

NIH Public Access Author Manuscript

oc Sci Res. Author manuscript; available in PMC 2012 November 05.

Published in final edited form as:

Soc Sci Res. 2012 March ; 41(2): 489-498. doi:10.1016/j.ssresearch.2011.08.001.

Parenthood and Psychological Well-Being: Clarifying the Role of Child Age and Parent-Child Relationship Quality

Kei M. Nomaguchi

Department of Sociology, Bowling Green State University, Bowling Green, OH 43403, Phone: 419-372-8147, Fax: 419-372-8306

Kei M. Nomaguchi: knomagu@bgsu.edu

Abstract

Although recent scholarship has emphasized the importance of examining the rewards of raising children in understanding variations in psychological consequences of parenthood, empirical research remains focused on the demands of parenthood. Using a sample of parents with children aged 0 to 22 in the National Survey of Families and Households (N= 6,228), this paper examines the association between age of children and parental psychological well-being, focusing on a key element of rewards of parenthood, parental relationship satisfaction with their children, as a mediator of the link. Findings indicate that parents whose oldest child is under age five report higher satisfaction with the relationship with their children, higher self-esteem, higher self-efficacy, and less depression than do parents whose oldest child is school-age or adolescent. When parental satisfaction is taken into account, the differences in self-esteem, self-efficacy, and depression by age of children disappear.

Keywords

depression; gender; happiness; life stage; parental satisfaction; self-concept

1. Introduction

Psychological consequences of parenthood have been of great interest to family and mental health scholars (Umberson, Pudrovska, and Reczek, 2010) and the broader audience outside the academia (Senior, 2010). Although researchers tend to argue that having children is detrimental for adult psychological well-being when children are under age 18, empirical evidence has not always supported this argument (Umberson, Pudrovska, and Reczek, 2010). For the lack of strong empirical evidence, scholars have suggested two possibilities: (1) the influences of rewards of raising children may cancel the influences of the burdens of raising children on psychological well-being, and (2) there may be substantial variations among parents in experience of demands and rewards of raising children by social and life contexts (Umberson, Pudrovska, and Reczek, 2010). Yet explicit examination of the rewards of parenthood has been limited, and much remains unknown about variations among parents.

Age of children is one context that deserves more attention. The nature and levels of burdens and rewards of being a parent may vary considerably by whether children are under school age, school age, teenagers, or young adults (Galinsky, 1987; Pearlin, 1983). Yet little research has investigated variations in parental well-being by age of children beyond the simple dichotomy of minor or adult children. On the basis of other research that has emphasized stressfulness of daily routines of caring for children under school-age (e.g., Goldsteen and Ross, 1989), researchers tend to assume that parental well-being may be worse before children start to go to school. Shifting the focus from strains to rewards, however, I argue that emotional benefits that parents gain from the relationship with their children, such as affection, stimulation, and new life meaning, are greatest when children are little. Thus parenthood while all children in the home are under school age may be *less* detrimental for adult psychological well-being than when children move into school age, adolescence, or early young adulthood. This prediction is examined using a sample of parents with the oldest child aged 0 to 22 drawn from the National Survey of Families and Households (NSFH).

2. Background

2.1. Previous studies on parenthood and psychological well-being

Two contrasting views of parenthood have motivated the research on the association between parenthood and adult psychological well-being. One focuses on the strains of the responsibility of raising children, whereas the other emphasizes the rewards that children bring in adults' lives (Bird, 1997; Nomaguchi and Milkie, 2003). A popular notion is that the demands may outweigh the rewards when children are minor, whereas the rewards may exceed the demands when children are far into adulthood (Umberson, Pudrovska, and Reczek, 2010). Although some studies had found support for this notion, at least for parents with minor children (e.g., Evenson and Simon, 2005), empirical evidence is inconsistent with several studies indicating no differences between parents and nonparents and some studies showing better well-being outcomes for parents than nonparents (see literature reviews in Bird, 1997; Koropeckyj-Cox, 2002; Nomaguchi and Milkie, 2003).

The lack of strong empirical evidence of detrimental or enhancing effects of children for adult psychological well-being led to the following two speculations. First, parenthood is both burdensome and rewarding, which may cancel out each other (Bird, 1997). Quantitative studies have largely focused on strains, however. Thus further research is needed to examine the effects of the rewards of parenthood on adult psychological well-being (Umberson, Pudrovska, and Reczek, 2010). Second, there may be considerable variations among parents in the extent that parenthood is burdensome or rewarding, which is largely shaped by social and life contexts surrounding the parents (Evenson and Simon, 2005). Empirical research has investigated variations in contexts by sociocultural factors such as gender, marital status, and race/ethnicity (Umberson, Pudrovska, and Reczek, 2010).

Researchers generally agree that the life stage is a crucial context that influences psychological consequences of parenthood (Evenson and Simon, 2005; Umberson, Pudrovska, and Reczek, 2010). Nonetheless, very little attention has been paid to variations beyond differences between minor and adult children. For an exception, Umberson (1989) examined four age categories of children including at least one child under six, youngest child 6 - 11, youngest child 12 - 18, and youngest child over 18. She found no differences among these four groups of parents in well-being outcomes such as psychiatric symptoms and life satisfaction.

From a demand perspective—a conventional approach in this area—the finding that there was no difference in psychological well-being by age of children is somewhat perplexing. Strains of raising children include the needs for additional income, difficulty in arranging child care, and marital conflict (Ross and Van Willigen, 1996). Much evidence has documented that parenthood in these aspects is particularly stressful when children are very young. Parents with preschool children are more likely than parents of older children to be overwhelmed with the amount of work involved in daily routines of caring for children (Scharlach, 2001) and experience an intense work-family conflict (Nomaguchi, 2009). The transition to parenthood often involves an increased marital conflict (Nomaguchi and Milkie, 2003) with changes in the division of household labor (Cowan and Cowan, 1992)

and the decline in leisure time as a couple (Claxton and Perry-Jenkins, 2008). In addition, young children constrain parents' personal freedom (Goldsteen and Ross, 1989) and participation in adult social networks (Munch, McPherson, and Smith-Lovin, 1997). This line of research leads to a prediction that having pre-school children may be related to the lower psychological well-being of adults.

In her study mentioned above, Umberson (1989) concluded that parent-child relationship quality, measured by parental satisfaction with the relationship with their children, had a greater influence on parental psychological well-being than objective measures of contexts such as the age of children. From the demand-reward perspective, relationship satisfaction with the child reflects an important element of rewards of being a parent. I argue that this psychological reward may be the key to understanding variations in parental psychological well-being by age of children. Parents with pre-school children may be more likely than parents with school-age, adolescent, or early young adult children to experience higher levels of relationship satisfaction with children, thus may report better psychological well-being. In Umberson's study, the inclusion of this variable in the analysis might have "explained away" the associations between age of children and parental well-being. In the next section, I discuss this prediction in more detail.

2.2. Age of children, parental satisfaction with children, and psychological well-being

Recent scholarship on childbearing and parenthood has emphasized that emotional aspects of parent-child relationships have increasingly become central to understanding rewards of parenthood in contemporary U.S. society. Demographers have contended that adults in advanced economies have children for emotional satisfaction, such as joy of watching children grow, love that children show, and life meaning (Morgan and King, 2001). Beck and Beck-Gernsheim (1995) argued that adults in a highly industrialized society have children to fulfill the needs for emotional intimacy, such as being affectionate, sensual, open, and creative, that they miss in the workplace where people are expected to behave rationally and efficiently.

How might parents' emotional satisfaction with the relationship with their children vary by age of children? Quantitative studies that explicitly examined this question are rare, although in the 1970s, survey researchers found that parental satisfaction with the relationships with their children decline as children age (Hoffman and Manis, 1978; Veroff and Feld, 1970). There is much qualitative evidence that emphasizes that parents enjoy the close relationships with their children when children are young. In Cowan and Cowan's (1992) study on new parents, after the initial shock of the transition to parenthood, parents expressed feeling special and reported increased self-esteem. Among Canadian women with pre-school age children, McManon (1995) found that a majority of mothers, regardless of social class, reported having a special relationship with their children and enjoying being with their children as rewards of parenthood. In Stone's study (2007) that focused on women with professional careers, mothers expressed that they "fell in love" with their children (p. 44). In Edin and Kefalas's study (2005) on unmarried mothers in a poor community, a mother described her relationship with her child as follows: "The best part [is] I got somebody that I can say that's *mine*. I know he gonna be there with me and for me. I know that he got love for me, and I got love for *him*. We can do things *together*. We have that type of bond (p. 176)."

Once children begin to go to school, however, emotional intimacy in parent-child relationships begins to decline for several reasons. First, children's social worlds expand. Galinsky (1987) found that when children began to go to school, parents experienced an increased sense of separation from their children who spend more time with friends and discover their own interests. The separation also means the increasing possibility of peer

influence on their children that parents often believe as negative (Edin and Kefalas, 2005). The decline in the sense of intimacy with children and the increase in peer influence may affect parents' satisfaction with the relationships with their children negatively. Second, some children begin to show difficulties such as behavioral problems in school, academic failure, and the inability to get along with other children. Such problems, actual or imagined, may lead to more tension between a parent and a child.

Much research has documented that the adolescent years (i.e., ages 12 to 17) are the period when children increasingly strive for autonomy, thus parent-child relationships become more distant (Buhrmester and Furman, 1987; Shanahan, McHale, Crouter, Osgood, 2007). Teenagers spend much less time with their parents than younger children (Milkie, Mattingly, Nomaguchi, Bianchi, and Robinson, 2004; Yeung, Sandberg, Davis-Kean, Hofferth, 2001). Adolescents prefer peers to parents for their main sources of intimacy and emotional support (Furman and Buhrmester, 1992; Nomaguchi, 2008). Adolescents also become more assertive with parents, questioning their parents' rules and practices (Grotevant and Cooper, 1986). In addition, this period is marked with the increased engagement of risk-taking behaviors such as substance use (Furstenberg, 2000). Many parents are wary of adolescents' behavior, remaining responsible for monitoring and setting limits for their teenagers' behaviors (Kurz, 2006), which may lead to more open conflict and arguments between parents and children.

Whether the quality of parent-child relationship improves during the child's early young adult years has been debated. Some researchers have reported that parents' perceptions of the quality of the relationship with their children would become more positive during early young adult years (i.e., ages 18 to 22) as children mature (Thornton, Orbuch, and Axinn, 1995). Many parents, however, continue to provide financial assistance for their grown-up but dependent young adult children, such as college tuitions and other expenses (Schoeni and Ross, 2004), and adult children's financial dependency may lead to increased tension in the parent-child relationship (Aquilino and Supple, 1991). The parent-child relationship quality during this period may depend on whether children live in their parents' home, although the pattern is unclear. Coresidence may lead to more frequent open disagreements between parents and children over children's share of household chores, life style, or behavior, in part because it violates the normative expectation of adult children's independent living. In contrast, because of the trend of prolonged transition to adulthood, having coresident adult children during children's early young adulthood may have become somewhat normative (Swartz, 2009). Instead, adult children's independent living may lead to a decline in parent-child shared activities and communication, which can be a source of parents' dissatisfaction with the relationship with their children. Examining a sample of parents of adult children aged 18 to 24, Aquilino (1997) reported that children's leaving home was related to parents' reports of less conflict but also less emotional closeness with their children.

In sum, previous research suggests that parents' perceptions of the quality of the relationship with their children may be highest when children are very little. In addition to Umberson's (1989) study mentioned earlier, a number of studies have shown that better quality of parent-child relationships is related to better psychological well-being of parents (Koropeckyj-Cox, 2002; Milkie, Bierman, and Shieman, 2008). Thus I expect that because of higher levels of satisfaction with the relationship with their children, parents with pre-school children will report better psychological well-being than do parents with school-age, adolescent, or early young adult children.

2.3. Age of the oldest child as a benchmark of parental stages

Although Umberson (1989) used the age of the youngest child as a benchmark of parental stages, the present study uses the age of the oldest child. First-born children are part of the parental learning curve, whereas transitions of younger children are less novel, thus may have less impact on parents' well-being (Menaghan, 1983). There is much empirical evidence suggesting that parenting practice and parent-child relationship quality differ between first-born and later-born children. Guzzo and Lee (2008) found that parents of first-born children are more likely to breastfeed their children, although they are also more likely to spank their children, than parents with later-born children. Kohler, Behrman, and Skytthe (2005) found that the first-born child has a greatest positive effect on global happiness for mothers. Shanahan et al. (2007) found that first-born children at any given developmental stage from middle childhood to late adolescence. On the basis of the "novelty" hypothesis, I use the oldest child's age as a marker of parental stage that shapes the demands and rewards of children.

2.4. Variations by gender

Research has shown a persistent gender gap in parental involvement in children's lives. Mothers are more likely than fathers to spend time with children, monitoring their children's lives, and orchestrating their children's academic and leisure activities (Bianchi, Robinson, and Milkie, 2006; Hawkins, Amato, and King, 2006). Time diary data have shown that the gender gap in parental involvement is more pronounced when children are pre-school age (Yeung et al., 2001). How a greater involvement in children's daily routines is related to parents' psychological well-being is debatable. From the demands perspective, because more involvement means more demands of time and energy, the benefits of young children may be lower for mothers than for fathers. Gove and Geerken (1977) found that among married parents, mothers with at least one child under age five showed more psychiatric symptoms than mothers whose youngest child was older, although for men, the opposite pattern was found: younger children were related to lower psychiatric symptoms for fathers. Alternatively, from the rewards perspective, spending time with their children may allow parents to bond with their children. If so, the psychological benefits of having pre-school children may be greater for mothers than for fathers.

3. Present Study

This study examines the association between age of children and adult psychological wellbeing from under school age to early young adulthood, including depression, global happiness, self-esteem, and self-efficacy. Self-esteem, the extent to which people see themselves as a person of worth (Rosenberg, 1986), and self-efficacy, the extent to which people feel they have control over what happens in their lives (Downey and Moen, 1987), are indirect indicators of psychological well-being; these personal resources play an important role in buffering stress from affecting subjective and psychological well-being (Pearlin, 1989).

In contrast to prior research, this study focuses on the role that parental reward plays in influencing parental psychological well-being, particularly on parental satisfaction with the parent-child relationship. I hypothesize that: (1) parents whose oldest child is under age five —before entering primary school including kindergarten—will report higher levels of satisfaction with the relationships with their children than parents with older children; (2) parents whose oldest child is under age five will report higher levels of psychological wellbeing than parents with older children; and (3) the differences in levels of psychological wellbeing by age of children will disappear when parental satisfaction with relationships

with their children is controlled for. Because of the importance of gender in shaping parental expectations and behaviors, I examine gender differences in the associations between child age and adult well-being. From the rewards perspective, I hypothesize that: (4) the greater psychological benefits of having pre-school children than having older children will be more pronounced for mothers than for fathers.

The present analysis controls for other factors that are related to the associations between age of children and parents' psychological well-being. Parents with older children are more likely to be older, have a greater number of children, and have non-resident children or stepchildren. Older parents tend to adjust better than younger parents to parenting demands (Cowan and Cowan, 1992). The number of children under age 18 living in the household (Ross and Huber, 1985), having stepchildren (Evenson and Simon, 2005), and having nonresident minor children (Evenson and Simon, 2005) are related to greater strains of parenting. Parents with pre-school children have lower family income than parents with older children, and the burden of children depends on employment status and financial conditions (Ross and Huber, 1985). Parents with higher levels of education have greater economic resources to avoid economic strains and other hardships related to parenting, but they also feel more burdened by children because of the greater opportunity cost (Goldsteen and Ross, 1989). Non-Whites, especially Blacks and Hispanics, are more likely than Whites to embrace parenthood as a source of happiness and life satisfaction (Milkie et al., 2008).

4. Method

4.1. Sample

Data were drawn from the first wave of the National Survey of Families and Households (NSFH) (Sweet and Bumpass, 1996). NSFH is a U.S. national probability sample of 13,007 respondents, collected in 1987–1988, with oversamples of minorities, single-parent families, stepfamilies, cohabiting people, and recently married people. The response rate was 74%. This survey had a unique advantage that serves the purpose of the present study. Parents were asked how they felt about their relationships with each of the children they had, regardless of the types of relationships (e.g., biological, step, adoptive) or living arrangements (e.g., resident, nonresident). Most survey research asks parents about their relationship satisfaction with one focal child or overall levels of satisfaction with their relationships with all of their children. This is problematic for the present study because it focused on parents' relationship satisfaction with their oldest child. Among the 9,835 respondents who had living biological or stepchildren of any age, either living in their household or elsewhere, 8,961 parents (91%) answered the question that asked how they felt about the relationships with each of their children. Because the present analysis focuses on the life stages before children reach far into adulthood, I selected those whose oldest child was 22 years old or younger. This resulted in the sample size of 6,228.

4.2. Measures

Table 1 presents descriptive statistics of all measures. Psychological well-being included the following four indicators. *Depression* was the 12-item version of the Center for Epidemiological Studies Depression scale (CES-D; Radloff 1977) ($\alpha = .93$). *Global happiness* was measured by the question, "Taking things all together, how would you say things are these days? (1 = very unhappy to 7 = very happy). *Self-esteem* was the average score of three items from Rosenberg's (1986) self-esteem scale ($\alpha = .63$): (a) "On the whole, I am satisfied with myself," (b) "I am able to do things as well as other people," and (c) "I feel that I'm a person of worth, at least on an equal plane with others" (Rosenberg, 1986). The response categories ranged from 1 = strongly disagree to 5 = strongly agree. *Self-efficacy* was one item from an efficacy scale used in previous studies (Downey and Moen,

Parental satisfaction with the relationship with the oldest child was measured by the question, "How would you describe your relationship with each of these children?" The response categories ranged from 1 = very poor to 7 = excellent. This variable was created by linking the information about each child's household member number and age.

Age of oldest child was measured as four dummy variables, including preschool years (0 - 4, 18.3%), school ages (5 - 11, 25.6%), adolescent years (12 - 17, 24.0%), and early young adulthood (18 - 22, 32.2%). I used age five as the cut-point for school age because many children begin to go to kindergarten around age five. I used age 12 as the cut-point for adolescence because the average age at which children begin to go to middle-school or junior-high school is around age 12. The early young adulthood group was divided into two groups: living in the household (19.8%) and living elsewhere (12.4%). *Gender* is a dichotomous variable (1 = mothers). The sample consists of 54.5% mothers and 45.5% fathers.

Controls—The number of children under age 18 living in the household ranged from 0 to 14, with the mean of 2.8 children. About 12 percent had nonresident biological children under age 18, and 13.6 percent had stepchildren. Age was measured in years, which ranged from 16 to 76, with the average of 37.8. Race/ethnicity was a dichotomous variable (1 = non-White), with 22.8% non-White. Marital status was measured as three dummy variables, including married (78.5%), cohabiting (4.4%), and single (17.1%). Education was measured as completed years of schooling, ranging from 1 to 20, with the average of 12.7 years. Weekly hours of paid work was measured by respondents' self-report about a usual week, ranging from 0 to 95 hours, with the average of 30.8 hours per week. Household income was measured in thousands of dollars. The mean household income was \$40,370.

4.3. Missing data

Some of the independent and control variables had missing data. Most variables were missing less than 1% of the sample, with the largest percentage in household income (19%). To address missing data, I performed the multiple imputation (MI) procedure described by Allison (2001), using the regression method in SAS with five imputations. For the well-being variables, missing data were not imputed. Thus, the number of cases in the regression analysis varied depending on the dependent variable. Those who dropped out of the analysis, because satisfaction with the parent-child relationship or dependent measures had missing data, were more likely to be younger, men, cohabiting or single, and have fewer children and less likely to have stepchildren, nonresident minor children, and coresident adult children.

4.4. Analytical plans

First, I used ordinary least-squares (OLS) regression models to examine the associations between age of the oldest child and parents' satisfaction with the relationships with their children, with parents whose oldest child was under age five as the omitted reference group. Then, I examined the associations between age of the oldest child and parents' levels of depression, global happiness, self-esteem, and self-efficacy. For each outcome, two models were examined. Model 1 examined the association between the age of the oldest child and a well-being outcome with control variables. Model 2 added parents' satisfaction with the relationship with the child to Model 1 to examine whether the link between the age of the oldest child and psychological well-being would be explained by differences in satisfaction in the parent-child relationship. Note that I examined another model that tested gender differences by adding interaction terms between gender and each dummy variable of the age

of the oldest child. Because there were no significant findings, I decided not to present the results in tables (results are available upon request). All analyses used weighted data.

5. Results

5.1. Age of children and parental relationship satisfaction with children

Table 2 presents the results of OLS regression models for parental satisfaction with relationships with the oldest child. It indicates that parents whose oldest child was under age five reported a higher level of satisfaction with their children than parents whose oldest child was school-age, adolescent, or early young adult. These findings suggest that, as hypothesized, parents are more likely to perceive the relationships with their children as excellent before children enter school than when children are older.

5.2. Age of children and psychological well-being

Table 3 presents the results from the multivariate analyses on the associations between the age of the oldest child and depression, global happiness, self-esteem, and self-efficacy, respectively. For depression, Model 1 indicates that parents whose oldest child was schoolage or adolescent showed higher levels of depression than did parents whose oldest child was under age five (p < .05). Parents whose oldest child was a young adult, regardless of coresident status, showed no difference in levels of depression with parents whose oldest child was under age five. Model 2 indicates that a higher level of parental satisfaction with the relationship with the oldest child was related to lower levels of depression. By adding the variable of parental satisfaction, the associations between the age of the oldest child and depression became nonsignificant. The difference in R^2 between Models 1 and 2 was significant (F[1, 4840] = 58.70, p < 0.001). These results indicate that having younger children was related to higher levels of parents' satisfaction with the relationship with their children.

Model 1 shows that there were no differences in levels of global happiness by the age of the oldest child. When parental satisfaction, which was positively related to global happiness, was included (Model 2), the coefficient for parents whose oldest child was a young adult living elsewhere became greater and significant (p < .05). The difference in R^2 between Models 1 and 2 was significant (F[1, 5467] = 159.06, p < 0.001). This means that the greater benefit of having young adult children who live independently for global happiness was "suppressed" by lower satisfaction with the relationships with the children. In other words, if parental satisfaction with the relationships with their children was at the same level, parents whose oldest child was a young adult living elsewhere would have shown higher levels of global happiness than parents whose oldest child was under age five.

For self-esteem, parents whose oldest child was school-age (p < .01), adolescent (p < .01), or a young adult living in the household (p < .001) reported lower self-esteem than parents whose oldest child was under age five. There was little difference in the levels of selfesteem between parents whose oldest child was under age five and parents whose oldest child was a young adult living outside of the home. A higher level of parental satisfaction with relationships with children was related to a higher level of self-esteem (Model 2). When parental satisfaction was controlled for, the differences between parents whose oldest child was under age five and whose oldest child was school age or adolescent disappeared. The difference in R^2 between Models 1 and 2 was significant (F [1, 5855] = 105.66, p <0.001). As found in the case of depression, the higher levels of self-esteem for parents with younger children than for parents with school-age or adolescent children were explained by the higher levels of satisfaction with the relationships with their children for parents with younger children. The lower level of self-esteem for parents with a young adult living in the

Finally, parents whose oldest child was school-age or adolescent reported lower selfefficacy than parents whose oldest child was under age five (p < .05, Model 1). A higher level of satisfaction with the parent-child relationships was related to a higher level of selfefficacy (Model 2). After controlling for parental satisfaction, the differences in the levels of self-efficacy by age of children disappeared. The difference in R^2 between Models 1 and 2 was significant (F [1, 5936] = 63.30, p < .001), indicating that the higher levels of selfefficacy for parents with younger children than for parents with school-age or adolescent children were explained by the higher levels of satisfaction with the relationships with the children for parents with younger children.

6. Discussion and Conclusion

Recent scholarship of parenthood and adult psychological well-being has emphasized the importance of variations among parents by social and life contexts and the role of rewards of having children, in addition to the role of burdens of children, in understanding psychological consequences of parenthood (Umberson, Pudrovska, and Reczek 2010). Yet much remained unknown about variations among parents and explicit empirical research that focused on the rewards of children has been limited. The present study attempted to fill this gap in the literature, reevaluating an overlooked aspect of variations among parents—age of children. Special attention was given to parents' relationship satisfaction with their children as a key element of a reward of parenthood. I hypothesized that parents with preschool children would be psychologically better off than parents with school-age, adolescent, or young adult children, because of greater emotional benefits that parents gain from the close relationships with their children.

The findings generally supported this prediction for parents whose oldest child was under 18. Parents whose oldest child was under age five reported higher levels of satisfaction with the relationships with their children than did parents whose oldest child was school-age or adolescent. They showed lower levels of depression, higher levels of self-esteem, and higher levels of self-efficacy than parents whose oldest child was school-age or adolescent. Once parental satisfaction with relationships with children was taken into account, these differences in depression, self-esteem, and self-efficacy by age of children disappeared.

Although this paper focused on rewards of parenthood, alternative explanations based on the demands perspective would be worth investigating. It is possible that the types of strains and rewards of having children may vary by age of children and each type of strain or reward may not be related to psychological well-being in the same degrees. For example, parents with pre-school children may experience role overload due to the time intensive nature of daily routines of child care or inter-role conflict, especially difficulties in balancing work and family responsibilities. Parents with school-age or adolescent children may face interpersonal conflict with children and psychological strains such as worries or regrets regarding children's misconducts or their involvement in risk-taking behaviors (for different types of strains, see Pearlin, 1983). It could be that the latter types of strains (i.e., interpersonal conflict and psychological strains) associated with parenthood may have greater influences on psychological well-being than the former types of strains (i.e., role overload and inter-role conflict).

Caution is needed when interpreting the findings of the present study. It does not mean that we can ignore the intense time constraints that very young children require for adults.

Instead, the present analysis suggests that we should not overlook lower psychological wellbeing of parents when children become more independent. Pearlin (1983) argued that psychological burdens of parenting never end over the life course, although their types change considerably. Parents of school-age children are, for example, concerned about numerous behavioral issues of their children such as disrespectfulness, misbehavior in school, the failure to achieve acceptable grades, making friends with someone of undesired quality, and an inability to get along with other children. Parents of adolescents are concerned about issues such as the excessive consumption of alcohol and the use of illegal drugs. While strains of children may not decline, psychological rewards of parent-child relationships, which may modify the effects of burdens of parenting on psychological wellbeing, appear to decline. I was unable to investigate the changes in a unique combination of demands and rewards of children by age because of data limitation. NSFH, similar to other surveys, asked parents different questions about children's problems according to their children's age. Future research is needed to develop measures of parenting experiences that are comparable across different life stages.

Regarding parents with young adult children, findings showed only partial support for my hypotheses. As expected, parents whose oldest child was a young adult, regardless of coresident status, reported lower levels of satisfaction with the relationship with their children than parents whose oldest child was under age five. Yet, parents whose oldest child was a young adult, regardless of coresident status, showed little difference from parents whose oldest child was under age five in depression and self-esteem, whether or not parents' relationship satisfaction with their children was controlled for. For global happiness and self-esteem, results differed by coresident status. For parents whose oldest child was a young adult living elsewhere, I found a "suppressor effect" of parents' satisfaction with the relationship with their children on global happiness—after controlling for parents' relationship satisfaction with their children, parents whose oldest child was a young adult living elsewhere showed higher levels of global happiness than parents whose oldest child was under school age. With regard to parents whose oldest child was a young adult living in the household, they reported lower self-esteem than parents whose oldest child was under school age, even after controlling for parents' relationship satisfaction with their children. Adult children's leaving parental home is socially expected in U.S. society. Although having coresident young adult children has become common in recent decades as a necessary adaptation that families make to changing economic conditions (Swartz, 2009), the findings of the present analysis indicate that it may still be seen as a failure to make a normative transition to adulthood, which may have negative influences on parents' self-esteem. All in all, the findings of this study suggest that more nuanced analysis is needed to better understand the role that parent-child relationship quality plays in influencing parents' psychological well-being during children's young adult years.

Despite gender differences in levels of involvement in children's lives that other research has documented (e.g., Bianchi, Robinson, and Milkie, 2006), the present analysis found few gender differences in the associations between parental stages and well-being (data are available upon request). Involvement in children's daily lives can be both demanding and rewarding. The present analysis was unable to examine nuanced differences in fathers and mothers' involvement in childrearing and its influence on well-being. Further research is warranted to investigate gender differences in the balance between demands and rewards of involved parenting and its influence on well-being across different developmental stage of children.

This study has limitations that future research should address. First, because the present analysis used cross-sectional data, it did not examine changes in adult well-being from new parenthood throughout the oldest child's transition to adulthood. In addition, I was unable to

examine whether and how early experiences of parenting will affect later experiences. Second, for the same reason, I was unable to address the causal direction between parental satisfaction with relationships with children and psychological well-being. It could be that parents with higher depression and lower self-esteem might perceive the relationships with their children less satisfactory.

Future research should also investigate whether and how having multiple children across multiple life stages may create particular demands for parents. A majority of parents have multiple children, and some of them experience different developmental stages of the children at the same time (Galinsky, 1987). It is possible that a particular combination of the ages of the oldest and the youngest children might affect adults' lives differently, which in turn may result in differences in adult well-being (Menaghan, 1983). Although the present study focused on child's age as a context, the life course perspective emphasizes that parent's and child's lives are intertwined (Moen, 2003). The "fit" between contents in the life course of parents, such as age, occupational experiences, and child's well-being.

In conclusion, parenthood involves emotional benefits in addition to strains. This study contributes by focusing on the role of emotional benefits of children in influencing adult psychological well-being. Contrary to the common image that parents are drained by the intense daily routines of caring for young children, this study shows that parents with preschool children are not worse off, or even better in some measures of psychological well-being, than parents with school-age or adolescent children, because of higher satisfaction they experience with the relationships with their little ones.

Acknowledgments

An earlier version of this paper was presented at the 2010 Annual Meeting of the American Sociological Association in Atlanta. I would like to thank Melissa Milkie and Tetyana Pudrovska for their helpful comments on earlier versions of this manuscript.

References

Allison, PD. Missing Data. Thousand Oaks, CA: Sage; 2001.

- Aquilino WS. From adolescent to young adult: A prospective study of parent-child relations during the transition to adulthood. Journal of Marriage and the Family. 1997; 59:670–686.
- Aquilino WS, Supple KR. Parent-child relations and parent's satisfaction with living arrangements when adult children live at home. Journal of Marriage and the Family. 1991; 53:13–27.
- Beck, U.; Beck-Gernsheim, E. The Normal Chaos of Love. Malden, MA: Polity Press; 1995.
- Bianchi, SM.; Robinson, JP.; Milkie, MA. Changing Rhythms of American Family Life. New York: Russell Sage Foundations; 2006.
- Bird C. Gender differences in the social and economic burdens of parenting and psychological distress. Journal of Marriage and the Family. 1997; 59:809–823.
- Buhrmester D, Furman W. The development of companionship and intimacy. Child Development. 1987; 50:1101–1115. [PubMed: 3608659]
- Claxton A, Perry-Jenkins M. No fun anymore: Leisure and marital quality across the transition to parenthood. Journal of Marriage and Family. 2008; 70:28–43. [PubMed: 20224746]
- Cowan, CP.; Cowan, PA. When Partners Become Parents: The Big Life Change for Couples. New York: BasicBooks; 1992.
- Downey G, Moen P. Personal efficacy, income, and family transitions: A longitudinal study of women heading households. Journal of Health and Social Behavior. 1987; 28:320–333. [PubMed: 3680923]
- Edin, K.; Kefalas, M. Promises I Can Keep: Why Poor Women Put Motherhood Before Marriage. Berkeley, CA: University of California Press; 2005.

- Evenson RJ, Simon RW. Clarifying the relationship between parenthood and depression. Journal of Health and Social Behavior. 2005; 46:341–358. [PubMed: 16433280]
- Furman W, Buhrmester D. Age and sex differences in perceptions of networks of personal relationships. Child Development. 1992; 63:103–115. [PubMed: 1551320]
- Furstenberg FF. The sociology of adolescence and youth in the 1990s: A critical commentary. Journal of Marriage and the Family. 2000; 62:896–910.
- Galinsky, E. The six stages of parenthood. Cambridge, MA: Da Capo Press; 1987.
- Goldsteen K, Ross CE. The perceived burden of children. Journal of Family Issues. 1989; 10:504–526. [PubMed: 12282415]
- Gove WR, Geerken MR. The effect of children and employment on the mental health of married men and women. Social Forces. 1977; 56:66–76.
- Grotevant HD, Cooper CR. Individuation in family relationships: A perspective on individual differences in the development of identity and role-taking skill in adolescence. Human Development. 1986; 29:82–100.
- Guzzo KB, Lee H. Couple relationship status and patterns in early parenting practices. Journal of Marriage and Family. 2008; 70:44–61.
- Hawkins DN, Amato PR, King V. Parent-adolescent involvement: The relative influence of parent gender and residence. Journal of Marriage and Family. 2006; 68:125–136.
- Hoffman, LW.; Manis, JD. Influences of children on marital interaction and parental satisfactions and dissatisfactions. In: Lerner, RM.; Spanier, GB., editors. Child Influences on Marital and Family Interaction: A Life-Span Perspective. New York: Academic Press; 1978. p. 165-214.
- Kohler HP, Behrman JR, Skytthe A. Partner + children = happiness? The effects of partnerships and fertility on well-being. Population and Development Review. 2005; 31:407–445.
- Koropeckyj-Cox T. Beyond parental status: Psychological well-Being in middle and old age. Journal of Marriage and Family. 2002; 64:957–971.
- Kurz, Demie. Keeping tabs on teenagers. In: Gubrium, JF.; Holstein, JA., editors. Couples, Kids, and Family Life. New York: Oxford University Press; 2006. p. 84-103.
- McMahon, M. Engendering Motherhood. New York: Guilford Press; 1995.
- Menaghan E. Marital stress and family transitions: A panel analysis. Journal of Marriage and the Family. 1983; 45:371–386.
- Milkie MA, Bierman A, Schieman S. How adult children influence older parents' mental health: Integrating stress-process and life-course perspectives. Social Psychology Quarterly. 2008; 71:86– 105.
- Milkie MA, Mattingly MJ, Nomaguchi KM, Bianchi SM, Robinson JP. The time squeeze: Parental statuses and feelings about time with children. Journal of Marriage and Family. 2004; 66:738–760.
- Moen, P. It's About Time: Couples and Careers. Ithaca, NY: Cornell University Press; 2003.
- Morgan SP, King RB. Why have children in the 21st century? Biological predisposition, social coercion, rational choice. European Journal of Population. 2001; 17:3–20.
- Munch A, McPherson JM, Smith-Lovin L. Gender, children, and social contact: The effects of childrearing for men and women. American Sociological Review. 1997; 62:509–520.
- Nomaguchi KM. Change in work-family conflict among employed parents between 1977 and 1997. Journal of Marriage and Family. 2009; 71:15–32.
- Nomaguchi KM. Gender, family structure, and adolescents' primary confidants. Journal of Marriage and Family. 2008; 70:1213–1227.
- Nomaguchi KM, Milkie MA. Costs and rewards of children: The effects of becoming a parent on adults' lives. Journal of Marriage and Family. 2003; 65:356–374.
- Pearlin, LI. Role strains and personal stress. In: Pearlin, LI., editor. Psychosocial Stress. Academic Press; 1983. p. 3-32.
- Pearlin LI. The sociological study of stress. Journal of Health and Social Behavior. 1989; 30:241–256. [PubMed: 2674272]
- Radloff LS. The CES-D scale: A self-report depression scale for research in the general population. Applied Psychological Measurement. 1977; 1:385–401.
- Rosenberg, M. Conceiving the Self. Malabar, FL: Krieger; 1986.

- Ross CE, Huber J. Hardship and depression. Journal of Health and Social Behavior. 1985; 26:312–327. [PubMed: 4086755]
- Ross CE, Van Willigen M. Gender, parenthood, and anger. Journal of Marriage and the Family. 1996; 58:572–584.
- Scharlach AE. Role strain among working parents: Implications for workplace and community. Community, Work, & Family. 2001; 4:215–230.
- Schoeni, R.; Ross, K. Material assistance received from families during the transition to adulthood. In: Settersten, R.; Furstenberg, F.; Rumbaut, R., editors. On the frontier of adulthood: Theory, research, and public policy. Chicago: University of Chicago Press; 2004. p. 396-416.
- Senior, J. All joy and no fun: Why parents hate parenting. New York Times Magazine. 2010 Jul 4. Retrieved from http://nymag.com/news/features/67024/
- Shanahan L, McHale SM, Crouter AC, Osgood DW. Warmth with mothers and fathers from middle childhood to late adolescence: Within- and between-families comparisons. Developmental Psychology. 2007; 43:551–563. [PubMed: 17484570]
- Stone, P. Opting Out? Why Women Really Quit Careers and Head Home. Berkeley, CA: University of California Press; 2007.
- Swartz TT. Intergenerational family relations in adulthood: Patterns, variations, and implications in the contemporary United States. Annual Review of Sociology. 2009; 35:191–212.
- Sweet, JA.; Bumpass, LL. The National Survey of Families and Households Waves 1 and 2: Data description and documentation. Center for Demography and Ecology, University of Wisconsin-Madison; 1996. Retrieved on May 10, 2009 from http://www.ssc.wisc.edu/nsfh/home.htm
- Thornton A, Orbuch TL, Axinn WG. Parent-child relationships during the transition to adulthood. Journal of Family Issues. 1995; 16:538–564.
- Umberson D. Relationships with children: Explaining parents' psychological well-being. Journal of Marriage and the Family. 1989; 51:999–1012.
- Umberson D, Pudrovska T, Reczek C. Parenthood, childlessness, and well-being: A life course perspective. Journal of Marriage and Family. 2010; 72:612–629. [PubMed: 21869847]
- Veroff, J.; Fled, S. Marriage and Work in America. New York: Van Nostrand Reinhold; 1970.
- Yeung WJ, Sandberg JF, Davis-Kean PE, Hofferth SL. Children's time with fathers in intact families. Journal of Marriage and Family. 2001; 63:136–154.

Table 1

Means (SD) and Percentage Distributions for Variables in Analysis.

	N	
Depression $(0 - 7)$	4,857	1.16 (1.36)
Global happiness (1 – 7)	5,484	5.41 (1.35)
Self-esteem $(1-5)$	5,872	4.11 (0.59)
Self-efficacy (1 – 5)	5,953	3.58 (0.97)
Satisfaction with the relationship with oldest child $(1 - 7)$	6,228	6.22 (1.27)
Age of oldest child		
0 - 4	6,228	18.3%
5 - 11	6,228	25.6%
12 – 17	6,228	24.0%
18 - 22, living in the household	6,228	19.8%
18 – 22, living elsewhere	6,228	12.4%
Gender (1 = mothers)	6,228	54.5%
Number of children < 18 living in the household (1–14)	6,228	2.75 (1.74)
Have nonresident child < 18	6,228	11.8%
Have a stepchild	6,228	13.6%
Age (16 – 76)	6,228	37.81 (9.89)
Non-White	6,228	22.8%
Marital Status		
Married	6,228	78.5%
Cohabiting	6,228	4.4%
Single	6,228	17.1%
Education $(0 - 20 \text{ years})$	6,228	12.72 (2.84)
Weekly hours of paid work $(0-95)$	6,228	30.81 (21.96)
Family income $(0 - 800, \text{ in thousands})$	6,228	40.37 (44.81)

\$watermark-text

Table 2

Ordinary Least Square Regression Coefficients Predicting the Associations Between the Age of Children and Parents' Satisfaction with the Relationship with Their Children (N = 6,228).

	b	SE
Age of the oldest child		
0 – 4		
5 - 11	373	(.048)***
12 – 17	803	(.056)***
18 - 22, living in the household	843	(.072)***
18 – 22, living elsewhere	-1.131	(.076)***
Number of children	.007	(.011)
Have a nonresident child < 18	575	(.051)***
Have a stepchild	379	(.048)***
Gender (1 = mothers)	.097	(.036)**
Age	.018	(.003)***
Non-White	.227	(.038)***
Marital status		
Married		
Cohabiting	.082	(.076)
Single	134	(.044)**
Education	012	(.006)*
Hours of paid work	.000	(.001)
Family income	.000	(.000)
Intercept	6.308	(.114)***
<i>R</i> ²	.11	10***

* *p* < .05;

** p<.01;

p < .001.

			JCIIICIC Sector		Ser Sill	Clobal H	DCLWC						reycu	COLUGICAL V		·ing.
	Μ	odel 1	W	odel 2	Mc	del 1	Mc	odel 2	W	odel 1	We	del 2	Mc	odel 1	W	odel 2
	q	SE	q	SE	q	SE	q	SE	q	SE	q	SE	q	SE	q	SE
Age of the oldest child																
0 - 4	I	1	I	-	ł	1	ł	-	ł	-	1	-	ł		I	I
5 - 11	.117	(.058)*	.072	(.058)	086	(.056)	019	(.055)	063	(.024) **	038	(.024)	085	(.039)*	052	(.039)
12 - 17	.138	(.068)*	.034	(690)	114	(.065)	.037	(990)	087	(.028) ^{**}	035	(.028)	095	(.045)*	027	(.046)
18 – 22, living in the household	.079	(.088)	029	(680)	080	(.084)	.081	(.084)	152	(.036) ^{***}	097	(.036) ^{**}	035	(.058)	.037	(.058)
18 – 22, living elsewhere	111.	(.095)	025	(960.)	.001	(680.)	.212	*(060.)	049	(.038)	.024	(.038)	040	(.062)	.056	(.063)
Satisfaction with the relationship with the oldest child			120	(.016) ***			.186	(.015) ^{***}			.064	(.006) ^{***}			.085	(.010) ^{***}
Number of children	.006	(.014)	.008	(.014)	023	(.013)	023	(.013)	.003	(900)	.003	(900.)	011	(600.)	012	(600.)
Have a nonresident child < 18	.011	(.067)	070	(.067)	108	(.060)	004	(.059)	041	(.026)	006	(.026)	052	(.042)	007	(.042)
Have a stepchild	.125	*(090.)	.078	(.060)	.005	(.056)	.074	(.056)	008	(.024)	.015	(.024)	103	(.039) **	072	(.039)
Gender $(1 = mothers)$	860.	(.045) [*]	.106	(.045)*	.036	(.042)	.019	(.042)	.063	(.018) ***	.056	(.018) **	092	(.029) **	101	(.029) ***
Age	013	(.003) ***	011	(.003)**	.006	(.003)	.002	(:003)	.005	(.001) ***	.004	(.001) **	.003	(.002)	.001	(.002)
Non-White	.036	(.050)	.066	(.050)	.056	(.045)	.012	(.045)	.045	(.019)*	.030	(019)	.122	(.031) ***	.102	(.031) ^{***}
Married	ł	1	I	-	ł	1	1	1	ł	-	-	1	1	ł	l	I
Cohabiting	.303	(.098) ***	.318	** (860.)	269	** (060.)	281	** (680.)	065	(.038)	070	(.038)	251	(.062) ***	257	(.062) ^{***}
Single	.429	(.056) ***	.418	(.056) ***	600	(.053) ^{***}	571	(.052) ***	048	(.023)*	039	(.022)	322	(.037) ***	310	(.036) ***
Education	073	(.008) ***	075	(.008) ***	.016	(.007)*	.019	(.007) **	.025	(.003) ***	.026	(.003) ^{***}	.007	(:005)	.008	(.005)
Hours of paid work	003	(.001) **	003	(.001) ***	.001	(.001)	.001	(.001)	.002	(.000) ***	.002	*** (000')	001	(.001)	001	(.001)
Family income	002	(.001) **	002	(.001)**	.002	(.001)*	.002	(.001)*	.001	(.000)	.001	(.000)	.001	(.000) **	.001	(000)*

Soc Sci Res. Author manuscript; available in PMC 2012 November 05.

Nomaguchi

(.112)^{***}

3.031

(.092) ***

3.569

(.068) ***

3.149

(.057) ***

3.553

(.161)^{***}

3.961

(.133) ***

5.130

(.173)^{***}

3.264

(.142)^{***}

2.513

Intercept R^2

.044 ***

.033 ^{***}

.058^{***}

.041 ***

.072 ***

.045 ***

.093 ***

.082 ***

Table 3

\$watermark-text

\$watermark-text

\$watermark-text

	Depression	Global 1	Happiness	Self-Est	teem	Self-Eff	licacy
	Model 1 Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
	b SE b SI	b b SE	b SE	b SE	b SE	b SE	b SE
Ν	4,857	5,	,484	5,87	12	5,95	53
*							
p < .05;							
p < .01; p < .01;							

<i>p</i> < .001.							

Nomaguchi