## ORIGINAL PAPER

# Perceived Parent-Child Relations and Adolescent Self-Esteem

Ronald E. Bulanda · Debarun Majumdar

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**Abstract** We used data drawn from the National Longitudinal Study of Adolescent Health to assess the independent and interactive correlations of maternal and paternal parenting with adolescent self-esteem. Specifically, ordinary least squares regression was used to provide estimates for a large, culturally diverse sample of married, biological parent-families with adolescent children. Our results suggested that adolescent reports of mothers' and fathers' physical availability, involvement, and quality of relations are each independently associated with adolescent self-esteem. In addition, statistically significant interactions indicated the positive associations of one parent's involvement and high quality relations with self-esteem grow stronger in the presence of high involvement and relationship quality of the second parent. Our study highlights the need to assess the independent and interactive associations parents have with the well-being of their children.

 $\begin{tabular}{ll} \textbf{Keywords} & Parenting \cdot Adolescents \cdot Self-esteem \cdot \\ Mothers \cdot Fathers & \\ \end{tabular}$ 

## Introduction

Adolescence is a stage of life characterized by many new psychological and social challenges (Lerner and Galambos

R. E. Bulanda (🖂)

Department of Sociology & Gerontology, Miami University, Upham Hall 372, Oxford, OH 45056, USA e-mail: bulandre@muohio.edu

c-man. bulandic@muomo.cc

D. Majumdar Department of Sociology, Texas State University, San Marcos, TX, USA 1998). Parents are seen as potential guides to aid adolescents in successfully meeting these challenges. However, the adolescent stage poses unique problems for analyzing the potential influence of parents because it is a developmental period characterized by increasing autonomy and self-regulation. In turn, parents' involvement, relations, and opportunities for interaction with adolescents are susceptible to important transitions.

As a child moves through adolescence, one change in parenting includes less parental supervision because adolescents begin to possess more responsibility for regulating themselves (Shearer et al. 2005). This increase in adolescent autonomy is often accompanied by other changes in the parent-adolescent relationship, such as decreased feelings of closeness and attachment to parents (Steinberg and Silk 2002). Parker and Benson (2004) suggested that perceptions of closeness with parents are positively associated with adolescent self-esteem. Thus, it appears a positive standard of psychological well-being in adolescence includes both the development of an independent sense of identity and the maintenance of close relationships with parents (Allen et al. 1994; Parker and Benson 2004). This apparent duality, however, often makes it difficult to specify if and how parents influence the overall self-esteem of their adolescent children (see Allen et al. 1994).

Contributing to this difficulty is the relative ambiguity regarding the direction of causality between parenting and child outcomes (see Kerr and Stattin 2003). Consistent with the developmental contextualism perspective (see Lerner et al. 1994; Trickett et al. 1996), it is important to acknowledge that an adolescent's developmental trajectory occurs within the fluid and reciprocal relationships they have with their parents. In other words, the relationship between parenting and adolescent self-esteem is likely to be reciprocal (Gecas and Schwalbe 1986).



Videon (2005) asserted that the impact of parent-child relations on adolescent psychological well-being has been largely overlooked in favor of other sources of influence and other developmental periods. Williams and Kelly (2005) stated unequivocally, "little is known about the different roles that mothers and fathers play during adolescent development" (p. 171). More specifically, Phares (1996) argued fathers are especially underrepresented in research assessing family functioning. Overall, little recent research illustrates if and how maternal and paternal parenting in nuclear families are independently and jointly associated with the self-esteem of their adolescent children.

Research assessing potential parental correlates of adolescent well-being and adjustment must account for both mothers and fathers to offer a more complete understanding of these potential associations. Perhaps due to the wide range of outcomes assessed in prior studies, many existing works limit their foci to the influence of only the mother (Govender and Moodley 2004; Heinonen et al. 2003) or the father (Barber 1994; Brotherson et al. 2003). Other research used composite measures of parental influence (Parker and Benson 2004), assessed parental influence outside of a nuclear family structure (Bean et al. 2003; McCurdy and Scherman 1996), or assessed the psychological well-being of young adults (Amato 1994). Overall, few recent studies investigated the potentially independent and interactive maternal and paternal associations of adolescent self-esteem.

This specific aim is warranted given evidence that mothers and fathers interact with their children in different ways. For example, research suggests mother-child relationships are characterized as being more intimate, whereas father-child relationships entail proportionally more leisure activities (Videon 2005). Moreover, in a study assessing the influence of family structures on college students' wellbeing, self-esteem was reported to be associated with attachment to fathers, but not to mothers (McCurdy and Scherman 1996). Conversely, in an assessment of young adults, Amato (1994) illustrates closeness to fathers is unrelated to self-esteem when controlling for closeness to mothers. Videon (2005) also asserted that little is known of the impact of father-child relations on children's well being. Furthermore, much of the existing literature is limited by separate assessments of mothers and fathers, leaving joint assessments of mothers and fathers largely unstudied (Johnson et al. 1991; Milevsky et al. 2007).

Shifts in family roles and family structures over the past few decades makes fathers' roles more diverse, and arguably more ambiguous, than ever before (Carlson 2006; Doherty et al. 1998). Fathering appears less of a cultural imperative when compared to mothering, resulting in greater variability in the nature and type of paternal parenting (Williams and Kelly 2005). Thus, it is important to

analyze what role fathers play in the well-being of their children. In the same manner, parenting is an interactive process, thereby making it pertinent to analyze the mother's role in child well-being as well. Doherty et al. (1998) identified the co-parenting relationship as a key factor in understanding the roles parents play in the lives of their children. However, few studies have assessed the parenting of both mothers and fathers (Johnson et al. 1991), whereas other studies assessed parents as a unit (Stolz et al. 2005). The latter approach makes it difficult to unpack the unique correlates of maternal and paternal factors, or if the correlations with maternal factors vary as a function of paternal measurements. Ultimately, it is important to account for the main and interactive effects of both mothers and fathers.

Well-being is a fundamental characteristic that may not only be developed within the family, but affected by the ways in which parents interact with their children (DeGoede et al. 1999). Measures of parental involvement are positively linked to several child outcomes, including better academic achievement, fewer behavior problems, and less depression and anxiety (Safford et al. 2007; Zick et al. 2001). Moreover, Gecas and Schwalbe (1986) suggested parental involvement conveys to the children information about their self-worth. Based on their review of the literature, Schmidt and Padilla (2003) stated that a person's self-esteem rises when they "experience another's love" (p. 38). Taken together, it is expected parents' involvement in the lives of their adolescent children will have implications for their self-esteem.

Indicators of parental support are predictive of some measures of adolescent psychological well-being (Parker and Benson 2004). Given the stress likely to characterize adolescence (Henricson and Roker 2000), it is reasonable to expect parents to serve as a significant source of support during this period. Indeed, Papini and Roggman (1992) suggested that mutual trust and quality communication with parents may serve as buffers against the stresses of adolescence. In a similar manner, indicators of poor relationship quality between parents and adolescents may have negative implications for the children. For instance, the lack of parental affect may promote feelings of rejection among adolescents, thereby lowering their sense of selfesteem (Heinonen et al. 2003). A poor relationship between parents and adolescent may also reflect one less source of support during a very stressful life period. The implications of poor relationship quality with parents may be great given evidence suggesting the effects of parental support are more apparent for the self-esteem of adolescents than alternate sources of support (Heinonen et al. 2003).

When compared to younger children, adolescents report less trust and communication with their parents and turn more to peers to fulfill attachment needs (Nickerson and Nagle 2005). Given this evidence and adolescents'



increasing autonomy, a measure of parents' physical availability may prove to be a salient dimension of parenting for children this age (Pearson et al. 2006). Although parents' physical availability does not necessarily represent emotional availability (see Lum and Phares 2005), some research does indicate parents' physical presence/availability during mealtime and in the evening hours is associated with fewer behavioral problems (Hofferth and Sandberg 2001; Muller and Kerbow 1993). It is possible the simple availability of a parent reflects an available source of support and/or a potential source of guidance for adolescents. Parents' availability may serve as an indicator of guidance and structure to the adolescent, but without elements of more explicit parental control that are often associated with negative adolescent outcomes (Pearson et al. 2006). Based on prior research, the availability of support allows adolescents to meet the challenges of their life stage without added anxieties, thereby contributing to overall greater self-efficacy and less depression (Young et al. 2005). Indeed, the perception of the adolescent that help and encouragement are available from the parents may contribute to their self-esteem.

Self-esteem is an evaluation and view of one's own worth (Gecas 1971), and is an indicator of psychological well-being (Shek 1998). Self-esteem is also considered an important indicator of the success with which one handles the developmental period of adolescence (Barber et al. 1992). Thus far, research suggests parents are important influences on several child outcomes, but has yet to clearly establish if and how mothers and fathers jointly contribute to adolescent self-esteem. In this study we specifically assess maternal and paternal involvement, availability, and relationship quality. We tested for both maternal and paternal parenting using self-esteem as an indicator of adolescent psychological well-being. First, we hypothesized that greater parental involvement will contribute to higher levels of adolescent self esteem. Next, we hypothesized that greater parental availability will contribute to higher levels of adolescent self-esteem. Finally, we hypothesized that higher quality parent-child relations will contribute to higher levels of adolescent self-esteem. In order to provide a more complete portrait of how mothers and fathers combine to influence the self-esteem of adolescent children, we also tested potential interaction effects of mothers' and fathers' parenting.

## Method

Data and Sample

We utilized contractual data from the first wave of the National Longitudinal Study of Adolescent Health 1994 (Add Health). It was designed for the purpose of analyzing health-related behaviors of adolescents in grades 7–12. The data were collected between 1994 and 1995 from a sample of 80 high schools and 52 middle schools and consists of a nationally representative sample of 20,745 adolescents (see Harris et al. 2003). These data are appropriate for this study for three reasons. First, the data provide information about adolescent's relationships with each of his/her biological parents. Second, the data contains information on various elements of parent–child relationships, such as availability, involvement, and relationship quality. Third, the data include items that allow for an appropriate assessment of the adolescent's psychological well-being in terms of self-esteem.

Since we focus on the parental behavior within the nuclear family, the sample is restricted to respondents who report living in a household with both the mother and the father. Stepfamilies were excluded because it is likely the circumstances contributing to the formation of that family configuration would likely impact the well-being of the adolescent. Overall, this restriction resulted in a sample size of 10,331 before listwise deletion. The analytic sample consisted of almost 75% of white adolescents, about 8.7% blacks, 11.7% Hispanics, and 5.3% from other race and ethnicities (see Table 1). The average age of the sample was almost 16 years, whereas the gender composition of

Table 1 Weighted descriptive statistics of analytic sample

Variable	Range	Mean/percent	SD
Dependent variables			
Self-esteem	-18.02 - 5.67	0.16	0.07
Availability*	3–15		
Mother		12.29	2.37
Father		10.14	2.61
Involvement*	0–3		
Mother		0.74	0.80
Father		0.56	0.72
Quality*	4–20		
Mother		17.45	2.79
Father		16.75	3.33
Race/ethnicity			
White		74.36%	
Black		8.68%	
Hispanic		11.66%	
Other		5.30%	
Age		15.9	1.73
Female		51.5%	
Mother's education	1–9	5.44	0.59
Logged income		10.70	0.03
N = 10,331			

*Note*: Difference in means for mothers and fathers, \* p < .05



the sample is 52% female and 48% male. The average level of mother's education was 5.43, which represents at least a GED level education, and the average household income was approximately \$44,300. The mean was substituted for the 20% of the sample missing valid income data, and a dummy variable was utilized in the analyses to assess if the substitution had any effects. Results unanimously indicated there were no significant effects of this approximation. Thus, results without this indicator are presented in all of the tables.

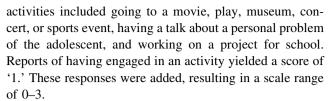
### Dependent Variable

We assessed the psychological well-being of adolescents in terms of self-esteem. This was measured by a six-item scale derived from adolescent's reports of how they felt emotionally in the past week and their levels of agreement with attitudes towards self (Longmore et al. 2004). The first two items include: (1) You felt you were just as good as other people, and (2) You thought your life had been a failure. Response categories ranged from rarely to all of the time. The remaining items include: (3) You have a lot of good qualities, (4) You have a lot to be proud of, (5) You like yourself just the way you are, and (6) You feel like you are doing everything just about right. The first two listed items have three response levels and the latter four have five response levels. Due to the disparity in response levels the items are standardized and then added to form a summative scale. Some items are reverse coded to reflect a scale where high values indicate high levels of self-esteem. The reliability of this scale is 0.77. This measurement contributes a more complete representation of feelings of self-worth by including items representing emotions, attitudes, and social comparison. Thus, this scale provides a global assessment of an adolescent's appraisal of self.

## Independent Variables

Adolescent reports of parental availability, parental involvement, and quality of parent—child relations represent the primary independent variables. Each element was measured for the mother and the father separately. The score of parental availability is represented by the adolescent's responses to three items assessing whether the parent is home when the adolescent leaves for school, returns from school, and goes to bed (South et al. 2005). Response categories range from (1) never to (5) always. The score of availability is the sum of the responses to the aforementioned items.

The levels of parental involvement were assessed by adolescent reports to three items. These items measured reports of whether or not, in the past week, the adolescent engaged in the selected activity with the parent. These



The quality of parent-child relations was assessed by four items. This score is derived from the adolescent's reports of how close they feel to their parents, if their parents are warm and loving to them, if they had good communication with their parents, and if they had good relationship with their parents. Response categories range from (1) not at all to (5) very much. The two items are added for this measure that has a range from 4 to 20. The reliability of this scale is 0.86.

## Control Variables

The analyses also included a set of control variables potentially related to the psychological well-being of adolescents. First, it is necessary to acknowledge that characteristics representing one's socioeconomic status may promote life stressors, thereby influencing levels of self-esteem. These characteristics include (logged) family income (Longmore et al. 2004) and the mother's educational attainment. Mother's education may be the primary indicator of human capital in the home (Entwisle and Astone 1994). Finally, race, gender, and age are three characteristics of the adolescent included as control variables. Research suggests female adolescents report lower levels of self-esteem than males, while self-esteem may be more stable among older adolescents than younger adolescents (Chubb and Fertman 1997). In addition to measures of age and gender, a series of dummy variables were included that categorize whites, blacks, Hispanics, and "other."

## Plan of Analyses

First, we discuss the zero-order correlations and descriptive statistics of the primary independent variables and dependent variables. Then, we estimate a series of models to test the hypotheses. Using ordinary least squares regression, the same models are estimated for each of the parenting elements examined: availability, involvement, and quality of parent—child relations. First, we tested the zero order effects of the mother's influence. Then, we tested a model that includes the influence of the mother and sociodemographic characteristics of the parents and adolescent. In order to assess the potentially independent and incremental influence of the second parent in the household, we included in the final model a measure accounting for the father's influence on adolescent well-being. The previous



sequence was repeated by first adding variables related to father's influence. This was done in order to assess the independent variance each parent accounts for in adolescents' self-esteem, and to demonstrate the incremental variance gained by adding the other parent to the equation. Specifically, paternal parenting variables were added first in the zero order model, followed by the addition of the sociodemographic controls to the zero order model, and then followed by the addition of the maternal parenting variables to the sociodemographic variables.

### Results

Table 1 presents the means, frequencies, and standard deviations of the analytic sample across the primary independent and dependent variables. The mean level of self-esteem was 0.16, indicating rather healthy emotional well being among the adolescents (note: range of self-esteem is -18.02-5.67). Regarding parental availability, mothers had a score of 12.29 (range 3–15), while fathers were somewhat less available, represented by a mean of 10.13 (t=61.98, df = 20600, p<.01). Fathers appeared to be slightly less involved than mothers, as indicated by their scores of .56 and .74 (out of 3), respectively (t=16.36, df = 20600, p<.01). Adolescents reported rather high quality relationships with both parents, with a score of 17.45 for mothers and 16.75 (out of 20) for fathers (t=16.39, df = 20600, p<.01).

Table 2 Zero-order correlations of focus and dependent variables

	1	2	3	4	5	6	7
1. Self-esteem	_	.05*	.13*	.37*	.07*	.10*	.40*
2. Dad availability		_	.04*	.12*	.16*	.01	.10*
3. Dad involvement			_	.26*	.03*	.49*	.12*
4. Dad relationship				_	.10*	.07*	.48*
5. Mom availability					_	.03*	.12*
6. Mom involvement						_	.21*
7. Mom relationship							-

<sup>\*</sup> *p* < .05

Table 2 presents the correlation matrix for each of the parenting measures and adolescent self-esteem. Among the parenting variables, fathers' and mothers' relationship quality with the child yielded the strongest correlations with adolescent self-esteem (r = .37, r = .40, respectively). The remaining parenting measures also yielded significant, positive correlations with adolescent self-esteem.

Table 3 presents the ordinary least squares regression estimates predicting the self-esteem of adolescents based on parental availability. As expected, the first model showed that greater availability of the mother is associated with higher levels of self-esteem in the adolescent. The addition of the control variables in Model 2 did not undermine this effect. Thus, the first hypothesis of this study is supported: the parent's availability is positively associated with the self-esteem of the adolescent.

Table 3 OLS regression estimates of the effects of parental availability on adolescent self-esteem

	Model 1 Slope	Model 2 Slope	Model 3 Slope	Model 4 Slope	Model 5 Slope	Model 6 Slope	Model 7 Slope
Mother's availability	0.11***	0.13***	0.12***			0.12***	0.05
Father's availability			0.09***	0.10***	0.10***	0.09***	-0.01
Race/ethnicity							
White		_	_		_	_	-
Black		0.70***	0.69***		0.69***	0.69***	0.69***
Hispanic		-0.30	-0.33		-0.32	-0.33	-0.33
Other		-0.87***	-0.92***		-0.98***	-0.92***	-0.92***
Age		-0.12***	-0.12***		-0.14***	-0.12***	-0.12***
Gender							
Female		-1.32***	-1.31***		-1.30***	-1.31***	-1.31***
Male		_	_		_	_	-
Mother's education		0.15***	0.14***		0.13***	0.14***	0.14***
Logged income		0.17	0.21*		0.19*	0.21*	0.22*
Father * Mother (availability)							0.01
Constant	-1.18	-1.44	-2.65	-0.83	-0.78	-2.65	-1.82

*Note*: N = 10.331

Source: The National Longitudinal Study of Adolescent Health (1994)



<sup>\*</sup> p < .05; \*\* p < .01; \*\*\* p < .001

The third model of Table 3 indicates that the father's availability was also positively associated with the selfesteem of the adolescent, net of the mother's availability. This indicates the availability of the mother and the father independently relate to greater self-esteem in their adolescent children. A nested F-test between Models 2 and 3 (F = 37.27; df = 1, 10321) indicates the addition of father's availability in Model 3 significantly contributes to the explanation of adolescent self-esteem. This demonstrates the independent and incremental contribution of father's availability net of mother's availability and the socio-demographic controls. In the next series of models, father's availability was added first (Model 4), followed by the addition of the sociodemographic characteristics (Model 5), and in Model 6 mother's availability was added to Model 5. The results indicate that paternal availability is positively related to self-esteem. This effect remains stable after adding the sociodemographic controls. The next model (Model 6) reveals that mother's availability remains positively related to adolescent self-esteem accounting for father's availability. A nested F-test between Models 5 and 6 (F = 56.93, df = 1, 10321), shows the addition of mother's availability significantly contributes to the explanation of self-esteem. This indicates the independent and incremental contribution of the mother's availability to adolescent self-esteem net of father availability and sociodemographic controls. Subsequent analyses performed to account for a potential interaction

between mother's and father's availability proved to be non-significant.

Table 4 illustrates the significant association of parental involvement with adolescent self-esteem. The first model specifically shows greater involvement by the mother contributes to greater levels of self-esteem in the adolescent. This relationship persists with the addition of the control variables in model 2. Thus, the second hypothesis is supported: Greater parental involvement contributes to higher levels of adolescent self-esteem.

As shown in model 3 of Table 4, the addition of the measure of paternal involvement is also significant. These results suggest greater levels of father's involvement are associated with higher levels of self-esteem among adolescents. A nested F-test between Models 2 and 3 (F = 47.38; df = 1, 10321) indicates that the addition of father's involvement in Model 3 significantly contributes to the explanation of self-esteem. This demonstrates the independent and incremental contribution of father's involvement net of mother's involvement and the sociodemographic controls. In the next series of models, father's involvement was added first (Model 4), followed by the addition of the sociodemographic characteristics (Model 5), and in Model 6 mother's involvement is added to Model 5. The results indicate paternal involvement is positively related to self-esteem. This effect remained stable after adding the sociodemographic controls. The next model (Model 6) reveals that mother's involvement is positively

Table 4 OLS regression estimates of the effects of parental involvement on adolescent self-esteem

	Model 1 Slope	Model 2 Slope	Model 3 Slope	Model 4 Slope	Model 5 Slope	Model 6 Slope	Model 7 Slope
Mother's involvement	0.45***	0.46***	0.28***			0.28***	0.14
Father's involvement			0.40***	0.70***	0.55***	0.40***	0.19
Race/ethnicity							
White		_	_		-	_	_
Black		0.73***	0.75***		0.75***	0.75***	0.75***
Hispanic		-0.29	-0.29		-0.28	-0.29	-0.29
Other		-0.83**	-0.82**		-0.85***	-0.82**	-0.81***
Age		-0.12***	-0.11***		-0.12***	-0.11***	-0.11***
Gender							
Female		-1.41***	-1.33***		-1.26***	-1.33***	-1.32***
Male		_	_		-	_	_
Mother's education		0.12***	0.12***		-0.12***	0.12***	0.11***
Logged income		0.08	0.06		-0.07	0.06	0.06
Father * Mother (involvement)							0.19**
Constant	-0.17	0.94	0.92	-0.23	0.89	0.92	0.96

*Note*: N = 10,331

Source: The National Longitudinal Study of Adolescent Health (1994)

<sup>\*</sup> p < .05; \*\* p < .01; \*\*\* p < .001



related to adolescent self-esteem accounting for father's involvement. A nested F-test between Models 5 and 6 (F = 28.63, df = 1, 10321), shows that the addition of mother's involvement significantly contributes to the explanation of self-esteem. This indicates the independent and incremental contribution of maternal involvement variable net of father involvement and socio-demographic controls. Furthermore, there is a significant interaction effect between mother's and father's involvement where greater levels of either maternal or paternal involvement reinforce the positive associations with self-esteem. At greater levels of maternal or paternal involvement, the association of the other parent's involvement with adolescent self-esteem remains positive and grows stronger.

The final hypothesis of this study was tested with the models presented in Table 5. The first model of Table 5 reflects the quality of the relationship between adolescents and their mothers significantly relates to the self-esteem of the adolescent. The higher quality of the relationships, the greater is the self-esteem of the child. This relationship persists with the addition of the control variables in Model 2. Thus, the third hypothesis of this study is supported: the quality of the parent—child relationship and adolescent self-esteem is positively associated.

Model 3 of Table 5 demonstrates that the addition of the measure accounting for the quality of the father-child relationship is also significant. The higher the quality of relations with the father, the greater the levels of self-

esteem exhibited by the adolescent. A nested F-test between Models 2 and 3 (F = 490.93; df = 1, 10321) indicates that the addition of father's relationship quality in Model 3 significantly contributes to the explanation of selfesteem. This demonstrates the independent and incremental contribution of father-adolescent relationship quality net of mother's relationship quality and socio-demographic controls. In the next series of models, father's quality was added first (Model 4), followed by the addition of the sociodemographic characteristics (Model 5), and in Model 6 mother's relationship quality was added to Model 5. The results indicate that paternal quality is positively related to self-esteem. This effect remains stable after adding the sociodemographic controls. The next model (Model 6) reveals that mother's quality is positively related to adolescent self-esteem accounting for father's quality. A nested F-test between Models 5 and 6 (F = 705.63, df = 1, 10,321), shows that the addition of mother's relationship quality significantly contributes to the explanation of self-esteem. This indicates the independent and incremental contribution of the mother's quality variable net of father quality and socio-demographic controls. Furthermore, there is a weak, yet significant, mother and father interaction effect with adolescent self-esteem. At greater levels of maternal or paternal relationship quality, the correlation of the second parent's relationship quality with adolescent self-esteem remains positive and grows stronger.

Table 5 OLS regression estimates of the effects of parent-child relations on adolescent self-esteem

	Model 1 Slope	Model 2 Slope	Model 3 Slope	Model 4 Slope	Model 5 Slope	Model 6 Slope	Model 7 Slope
Mother's quality	0.51***	0.48***	0.35***			0.35***	-0.10
Father's quality			0.24***	0.41***	0.39***	0.25***	-0.23*
Race/ethnicity							
White		_	_		_	_	-
Black		0.63***	0.68***		0.75***	0.68***	0.69***
Hispanic		-0.21	-0.14		-0.12	-0.14	-0.15
Other		-0.74**	-0.73**		-0.83***	-0.73**	-0.72***
Age		-0.01	-0.05		-0.01	-0.05	0.05*
Gender							
Female		-0.97***	-0.88***		-1.01***	-0.88***	-0.88***
Male		_	_		_	_	_
Mother's education		0.13***	0.12***		0.12***	0.12***	0.12***
Logged income		0.14	0.11		0.09	0.11	0.11
Father * Mother (Quality)							0.03***
Constant	-8.68	-9.78	-12.11	-6.64	-7.40	-12.11	-4.95

*Note*: N = 10,331

Source: The National Longitudinal Study of Adolescent Health (1994)



<sup>\*</sup> p < .05; \*\* p < .01; \*\*\* p < .001

#### Discussion

We extended existing literature by illustrating if and how mothers and fathers each relate to the self-esteem of their adolescent children. Our results make clear the parenting of both mothers and fathers each independently relates to the self-esteem of their adolescent children through involvement, quality relationships, and availability. Beyond the significant main effects of both mothers and fathers, we also provide evidence of important interactive effects between maternal and paternal involvement and relationship quality on adolescent self-esteem. In sum, our study affirms conceptions of family as an important arena in which adolescent children derive their perceptions of self-worth (Gecas and Schwalbe 1986; Parker and Benson 2004).

Parental availability, among both mothers and fathers, each significantly contributes to the self-esteem of adolescents. Consistent with our hypothesis, greater parental availability is associated with higher levels of self-esteem. This finding appears to support the notion children may benefit by knowing sources of support are available to them, regardless of whether these resources are tapped. It may also be true parental availability reflects a degree of structure and guidance in the lives of adolescents that serves to build and maintain higher levels of self-esteem. Ultimately, the positive associations of parents' physical availability represent a stark contrast to the known negative influence of parental intrusiveness on adolescent emotional well-being (McFarlane et al. 1995).

We also provide evidence of the importance of the relationship between parental involvement and adolescent self-esteem. As hypothesized, greater parental involvement, for both mothers and fathers, is associated with higher levels of self-esteem. Given the range of items comprising our parental involvement measure, we observe these results to suggest that both instrumental and recreational modes of involvement benefit the psychological well-being of their adolescent children. At the same time, given the cross-sectional nature of the study, it is also possible adolescent children with high self-esteem facilitates greater parental involvement. It is possible the significant correlations support the assertion of Gecas and Schwalbe (1986) that parental involvement is a means to convey to children indicators of their own self-worth. Moreover, the correlations appear to support the expected value of parents' relationship to adolescent self-esteem despite the ostensible ambiguity in parenting roles during adolescence (Henricson and Roker 2000) and the increasing autonomy of adolescents (Shearer et al. 2005). This finding is especially salient given the involvement of both mothers and fathers each independently relate to adolescent self-esteem. In addition, the assessment of the interaction effect reveals an apparent synergistic parental relationship where adolescent self-esteem is exponentially higher when concurrent levels of mother and father involvement are high. Taken together, the results demonstrate the involvement of both mothers and fathers independently and interactively correlate with the self-esteem of their adolescent children.

As hypothesized, the results also show both maternal and paternal relationship quality to be positively linked to adolescent self-esteem. Specifically, our assessment illustrates positive relationships with mothers and fathers independently and significantly correlate with the selfesteem of the adolescent children. This set of findings may reflect the fact that parents, especially when relations are high quality, are in position to serve as a buffer against the stresses of adolescence (Papini and Roggman 1992). A significant interaction in parents' relationship quality with children suggests the positive correlation with self-esteem remains positive and grows stronger when the relationship quality with each parent is high. However, this effect is relatively small in magnitude and should be interpreted with caution. Given the likelihood that high quality relations with one parent occur concurrently with high quality relations with the other parent, future research is needed to assess adolescent self-esteem when parental relationships are uneven in quality.

It is important to acknowledge the limitations inherent in our study. First, the design of our study is cross-sectional. Although prior longitudinal assessments provide support for the likelihood that parenting is a causal influence of child self-esteem, proper attention should be paid to the likelihood the child's self-esteem may influence parenting. In terms of the parenting dimensions in this manuscript, it is important to acknowledge higher adolescent self-esteem may facilitate greater parental involvement and also have positive implications for parent-child relationship quality. It appears less likely positive adolescent self-esteem would contribute to greater physical (versus emotional) parental availability. While testing for causality using path modeling is beyond the scope of our study, it does warrant inclusion in future research. In addition, although the scope of our study was purposely restricted to the assessment of adolescents in nuclear families, it is therefore limited in its ability to generalize to the outcomes of adolescents in alternate family forms. Given the notable family instability characterizing many other family forms, including cohabitation and step-families, it is likely the family transitions experienced by children in these families also serve to disrupt the availability, involvement, and support of parental figures. Future research is needed to more clearly establish the roles parental figures outside of nuclear family structures play in the self-esteem of adolescent children.



In sum, our research contributes to the literature by assessing the independent and interactive association's mothers and fathers have with adolescent self-esteem. Indeed, the results make clear the availability, involvement, and relationship quality of both the mother and father all are significantly and positively related to the self-esteem of their adolescent children. In addition to the substantive findings of these results, these findings also illustrate the methodological value in accounting for both maternal and paternal influences on adolescent adjustment (Milevsky et al. 2007). Future research on adolescent outcomes will further benefit with assessments of mothering and fathering in terms of monitoring, time-sensitive measures of involvement, and discipline.

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