well-being and maternal parenting practices. Specifically, kinship support to mothers may enhance mothers' psychological adjustment and parenting behaviors. When mothers are better adjusted and display more positive parenting behaviors, adolescents may function more adequately. Positive parenting was defined in this study as the extent to which mothers/female guardians displayed attitudes and behaviors associated with authoritative parenting. Authoritative parenting is a parenting style that involves acceptance, demands for mature behavior and autonomy, and firm control and monitoring of behavior. Authoritative parenting has been positively linked to the adjustment of African-American adolescents (e.g., Steinberg et al., 1991; Taylor et al., 1993).

In a sample of poor African-American families, we assessed the following hypotheses: (a) kinship support was expected to predict increased psychological well-being among adolescents, increased psychological well-being among mothers/female guardians, and more positive parenting practices by mothers/female guardians; (b) maternal well-being and maternal parenting practices were expected to predict increased adolescent psychological well-being; and (c) the effects of kinship support on adolescent well-being were expected to be mediated by maternal well-being and maternal parenting practices. The conceptual model tested is shown in Figure 1.

Little research exists on the processes linking kinship support to child and adolescent outcomes in poor African-American families. Taylor et al. (1993) showed that in a mainly working-class, African-American, adolescent sample, kinship support predicted increased authoritative parenting
experiences, which in turn, predicted increased adolescent well-being. The present study extends the work of Taylor et al. (1993) by (a) examining the role of maternal well-being as an additional possible mediator of the association of kinship support and adolescent well-being; (b) gathering information about kinship relations and parenting practices from additional informants (mothers/female guardians); and (c) examining the mediation of kinship support and adolescent adjustment in an economically disadvantaged sample.

Method

Sample

The sample is composed of 51 African-American adolescents and their mothers/female guardians living in a large northeastern city. The term mothers/female guardians is used to reflect the fact that 6 of the adolescents were living with female guardians (e.g., four with grandmothers and 2 with aunts). Because data from only 7 fathers or male guardians were available, information from fathers was not included in the analyses. The adolescents and their mother/female guardian were part of a group of 100 families whose names and addresses were obtained through the adolescent's school. School officials randomly selected approximately 5 classes at the school and made the names and addresses of the students available to the research staff. The investigators attempted to contact and recruit each family for participation in the study. The neighborhood in which the school exists and the families reside is economically depressed. According to student data compiled by the school district, 80.3% of the youngsters are from economically disadvantaged homes, based upon Census classifications. A comparison of demographic and achievement data from the school district for students living in similar neighborhoods and attending similar types of schools revealed no differences.

We were unable to contact a sizeable number of parents (44) because of frequent changes of
residence, lack of a telephone in the home, unreturned phone calls, and unacknowledged mailings. Only 5 students and their parents refused to participate. The students who did not participate, either because of their refusal or because of their lack of availability, did not differ from the participants in terms of age, sex, or school achievement, based on data obtained from school records. However, according to school officials, the inaccessibility of these families may be a sign of instability and family problems. Thus, it is possible that our sample is overrepresented by more highly functioning economically disadvantaged families.

The adolescents were 31 females and 20 males. Demographic information on the sample is shown in Table 1. The information was examined separately for one-parent and two-parent families. Table 1 reveals that the average and actual income levels of both one- and two-parent families placed them at or below the poverty threshold for families of their size (U.S. Bureau of the Census, 1991). The relationship between family structure and the other demographic characteristics was assessed. The difference in the incomes of two-parent and one-parent families approached significance \( F(1,49) = 3.65, p < .06 \), with two-parent families having somewhat higher incomes. Also, two-parent families had larger families than one-parent families \( F(1,49) = 5.77, p < .02 \).

Procedure

Data on relations with kin, parenting practices, psychological adjustment, and demographic characteristics were collected via interviews administered to the adolescents and the mother/female guardian in a laboratory setting. Five families were unable to travel to the research setting and interviews were administered at their home. A comparison of the scores for those families administered the measures in the laboratory, versus those seen at home revealed no differences. The adolescents and parents at either sites were given the interviews in separate rooms. The families were
paid for their participation.

Measures

Adolescent variables. (a) Self-reliance (10 items) was measured using the Psychological Maturity Inventory (Greenberger, Josselson, Kneer, & Kneer, 1974; Greenberger & Bond, 1986). The measure assessed adolescents' lack of dependency, sense of initiative, and control of events. Sample questions reverse coded included; "Luck decides most of the things that happen to me", or "When I do something wrong I depend on my parents to straighten things out for me". The adolescents indicated their answers using a Likert-response scale ranging from 4 (Strongly Agree) to 1 (Strongly Disagree).

(b) Problem behavior (15 items) was assessed by obtaining the adolescents' self-report of their frequency of involvement in delinquent activities such as physical assault, drug use, vandalism, (Gold & Reimer, 1975). The response format for the measure is a Likert-scale ranging from 4 (several times) to 1 (never).

(c) Psychological distress (20 items) was measured with the Center for Epidemiological Studies (CES) Depression Scale (Radloff, 1977). Adolescents reported the frequency of mental or physical states (e.g., feelings of depression, loss of appetite, difficulty sleeping) over the past month. The Likert-response scale ranges from 4 (three or more times) to 1 (never).

Maternal variables. (a) Kinship relations (13 items) was measured with a series of questions taken from Taylor et al. (1993). The measure assesses the mothers'/female guardians' perceptions of the level of social and emotional support they receive from adult kin. The measure examined the areas of socialization and entertainment, advice and counseling, and problem solving. Sample questions in each area included; "We often get together with our relatives for reunions and holidays" (socialization and entertainment); "When I'm worried about something I look to my relatives for advice" (advice and counseling); or "We can count on our relatives to help when we have problems" (problem solving). The participants indicated their answers using a Likert-response scale ranging from 4 (Strongly Agree)
(b) Psychological distress for mothers/female guardians, like the adolescents, was assessed with the CES Depression Scale.

(c) Self-esteem (10 items) was assessed with the Rosenberg Self-Esteem Scale (Rosenberg, 1965). This scale, which has been widely used with adults, assesses the self-acceptance component of self-esteem (sample question: "I feel that I have a number of good qualities"). The response format for the measure is a Likert-response scale ranging from 4 (Strongly Agree) to 1 (Strongly Disagree)."}

(d) Parenting practices were examined with the revised short form of the Child's Report of Parental Behavior Inventory (CRPBI, Schludermann & Schludermann, 1977). This measure assesses three aspects of maternal disciplinary practices: Acceptance, Psychological Control (vs. Psychological Autonomy), and Lax Control (vs. Firm Control). The CRPBI is a widely used Likert-scale format, self-report measure of adolescents' assessment of the parents' discipline practices. Both adolescents and the mothers/female guardians completed the measure. The mothers/female guardians completed a version of the measure modified appropriately for administration to parents.

The Acceptance subscale (10 items) consists of questions assessing the mother's/female guardian's and adolescent's perceptions of maternal closeness and acceptance of the adolescents. The Psychological Control subscale (10 items) consists of questions assessing the mother's/female guardian's and adolescent's ratings of maternal use of anxiety or guilt induction as a method of control of the adolescent. The measure of Psychological Control was coded so that high scores represent the extent to which the adolescents' psychological autonomy was encouraged. The items of the Lax Control subscale (10 items) assess mother's/female guardian's and adolescent's ratings of maternal regulation and monitoring of the adolescents' behavior. High scores on the measure of Lax Control represent the perception that adolescent's behavior was under Firm Control. These subscales of the CRPBI have been found to have good discriminant and convergent validity (Schwarz, Barton-Henry, and Pruzinsky, 1985).
A single score for each aspect of parenting assessed was created by averaging the ratings of the mothers/female guardians and adolescents for each of the parenting subscales. Justification for this approach comes from Schwarz et al. (1985) who have shown that the reliability and validity of scores on the subscales of the CRPBI increase as the number of aggregated ratings increases. The subscales of the CRPBI were employed as measures of more positive parenting because they are components of authoritative parenting, which has been linked to adolescent adjustment.

All of the measures included have been utilized in research with African-American parents or adolescents and have had acceptable levels of reliability. The measures appear to operate similarly across ethnic and social class groups in that the correlates of the measures are similar across groups (e.g., Steinberg et al., 1991; Taylor et al., 1993; Roberts & Taylor, 1994). In the present sample the internal reliabilities of all scales were acceptable and highly similar to those reported in previous research using the measures (see Table 2).

Analysis Plan

Recursive path analysis estimated by ordinary least squares regression was utilized to test the conceptual model shown in Figure 1. This statistical technique allows the assessment of both direct and mediated relations among variables in the model. For each of the three indicators of adolescent psychological functioning, path coefficients were estimated using a series of multiple regression equations. At each step the criterion variables were regressed on all variables with arrows leading directly to the criterion variable. This procedure was followed for each of the separate criterion variables. The demographic factors of age, sex, income, and family structure were included in the analyses to examine and control for their effects.

The data were analyzed in accord with Baron and Kenny’s (1986) recommendations for assessing mediator effects. According to Baron and Kenny mediational effects are apparent when there is evidence that (a) the predictor variable (e.g., kinship support) is significantly associated with the criterion variable (e.g., adolescent self-reliance, problem behavior, psychological distress); (b) the
predictor variable and the proposed mediator variable (e.g., maternal acceptance, firm control, autonomy granting, psychological distress, self-esteem) are significantly related; (c) the criterion variables and mediator variables are significantly related; and (d) controlling for the effects of the mediator variable reduces the association of the predictor and criterion variables, while the association of the mediator and criterion variables remains.

Results
The means and standard deviations of the major variables are presented in Table 2. Table 3 shows the correlations among variables. The effects of the demographic factors (age, sex, income, and family structure) were examined and had no significant effect on any of the measures.

Insert Tables 2 and 3 about here

Kinship support and adolescent self-reliance, problem behavior, and psychological distress
The first step in assessing the mediation of the association between kinship social support and adolescent well-being is to examine the relationship of kinship social support and the domains of adolescent psychological well-being assessed. These results are shown in Figure 2. Kinship support is positively associated with self-reliance ($\beta = .28$, $p < .05$), and negatively associated with problem behavior ($\beta = -.28$, $p < .05$). Kinship support and psychological distress are unrelated.

Insert Figure 2 about here

Kinship support, maternal psychological distress, self-esteem, acceptance, firm control, and psychological autonomy granting
The second step in assessing the mediation of the link between kinship support and adolescent well-being is to examine the association among kinship support, maternal well-being, and maternal parenting practices. These findings are shown in Figure 3. Results indicate that social support by kin
is positively associated with maternal self-esteem (beta = .46, p < .01), maternal acceptance (beta = .38, p < .01), and maternal autonomy granting (beta = .38, p < .01).

Maternal self-esteem, psychological distress, acceptance, firm control, autonomy granting and adolescent self-reliance, problem behavior, and psychological distress

The third step in assessing the mediation of the link between kinship support and adolescent well-being is to assess the association of maternal well-being and maternal parenting practices with adolescent well-being. These results are shown in Figure 4. The findings reveal that maternal self-esteem is positively associated with adolescent self-reliance (beta = .41, p < .01) and negatively related to adolescent problem behavior (beta = -.36, p < .01). Maternal acceptance is positively associated with adolescent self-reliance (beta = .41, p < .01) and negatively related to problem behavior (beta = -.27, p < .05). Maternal firm control of behavior is negatively associated with adolescent problem behavior (beta = -.28, p < .05). Finally, maternal autonomy granting is positively associated with adolescent self-reliance (beta = .44, p < .01).

Mediational effects

The final step in assessing the mediation of the relationship between kinship support and adolescent well-being is the evaluation of the link between kinship support and adolescent psychological
well-being, when controlling for the effects of maternal well-being and maternal parenting practices. Evidence in support of mediational effects also requires that maternal well-being and parenting practices remain significantly associated with adolescent well-being when kinship support is controlled. Evidence of mediation emerged for two of the indicators of adolescent psychological functioning. Specifically, for self-reliance the significant standardized regression coefficient linking kinship support and self-reliance (beta = .28) is no longer apparent with the effects of maternal self-esteem, acceptance, and autonomy granting controlled (beta = .05). Furthermore, with the effects of kinship support controlled, maternal self-esteem, acceptance and autonomy granting remain significantly associated with self-reliance (beta = .35, p < .01, beta = .41, p < .01, beta = .39, p < .01, respectively). Turning to the second indicator, the significant relationship between kinship support and adolescent problem behavior (beta = -.28) is no longer apparent when the effects of maternal self-esteem and maternal acceptance are removed (beta = .15). Autonomy granting is not assessed as a mediator here because it was unrelated to problem behavior. With the effects of kinship support controlled maternal self-esteem and acceptance remain significantly related to problem behavior (beta = -.43, p < .01, beta = -.44, p < .01, respectively).

Mediational effects for adolescent psychological distress, and the role of maternal psychological distress and firm control of behavior as mediator variables were not examined because these measures were unrelated to kinship support.

Discussion

The present study adds to the sparse literature on family relations and psychosocial adjustment for economically disadvantaged African-American families. The results obtained generally supported the predictions tested. Specifically, consistent with expectations, the more social support mothers/female guardians report receiving, the greater adolescents’ sense of self-reliance, and the less they engage in problem behavior. These findings are in accord with previous research linking support from extended family members to individuals’ adjustment in poor and nonpoor families (e.g., Dressler,
1985; Kellam et al., 1982; Taylor et al., 1993).

The findings also support the hypothesis of a positive association between kinship support and aspects of mother's/females guardian’s well-being and parenting practices. The more support mothers/female guardians reported, the higher their self-esteem, the greater their acceptance of the adolescent, and the more they granted the adolescent autonomy and independence. These finding compliment the results of a number of investigations linking kinship social support to maternal adjustment (e.g., Colletta & Lee, 1983; McLoyd 1990; Zur-Szpiro & Longfellow, 1982), and to better parenting practices (Colletta, 1981; McLoyd, 1990). The results extend previous research by showing that not only are mothers less likely to display aversive behaviors (Colletta, 1981; scolding, nagging, threatening) when they have assistance, but they are also more likely to display supportive behaviors and attitudes.

Evidence supporting the hypothesis that maternal psychological well-being and parenting practices predict adolescent psychological well-being is also present in the findings. Results reveal that to the extent that mothers/female guardians are higher in self-esteem, more accepting of the adolescent, and encourage the adolescent’s autonomy, the adolescents report greater self-reliance. Higher maternal self-esteem and acceptance are also associated with lower levels of adolescent problem behavior. These findings add to the growing body of research showing that among economically disadvantaged families parent’s psychological distress and the adequacy of their parenting practices are linked to childrens' and adolescents' social and emotional adjustment (McLoyd, 1990).

Finally, evidence supporting the prediction regarding the mediation of the association of kinship social support and adolescent adjustment is apparent in the findings. The results suggest that higher kinship support is associated with higher maternal self-esteem, acceptance of the adolescent, and autonomy granting. Higher acceptance, self-esteem, and autonomy granting, in turn, are associated with higher adolescent self-reliance. Higher acceptance and self-esteem are also associated with lower levels of problem behavior. These findings in particular, and the overall pattern of results support portions of McLoyd's (1990) analytic framework linking economic hardship to children’s outcomes. McLoyd (1990) suggests that social support may ease parents emotional distress, and may promote
more adequate parenting practices, which in turn, may "foster positive socioemotional development in impoverished children" (pp. 315). The results are also in line with Belles' (1984) discussion of the potential benefits of social support as a source of mental health treatment for women "in the midst of oppressive life conditions" (pp. 148).

Several limitations in the research should be noted. First, our measures were based on the self-reports of the parent and adolescent. The relationships observed would be more firmly established with similar findings using methods that directly assessed the behaviors under study. Having additional informants who might have different perspectives on the functioning of the family would also be beneficial.

Second, the size of the sample included is also an issue that should be considered in interpreting the findings. In particular, in the assessment of mediational effects, the regression coefficients may be less precise than they would be if they were assessed in a larger sample. It is important to note however, that a smaller sample size does not invalidate the regression coefficients, but makes the detection of significant effects, in fact more difficult.

Third, also regarding the sample, the accessibility of the families in the study and the lack of availability of those not included may be indicative of important distinguishing features of the participants. Caution should be taken when applying results across economically disadvantaged African-American families.

Finally, the findings obtained are all correlational and therefore, the causal relations of the variables are not known. For instance, it is possible that kinship social support leads to greater parental self-esteem. It is equally plausible however, that parents who are high in self-esteem or more generally well-adjusted, may elicit more assistance from kin. Similar arguments can be made for other relations found in this research.

The possibility of bidirectional relations or feedback among the variables is important. In particular, if there is feedback between the mediating variables and the outcome variables, then the relations between the variables may be over-estimated. If the relations are over-estimated, the mediational findings revealed may not be as strong, and caution must used in interpreting these results.
However, it is important to note that for several reasons, it is not clear that bidirectional relations exist between the variables in the mediational chains. We know of no research with African-American families showing for example, that maternal parenting practices and adjustment, and adolescent adjustment are reciprocally related. Also, in a relevant discussion Cairns (1979) notes, "In relationships where there are clear discrepancies between the social roles of the participants, teacher-pupil, therapist-patient, father-son, older-younger - societal biases can support the dominance of one individual’s acts relative to another' (p.313). He suggests further, that even if a social relationship is bidirectional "its major themes and course can be determined unequally by virtue of societal expectations and institutional constraints that operate on all members of the interchange" (p. 314). Cairns’ discussion supports the plausibility of the mediational chains specified in our conceptual model and revealed in our findings. Because parents typically, have more power, status, and control in the home than adolescents, bidirectional effects between parent variables (parenting practices and adjustment) and adolescent variables (adjustment) may be either nonexistent or small. Longitudinal data focusing on the issues investigated here are needed to examine the matters of causality and reciprocal relations.

In term of future research, the ecology associated with poverty and economic disadvantage and its impact on family relations need to examined. Specifically, the manner in which kinship support and family well-being varies as a function of community or neighborhood conditions needs to be evaluated. Also, little is known about the effects on families of extending help to kin. Indeed, Belle (1984) has suggested that for poor women the strain and distress associated with providing support to extended family members may diminish the effectiveness of the help poor women themselves receive.

Finally, more process-oriented work with African-American children and families is needed. We know far too little about the nature of Africa-American families, their parenting practices, and the outcomes for children. We know less still about the processes underlying relationships between important variables. Given the increasing diversity of children and youth in the United States, it is important that greater attention be given to the conditions promoting and inhibiting the competence and well-being of families of color.
Footnotes

1. Parents were not administered measures of well-being identical to those given to the adolescents because the measures administered to the adolescents were developmentally appropriate for adolescents but not adults.

2. According to Baron and Kenny (1986) the use of multiple regression to estimate a mediational model requires that the criterion variable not cause the mediator variable. Given the nature of the variables assessed, reciprocal relations between some of the measures are indeed possible (e.g., maternal self-esteem may lead to greater adolescent self-reliance, and increased self-reliance may lead to greater maternal acceptance). Because our data is cross-sectional it is impossible to sort out causal relations among the variables. In addition, our data is not sufficient for the use of other structural modeling techniques that take into consideration the complication of feedback or bidirectional relations in the mediational chains. First, our sample size is too small to utilize procedures such as LISREL-IV (Joreskog & Sorbom, 1984) or EQS (Bentler, 1982). Bentler and Chou (1987) recommend that the ratio of sample size to number of free parameters be 5:1, though a ratio of 10:1 may be more appropriate. Second, none of our variables meet the recommended criteria for serving as instrumental variables in the estimation of two-stage least squares to examine feedback (James & Singh, 1978). Specifically, the use of two-stage least squares requires the identification of a variable that: (a) has a direct or indirect effect on the criterion variable; (b) is not related to the mediator variable; (c) is unrelated to unmeasured causes of the criterion variable, and (d) is not caused by either the criterion or mediator variable. None of the variables measured in the sample unequivocally meet these criteria. Therefore, because the possibility of feedback exists, the mediational relations revealed must be interpreted with caution.
References


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Table 1
Demographic Information

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Single-Parent (n = 24)</th>
<th>Two-Parent (n = 27)</th>
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</thead>
<tbody>
<tr>
<td>Mean age adolescent (SD)</td>
<td>16.50 (5.07)</td>
<td>17.91 (1.30)</td>
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<tr>
<td>Range</td>
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<td>15 - 19</td>
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<td>Mean age mother/guardian (SD)</td>
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<td>41.54 (5.69)</td>
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<td>Range</td>
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<td>Mean number of household members (SD)</td>
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<td>Range</td>
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<td>1 - 9</td>
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<td>Mean household income (SD)(^b)</td>
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<td>2.59 (1.76)</td>
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<td>Range</td>
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<td>1 - 3</td>
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<tr>
<td>Mean years of schooling (SD)</td>
<td>11.76 (2.05)</td>
<td>11.54 (2.93)</td>
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<td>Range</td>
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<td>0 - 13</td>
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<tr>
<td>Number reporting receiving forms public assistance (%)(^c)</td>
<td>19 (79%)</td>
<td>18 (66%)</td>
</tr>
<tr>
<td>Household employment (%)(^d)</td>
<td>8 (33%)</td>
<td>11 (40%)</td>
</tr>
</tbody>
</table>

\(^a\) The families in two-parent family structure include 6 families in which both grandparents were the custodial guardians of the adolescents.

\(^b\) Income level: 1 = less than $5,000/year; 2 = $5,000 - $10,000/year, 3 = $10,000 - $15,000/year, 4 = $15,000 - $20,000/year, 5 = $20,000 - $25,000/year, 6 = $25,000 - $30,000/year, 7 = $30,000 - $35,000.

\(^c\) Public assistance included the receipt of welfare, food stamps, or public housing.

\(^d\) Household employment refers to the question of whether there were employed adult(s) within the home.
Table 2
Means, Standard Deviations, and Alphas of the Major Variables

<table>
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<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Alpha</th>
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<tr>
<td>Kinship social support</td>
<td>25.49</td>
<td>4.94</td>
<td>.88</td>
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<tr>
<td>Maternal Self-esteem</td>
<td>33.08</td>
<td>5.50</td>
<td>.85</td>
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<td>Maternal Psychological Distress</td>
<td>27.78</td>
<td>7.95</td>
<td>.82</td>
</tr>
<tr>
<td>Maternal acceptance</td>
<td>38.88</td>
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<td>.72</td>
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<td>Psychological Autonomy Granting</td>
<td>29.71</td>
<td>6.02</td>
<td>.82</td>
</tr>
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<td>27.18</td>
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<td>Adolescent Problem Behavior</td>
<td>6.63</td>
<td>2.07</td>
<td>.74</td>
</tr>
<tr>
<td>Adolescent Psychological Distress</td>
<td>12.65</td>
<td>4.63</td>
<td>.82</td>
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</table>

The alpha's reported in the table are from the sample in the present study.
Table 3
Correlations Among Major Variables

<table>
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<th>1</th>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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</thead>
<tbody>
<tr>
<td>1. Kinship social support</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. Maternal Self-esteem</td>
<td>.47**</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>3. Maternal Psychological Distress</td>
<td>.15</td>
<td>-.23</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>4. Maternal Acceptance</td>
<td>.32*</td>
<td>.28*</td>
<td>-.27*</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5. Psychological Autonomy Granting</td>
<td>.35*</td>
<td>.34*</td>
<td>.09</td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Firm Behavioral Control</td>
<td>.05</td>
<td>.10</td>
<td>-.30*</td>
<td>.16</td>
<td>-.38**</td>
<td></td>
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<tr>
<td>7. Adolescent Self-Reliance</td>
<td>.30*</td>
<td>.28*</td>
<td>.02</td>
<td>.28*</td>
<td>.29*</td>
<td>.02</td>
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<td></td>
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<tr>
<td>8. Adolescent Problem Behavior</td>
<td>-.29*</td>
<td>-.34*</td>
<td>-.08</td>
<td>-.34*</td>
<td>.15</td>
<td>.30*</td>
<td>.01</td>
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<tr>
<td>9. Adolescent Psychological Distress</td>
<td>.16</td>
<td>-.14</td>
<td>.25*</td>
<td>-.03</td>
<td>.08</td>
<td>-.26</td>
<td>-.28*</td>
<td>.05</td>
<td>---</td>
</tr>
</tbody>
</table>

*p < .10  
*p < .05  
**p < .01
FIG. 1- Conceptual model of the mediation of the association of kinship support and adolescent well-being.
Kinship Support

Adolescent
Self-reliance
F=4.02 p<.01
R=.07

Adolescent
Problem behavior
F=4.21 p<.04
R=.07

Adolescent
Psychological distress
F=1.41 p<.48
R=.01

.28(.05)

-.28(.05)

.14(.66)

FIG. 2- Kinship support and adolescent self-reliance, problem behavior, and psychological distress. Standardized regression coefficients are displayed on each path with the corresponding p values in parentheses.
FIG. 3- Kinship support and maternal self-esteem, psychological distress, acceptance, firm control, and autonomy granting. Standardized regression coefficients are displayed on each path with the corresponding p values in parentheses.
The Laboratory for Student Success (LSS) is one of ten regional educational laboratories in the nation funded by the U.S. Department of Education to revitalize and reform educational practice in the service of children and youth.

The mission of the Laboratory for Student Success is to strengthen the capacity of the mid-Atlantic region to enact and sustain lasting systemic educational reform through collaborative programs of applied research and development and services to the field. In particular, the LSS facilitates the transformation of research-based knowledge into useful tools that can be readily integrated into the educational reform process both regionally and nationally. To ensure a high degree of effectiveness, the work of the LSS is continuously refined based on feedback from the field on what is working and what is needed in improving educational practice.

The ultimate goal of the LSS is the formation of a connected system of schools, parents, community agencies, professional organizations, and institutions of higher education that serves the needs of all students and is linked with a high-tech national system for information exchange. In particular, the aim is to bring researchers and research-based knowledge into synergistic coordination with other efforts for educational improvement led by field-based professionals.

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