

**Maternal labor supply and child decision power:
Evidence on the adultification hypothesis¹**

**Shelly Lundberg
Jennifer Romich
University of Washington**

December 2004

¹ Paper prepared for session on “Bargaining in Families,” 2005 American Economic Association Meeting, Philadelphia, January 8. We gratefully acknowledge support from NICHD (R01 HD45635-2 – “Child agency in resource allocation”). Thank you to Xiang Gao and Cori Mar for assistance in data preparation.

This is preliminary work and the usual disclaimers apply. Please contact authors (lundberg@u.washington.edu or romich@u.washington.edu) before citing.

I. Introduction

Economic models of the family generally conceptualize children as either completely dependent, or as teenagers with fully-formed preferences and capable of full economic independence—e.g. McElroy's (1985) young adult men or teenagers studied by Hotz et al (2002) or Kooreman (this session). In between are children who have well-developed preferences,² are developing formal reasoning skills, and are capable of productive work, but who are not able to support themselves independently. During young adolescence, ages 10-14, children gradually acquire a level of autonomy about their own activities and spending—at varying rates depending on their characteristics, their parents, and their environment. We know very little about the process by which children develop into economic agents.

The extent to which parents, children or parents and children together exert authority in making decisions about children's life activities matters from a developmental perspective. The gradual acquisition of autonomous decision-making ability is an important process of early adolescence. Formal reasoning skills needed to generate and weight alternatives, skills associated with sound decision-making, develop from age eight or nine to 15 or 16 (Keating 1990). Participation in decisions about household rules and allocations increases as children age, but a gradual transfer of decision power from parents to children seems to be normatively better for development. Correlational studies show that children who report levels of decision-making autonomy higher than expected for their age are also more likely to exhibit delinquent behavior and less likely to be engaged in school (Dornbusch, Carlsmith et al. 1985; Dornbusch, Ritter et al. 1990).

² Harbaugh, Krause, and Berry (2001) find that the choices of children as young as 11 seldom violate the generalized axiom of revealed preference, though Harbaugh, Krause, and Vesterlund (2002) find that the ability to appropriately weight high-probability and low-probability events develops more slowly.

Certainly some aspects of the balance of power between children and parents depend on personal or interpersonal psychological characteristics. However, parameters external to the players' personalities may matter as well. One specific hypothesis about the relationship between children household power is that it may increase with mothers' labor supply under some conditions. Brooks, Hair and Zaslow (2001, July) invoke an "adultification" hypothesis to explain the negative impact of welfare reform experiments on teenagers whose mothers received a treatment including work requirements or work incentives. They hypothesize that mother's work increased adolescents' household and sibling care responsibilities, leading to youths prematurely developing adult self-images. Furthermore, parents who rely on children to fill such adult roles may be more reluctant to discipline them for age-inappropriate behavior such as smoking, not attending school, or staying out late. Such "adultification" (Burton, Brooks et al. 2002) may weaken the parent's authority within the parent-child relationship, leading to less effective discipline.

This adultification story is consistent with a bargaining model of exchange between a parent with limited resources and a child with both productive potential and preferences for control over resources. In this paper we apply a bargaining model to predict how maternal employment may be related to children's power in making decisions about household resources and rules. The paper proceeds as follows. Section II. outlines a model of bargaining between parents and children. Next we overview the implications of this model for empirical investigations. Section IV contains a description of our sample drawn, from the National Longitudinal Survey of Youth Child data (NLSY-C), and the decision-making indexes used as our key dependent variables. Results are presented on family structure, mothers' work and

children's autonomous and shared participation in decision-making. We find little evidence to support the adultification hypothesis.

II. Children as Economic Agents

Children usually appear in economic models of household behavior as consumption goods rather than agents. Adults allocate time and goods to the household production of child services or child "quality" and receive direct utility from their children and their attributes. In these models, children may or may not have preferences that appear in the objective function of altruist parents, but they do not make decisions—the allocation of goods and time within the household is determined by the parent or parents. One mechanism for achieving this outcome is analyzed in Becker's "altruist" model (1974, 1991) in which the family consists of purely selfish, rational "kids" and an altruistic "parent" who cares about the well-being of the kids as well as his/her own. If the altruistic parent makes transfers to all the kids, then Becker's "rotten kid" theorem asserts that the selfish kids will be induced to act in an efficient and unselfish manner. This occurs because the parent will adjust transfers in such a way that acting so as to maximize total family income will be in each child's own self-interest. The family can then be thought of as a single decision-making unit, where every decision helps to maximize a single utility function—the altruist's.

As children grow into teenagers and young adults, it seems more appropriate to model them not only as individuals with their own preferences, but also as agents who are capable of influencing family outcomes. Critics of the altruist model raise the possibility of strategic behavior by children that can limit parental control and cause the rotten kid theorem to fail (Bergstrom, 1989; Bruce and Waldman, 1990). Pollak (1988) argues that there is likely to be a

divergence between what children want and what parents want for their children (paternalistic preferences), and that this can lead to transfers from parent to child that are “tied”, or conditional on the child’s consumption of particular goods and services (such as education). One way to think about altruistic parenting with paternalistic preferences is to suppose that the intergenerational allocation is efficient, and maximizes a weighted average of parental and child utility:

$$\alpha W(c_p, l_p, U^p(c_c, l_c)) + (1 - \alpha) U^c(c_c, l_c) \quad (1)$$

in which W , the parent’s utility, depends upon direct parental consumption and leisure, and a function of the child’s consumption and leisure as weighted by the parent, and U^c is the child’s direct utility. One measure of a child’s autonomy in this framework will be the sharing parameter α which indicates how much weight the child’s preferences have on the household’s allocation. In the traditional parental provision model, of course, $\alpha=1$. This framework rather begs the question of what determines the relative influence of parent and child on the child’s time use and consumption and how it might vary with age. For this purpose a cooperative bargaining model with an explicit threat point (which is a special case of the general collective model in (1)) provides a useful alternative.

We put the collective problem in (1) into a Nash cooperative bargaining framework,³ and extend it to include a household public good, G , that is produced with purchased inputs, X , and inputs of parental and child time, h_p and h_c . This expands parental interest to include the child’s

³ Cooperative bargaining models were developed by researchers concerned with marriage and divorce (Manser and Brown 1980; McElroy 1990; McElroy and Horney 1990; Lundberg and Pollak 1993; Lundberg and Pollak 1994; Lundberg and Pollak 1996; Lundberg and Pollak 1998) but can be extended to the parent-child relationship³. The applicability of these models to parent-child or child-child bargaining has been noted, but not developed (Lundberg and Pollak 1998; Folbre 1999). An exception is McElroy (1985) who uses a cooperative bargaining model to analyze the decisions of young adult children to stay at home or leave.

contributions to the household in addition to child wellbeing. The intergenerational problem is to maximize the Nash product function:

$$[W(c_p, l_p, G, U^p(c_c, l_c, G)) - T^p(w_p, y_c, p; a)][U^c(c_c, l_c, G) - T^c(w_p, y_c, p; a)] \quad (2)$$

subject to $G = g(h_p, h_c, X)$

$$c_p + c_c + pX = w_p(1 - l_p - h_p) + y_c$$

and $1 - l_c - h_c = 0$

The parent can work at a wage w_p , but we rule out market work by the child, and instead assume that he receives exogenous income, y_c . The T functions are the threat points for parent and child, and we assume that they represent the expected utility of a noncooperative household equilibrium in which the parent may make voluntary transfers to the child and each makes voluntary contributions to the household public good. The threat points depend upon the child's age, a : we can expect the child's utility in the noncooperative equilibrium to rise as his dependence on adult help and supervision decreases. We could also extend the model to include the possibility of tied transfers in the noncooperative equilibrium and costly, imperfect monitoring of child behavior by the parent.

An important aspect of game-theoretic modeling is the specification of the threat point or fall-back option for each player. McElroy (1990) defines extrahousehold environmental parameters (EEPs) as measurable factors that affect the maximum utility attainable by an individual outside of the relationship, such as the availability of income or alternative relationships. Unlike adult domestic partners or spouses, children's options for leaving the household are limited to running away or living with another adult or non-custodial parent.

However, Lundberg and Pollak (1993) establish that departure is not the only threat point within a relationship. In their separate spheres model they paint a picture of a middle ground in which partners reach a non-cooperative equilibrium within the relationship. Spouses stop short of leaving but instead withdraw, making unilateral decisions about the allocation of resources they control and diminishing the emotional marriage surplus.

The parent-child analogy to this noncooperative equilibrium involves the child making independent decisions about how to spend the time and money under his control, subject to imperfect parental monitoring or control. Children's threats need not involve leaving, but simply the possibility of engaging in undesirable (from the parent's point of view) or disagreeable behavior. In noncooperative parent-child games, the credibility of parental threats to punish by revoking privileges or restricting transfers, as well as their ability to reward through providing economic resources become important determinants of the outcome.⁴ Social norms, parental control of money, and legal authority give parents power over children; children's power will be increased by their ability to access non-parental resources. In the cooperative framework of (2), an increase in the value of the child's noncooperative threat point (an increase in the child's independent income y_c , for example), will increase his weight in the household's decision-making.

It would also be possible to model parent-child interactions as a solely noncooperative game. Cooperative bargaining is distinguished by the ability of the players to make binding costlessly-enforceable agreements with one another; noncooperative agreements must be self-enforcing. For example, we could imagine families faced with the game in (2), but with transactions costs associated with the negotiation required to achieve the cooperative solution. If

⁴ This is discussed in Lundberg and Pollak (2001).

these transactions costs are high relative to the expected gains from cooperation for some families, they may be “stuck” at the noncooperative equilibrium (Lundberg and Pollak 1993). Families with higher levels of trust may face reduced negotiating costs. Trust is positively related to the ability of parents to balance work and childrearing (Romich 2002), and this may reflect the wider range of agreements available to cooperative bargainers.

III. Hypotheses and empirical specifications

The parameter of interest is α in (1), the unobserved relative weight parental preferences in determining household allocation. The key questions concern the relationship between threat points and α , with the adultification hypothesis suggesting that relative scarcity of time or income alone or combined with relative need for child household labor will decrease parental power. The parameter α , however, is unobservable. One empirical strategy for inferring the magnitude of α is to measure observed allocations of labor, consumption or their effects. For instance, Lundberg, Pollak and Wales (1997) infer non-unitary preferences when they observe a shift in expenditures on items preferred by men (tobacco, men’s clothing) to expenditure items preferred by women (women and children’s clothing). A drawback of this strategy for inferring a balance of preferences between parents and children is that parents draw utility from their children’s consumption. Any observed resource allocation may reflect either relative power or altruistic parental preferences.

In this analysis we use a measure of child-reported decision-making autonomy as evidence on the relative power of children in making household decisions. We examine the determinants of children’s reports of how many aspects of their own activities, such as allowances and watching TV, they decide on their own, or decide together with their parents. In

a bargaining model such as (2), we can think of the child making his own decisions as a greater weight being placed on the child's own preferences regarding his allocation of time and money, rather than his parent's. This, in turn, should depend upon the child's independent access to resources (such as through market work), the child's ability to contribute to the household (which will depend both upon his abilities and the family's needs), and the degree of parental control (which will depend upon parental resources as well as normative and environmental factors).

Children will vary in the rate at which they achieve autonomy, but, as children age, we can expect them to make more of their own decisions about how to spend their time and to control larger amounts of money, both through parental allowances and other transfers, and through market work (Pabilonia 2001). The child's ability to earn their own money, to care for themselves and evade parental control, and to make meaningful contributions to household public goods will increase. It is also possible that, as children mature, their preferences become more similar to the paternalistic preferences of their parents—reducing conflict and the expected returns to costly monitoring by parents.⁵

What can we predict about the relative autonomy of children with single mothers vs. married parents? Single mothers have on average, less control over resources, relative to their children, than do married parents. This limits the amount of money they can use to reward/bribe their child in the noncooperative state, as well as the time they are able to devote to monitoring. Low income and the absence of a second parent also increases the value of the child's contribution to household public goods. This “need” for the child's help, combined with the

⁵ Pollak (1988) notes, “Parents attempt to influence their children's consumption patterns in two ways: by altering the preferences of children and by altering the opportunities of children.” Successfully accomplishing the former should reduce effective parental control.

child's credible threat of unsupervised mayhem if a cooperative agreement breaks down, provides a possible rationale for the "adultification" of the older children of low-income single parents. Employed single parents will have a greater need for help from older children, particularly if there are younger children who require care.

IV. Data and measures

Data are from the ongoing 1979 National Longitudinal Survey of Youth (NLSY79) and associated Child Supplement and Work History files. The NLSY tracks a nationally representative sample of men and women who were age 14-21 in 1979. Beginning in 1986, a supplement has also gathered data from children of the women in the 1979 cohort. Children stay in this sample as long as they are age 14 or younger on December 31 of the sampling year; thereafter they are administered a different, "young adult," interview.

This analysis uses a pooled time series constructed from the universe of children ages 10-14 in the 1994, 1996, 1998 and 2000 waves. Some children may contribute more than one observation. For instance, an 11-year-old surveyed in 1996 might also be included as a 13-year-old in 1998. Eliminating observations with wave-specific child or parent non-response on the key dependent and labor supply variables gives a sample of 6280 child-years.

This is not a nationally-representative sample of 10-14 year olds in the late-1990s and 2000 (Chase-Lansdale, Mott et al. 1991). Rather, it is a sample of children born to women in their early years of fertility, ages 17 to 32. First-born children and children of young mothers are over-represented relative to their population prevalence. Likewise, children of women who delayed childbirth until their late 20s or 30s are under-represented. Estimates using the

distribution of children's ages and age of mother at birth of child made available by the Center for Human Resource Research suggest that 31 percent of children in the 1994 sample were born to mothers under age 21, and this percentage falls to 21 percent in the 1996 sample and 5 percent in the 1998 sample (Center for Human Resource Research 2000). This second-generation sample also has no children born to women not living in the US in 1979. However, the NLSY oversampled black, Hispanic, and economically disadvantaged white youth, making it particularly informative for these groups. No appropriate weighting scheme is available for pooled time series analyses (Olsen 2001), so all estimations are presented on unweighted data. This limits the representativeness but not the generalizability of the findings.

Measures

Details on key variables are included below. Table 1 contains basic descriptive statistics for analysis variables.

Decision-making

Our dependent variables are two indexes created from child self-reports about decision-making within the household. We use a series of questions originally used in the National Health Examination Survey (Dornbusch, Carlsmith et al. 1985) and included in the NLSY Child Self-Administered section. Seven areas of children's lives are listed, buying clothes, spending money, friends to go out with, how late allowed to stay out, how much allowance received, how much TV allowed to watch, and religious training. In response to the question "Who usually makes the decisions about [an area]," respondents could multiple responses from the list of you (respondent), mother, father, stepfather, friends or someone else. Incidences of friends and others' participation was low (less than 2 percent). Indexes were created for sole decision-making (child reports self but not a parent as decision-maker) and any decision-making (child

reports self with or without parent). Table 2 contains item-specific means and the distribution of responses on the index.

Parental employment

Originally designed as a labor survey, the NLSY contains detailed information on mothers' employment. The Work History files contain week-by-week labor force participation and hours data for mothers. We use two labor supply variables which refer to the week of the interview, labor force status (whether mother was employed) and her hours per week. A spline form allows work hours about 30 hours to have an additional impact.

Problem behavior

A measure of child behavior problems is used as a covariate. The Behavior Problems Index (BPI), was developed by Peterson and Zill (Peterson and Zill 1986) based on checklists and inventories of problem behavior, primarily Achenbock and Edelbrock's (1985) Child Behavior Checklist. Mothers were asked whether their children ages four and up displayed any of a checklist of both internalizing and externalizing behavior problems. Designed for children aged 4-17, the BPI displays adequate psychometric properties and is a widely-used measure of child behavior (Chase-Lansdale, Mott et al. 1991). We use the combined internalizing and externalizing scales to get a total raw score with a range of 0-280, which is capped at the 99th percentile (250) so that results are not influenced by extreme values. The scale is then standardized on the whole sample.

Child-perceived closeness to parent

Children were also asked how close they feel to their mothers. The modal respondent selected the positive extreme, "extremely" close, so a dummy variable was created that

differentiated between children who ranked their relationship extremely close and those that did not.

Armed Forces Qualifying Test (AFQT)

Armed Forces Qualifying Test (AFQT) percentile rankings are included as a proxy for mothers' cognitive ability. As part of the original NLSY 1979 cohort, the mothers in our sample were administered the Armed Services Vocational Aptitude Battery, a series of tests given to potential servicepersons intended to identify areas of knowledge and skill in ten areas. The AFQT is calculated from arithmetic reasoning, work knowledge, paragraph comprehension and numerical operations batteries of the ASVAB (Bureau of Labor Statistics 2001).

Demographic and control variables

The comprehensive NLSY allows for the inclusion of other variables that may affect a parent's labor supply or child behavior. Control variables summarized in Table 1 include child's gender (one dummy variable), race (two dummy variables, non-black non-hispanic omitted), birth order, whether the observation is from an only child, the number of brothers and sisters (included separately), mother's highest grade completed (three dummy variables, high school only omitted). The year of observation is also included to capture trends in children decision-making over time and any otherwise unobserved effects of the over-representation of children born to young mothers in earlier waves.

V. Analysis and Results

Tables 3 through 6 present our findings on the relationships between family structure, maternal labor supply and child decision-making. Our first two sets of analysis use the full

sample to look for differences in decision-making between two-parent and mother-only households. We then limit the sample to mother-only households to investigate the hypothesis that children in single mother households are at risk of adultification associated with mothers' time at work. The dependent variable is the number of categories in which the child reports that he is able to make decisions on his own ("sole") or decisions either alone or with his parents ("any"). An ordered logit model is used to avoid arbitrary scaling of the responses. Standard errors are calculated using the Huber/White estimator of variance to account for non-independence between multiple observations of the same child. The appendix table shows predictors of having sole or any decision power on the individual items (allowance, clothing, etc.).

Table 3 presents our basic results on the determinants of child-reported decision-making for the full sample of children, including those in single and two-parent families. It is not surprising that age is an important determinant of both sole and joint decision-making—children's ability to participate in decisions affecting their use of time and allocation of resources grows rapidly from ages 10 to 14. An additional year of age is associated with approximately a 40 percent increase in the relative odds of reporting sole decision-making power in one additional area. Figures 1 and 2, based on models in Table 3, show this age progression for boys and girls in single and two-parent households.

Another striking result is the large coefficients on race and ethnicity: both black and Hispanic children are much less likely than non-Black, non-Hispanic children to report having a say in decisions—either sole or with their parents. This is consistent with developmental research on parenting styles in African-American families (Steinberg, Mounts et al. 1991). These racial and ethnic differences persist throughout for both one and two-parent households. Mother's

education and household income have significant positive effects on the number of domains in which the child participates in decision-making; this result in itself could be considered inconsistent with the hypothesis that control over resources gives parents more authority. However, it is clear from the first panel of Table 3 that this effect comes only from the child's participation in joint decisions with the parents. Parental income has no effect on the propensity of the child to report having sole decision-making authority, and a college-educated mother has a significant negative effect on independent child decisions.

Working mothers and single mothers are associated with an increased propensity for the child to make their own decisions, and with the combination of sole and joint decision-making. A working mother is more strongly associated with joint decisions rather than autonomous child decisions; the reverse appears to be true for single mothers. These effects are generally consistent with the "adultification" story, but we also expect the employment of single mothers to have a stronger impact on child authority than the work of married mothers, and this does not appear to be the case.

A number of factors that do not influence sole decision-making have significant effects on joint decisions. Girls are much more likely to report participating in decisions than boys.⁶ More siblings, both male and female, have strong negative effects on joint decision-making—possibly the negotiations involved in making decisions jointly becomes prohibitively expensive as the number of children increases.

⁶ Strong child gender effects appear only in some categories: clothes, watch TV, and religious training. See Appendix. Girls are not significantly more likely to make decisions about allowance, how to spend their money, who they go out with or how late they stay out than are boys. The inter-item differences may be due to gender differences in the activity (ex: girls may care more about clothes). It is also possible that girls represent decision-making differently than boys, a story consistent with collectivity being more salient than autonomy to girls (Gilligan 1982; Gilligan, Rogers et al. 1991).

The general patterns here are quite distinct. Joint decisions, which we might associate with cooperative decisions since they must involve some negotiation, or at least discussion, between parent and child are associated with higher parental education and resources, fewer children, and female children. The determinants of independent child decisions are quite different—single mothers and less parental education. Black and Hispanic children have less decision power on both measures.

Interpreting the positive effects of working mothers and single mothers as evidence in favor of the “adultification” story—that mothers with few resources who need help from their older children yield authority to them in exchange—ignores the possible endogeneity of the mother’s status with respect to other determinants of the child’s participation in decision-making. For example, it is possible that mothers, and particularly single mothers, are more likely to work if they have a competent and responsible child, who would therefore be given more leeway in making decisions about their own actions in any case. Alternatively, single motherhood may be correlated with maternal characteristics that would affect her relationship with her child, even if she were married. In future work, we plan to try several techniques to deal with this endogeneity, but for now add in additional controls for maternal and child characteristics, and the reported quality of the child’s relationship to the mother.

In Table 4, the first column is the same model as the first column in Table 3, with most of the coefficients left unreported. In column 2 we include the mother’s AFQT score, and in (3) and (4) add the child’s behavioral problems index and an indicator for the closeness of the child-mother relationship. The inclusion of these variables have no effect on the positive coefficients on mother working and single mother in the determinants of sole decisions by the child. However, in the “any” decision category, which includes both sole and joint decisions, the

addition of these variables does affect the other coefficients. The positive effect of a working mother loses significance—the probability that a mother works is clearly correlated with child and parent characteristics that promote joint decision-making (though not sole child decision-making). The effect of ‘single mother’, on the other hand, becomes significantly positive when these variables are added. Single motherhood is correlated with low AFQT scores and child behavior problems which themselves have negative effects on joint decision-making. These results increase our confidence that the effect of single motherhood on the child’s weight in decision-making is a causal one.

Table 5 focuses on single mother families, and families with employed single mothers. Within single mother households, the mother’s work and, conditional on positive work hours, how much she works, have no effect on the child’s decision-making—whether sole or joint. These results suggest that, whatever it is that increases the power of children in single mother families, it is not intensified by her employment.⁷ There are two possible stories that can be told about this increased child autonomy. One is the adultification story, which implies that children of single mothers should contribute more to household work, including the care of younger siblings. The other is a parental authority story, in which mothers with little time and few resources are less able to monitor and control their children. The employment of single mothers should definitely increase the exchange between child and parent that is the essence of the adultification hypothesis, but the effects of employment on parental authority are ambiguous. Working single mothers will have less time available to monitor the child’s behavior, but they

⁷ Estimation of this model on subgroups of children, including boys, girls, oldest children, and children of mothers with less than a high school education also showed no effect of mother’s employment on child’s decision-making.

may have more income, and so will be able to employ tied transfers or other mechanisms of control more effectively.

We explore this issue further in two ways—first, we include indicators of the single mothers’ “need” for child help, such as the presence of young children and or alternative caregivers, and second, we measure directly the child’s contribution to household work. In Table 6 we include, as determinants of child decision-making, dummy variables for the presence of a sibling under age 6, a sibling near in age who could serve as an alternative caregiver, a grandmother, and a grandfather. In the third column we replace these variables with a single dummy for the inverse, “no substitute caregiver”, and an interaction between no substitute and the presence of a very young sibling. None of the household composition dummies have any significant impact on sole decision-making by the child, but the presence of a grandmother in the household reduces the prevalence of joint parent-child decisions.

There are several possible explanations for the grandmother effect. First, if the presence of a grandmother as an alternate provider of household services reduces a single mother’s need for help from the child, the pressure towards adultification and increased child independence will be reduced. Second, the grandmother could be providing additional supervision of the older child. However, we would have expected either of these effects to reduce the “sole” decision category rather than to reduce joint decision-making. Alternatively, grandmothers may be serving as a co-decision-maker with the child rather than the mother, and this is not captured by the current parent-child decision index.

The “help expectations” index included in column (4) of Table 6 counts the number of housework items the child is expected to help with, including cleaning his own room, doing dishes, and cooking. This outcome is clearly endogenous; we include it here to show the partial

correlation between the child's reported housework duties and decision-making. There is no significant relationship between household help and participation of the child in decisions, but there is a significant negative coefficient on "help" in the sole decision equation. So, children who are expected to help less in the household are more likely to report making autonomous decisions about their own activities. This result once again fails to support the adultification hypothesis, and instead suggests that lone decision-making among the children of single mothers may be due simply to less parenting rather than to an exchange of child authority for household help.

VI. Discussion

We find little evidence of an adultification effect among children of employed single mothers. Children of single mothers have more sole and total decision power than do children who live with two parents, but this seems to be due to factors associated with family structure rather than maternal employment. Among children in mother-only households, mothers' work and hours at work for employed mothers are not associated with having decision say in more areas.

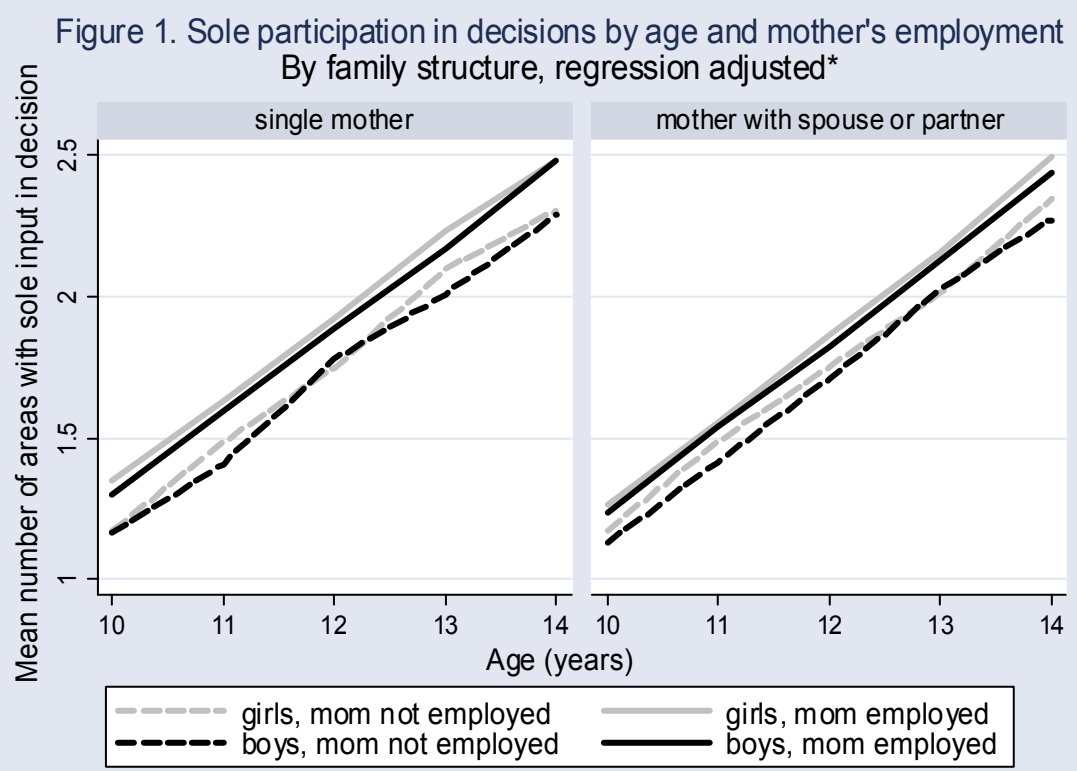
This preliminary work that can be strengthened in several ways. First, family structure and maternal labor supply are likely to be endogenous with respect to child and mother characteristics that affect the division of power within the household. . In this preliminary analysis we have relied on a small set of observed measures to account for this heterogeneity in child and mother characteristics. A next step is to exploit the multi-child, longitudinal nature of our data through family fixed-effect or change models.

Another area for additional thought is whether these findings have any implications for thinking about bargaining models between parents and young adolescents. Several complexities arise in applying models developed to describe bargaining between two adults to the relationship between a parent and a child. Within the context of these models we can assume that adults are, and should be, capable of autonomous or voluntarily cooperative action. This same assumption does not apply to children. The suggestion that too much power too soon may be bad for a child's developmental trajectory requires some clarity as to the normative interpretation of outcomes. Our results also suggest that the extent to which parents and children are able to cooperate in making decisions about the child's activities varies, and this diversity should be incorporated into the theoretical model.

References

- Brooks, Jennifer L., Elizabeth C. Hair and Martha J. Zaslow.(2001, July) *Welfare reform's impact on adolescents: Early warning signs*. Washington, DC. Child Trends.
- Bureau of Labor Statistics (2001). *NLSY79 user's guide*.
- Burton, Linda, Jennifer L. Brooks and J. Clark (2002). *Adultification in childhood and adolescence: A conceptual model*. Center for Human Development and Health Research in Diverse Contexts, Pennsylvania State University. Pennsylvania State University at University Park, PA.
- Center for Human Resource Research (2000). 1998 child and young adult data. *NLSY Users Guide*. Columbus, OH, Ohio State University. October.
- Chase-Lansdale, P. Lindsay, Frank L. Mott, Jeanne Brooks-Gunn and Deborah A. Phillips (1991). "Children of the national longitudinal survey of youth: A unique research opportunity." *Developmental Psychology* 27(6): 918-931.
- Dornbusch, Sanford M., J. Merrill Carlsmith, Steven J. Bushwall, Philip L. Ritter, Herbert Leiderman, Albert H. Hastorf and Ruth T. Gross (1985). "Single parents, extended households, and the control of adolescents." *Child Development* 56: 326-341.
- Dornbusch, Sanford M., Philip L. Ritter, Randy Mont-Reynaud and Zeng-yin Chen (1990). "Family decision making and academic performance in a diverse high school population." *Journal of Adolescent Research* 5(2): 143-160.
- Folbre, Nancy (1999). *Spoiling for success: Poverty, parental power and child outcomes. mimeograph*. Amherst, MA, University of Massachusetts.
- Gilligan, Carol (1982). *In a different voice : Psychological theory and women's development*. Cambridge, Mass., Harvard University Press.
- Gilligan, Carol, Annie G. Rogers and Deborah L. Tolman (1991). *Women, girls & psychotherapy : Reframing resistance*. New York, Haworth Press.
- Harbaugh, William T., Kate Krause and Timothy R. Berry (2001). "GARP for kids: On the development of rational choice behavior." *American Economic Review* 91(5): 1539-45.
- Harbaugh, William T., Kate Krause and Lise Vesterlund (2002). "Risk attitudes of children and adults: Choices over small and large probability gains and losses." *Experimental Economics* 5(1): 53-84.
- Hotz, V. Joseph and et al. (2002). "Are there returns to the wages of young men from working while in school." *Review of Economics and Statistics* 84(2): 221-36.
- Keating, Daniel P. (1990). Adolescent thinking. *At the threshold: The developing adolescent*. S. S. Feldman and G. R. Elliot. Cambridge, MA, Harvard University: 54-89.

- Lundberg, Shelly and Robert A. Pollak (1993). "Separate spheres bargaining and the marriage market." *Journal of Political Economy* 101(6).
- Lundberg, Shelly and Robert A. Pollak (1994). "Noncooperative bargaining models of marriage." *American Economic Review* 84(2).
- Lundberg, Shelly and Robert A. Pollak (1996). "Bargaining and distribution in marriage." *Journal of Economic Perspectives* 10(4).
- Lundberg, Shelly and Robert A. Pollak (1998). *Bargaining in families. mimeograph*. St. Louis, Washington University.
- Lundberg, Shelly, Robert A. Pollak and Terence J. Wales (1997). "Do husbands and wives pool their resources?" *The Journal of Human Resources* 32(3).
- Manser, Marilyn and Murray Brown (1980). "Marriage and household decision making: A bargaining analysis." *International Economic Review* 21(1): 31-44.
- McElroy, Marjorie B. (1990). "The empirical content of nash-bargained household behavior." *Journal of Human Resources* 25(4): 559-83.
- McElroy, Marjorie B. and Mary Jean Horney (1990). "Nash-bargained household decisions: Reply." *International Economic Review* 31(1): 237-242.
- Olsen, Randall (2001). *Explanation of sampling strategy and weights in the nlsy surveys*. Children of the NLSY79 Summer Workshop. Columbus, OH, Center for Human Resource Research.
- Pabilonia, Sabrina Wulff (2001). "Evidence on youth employment, earnings, and parental transfers in the national longitudinal survey of youth 1997." *Journal of Human Resources* 36(4): 795-822.
- Peterson, J. and N. Zill (1986). "Marital disruption, parent-child relationships, and behavior problems in children." *Journal of Marriage & the Family* 48: 295-307.
- Romich, Jennifer L. (2002). "Time and trust: Low-income families manage mothers' work and young adolescents' lives." Manuscript. University of Washington.
- Steinberg, Laurence, Nina S. Mounts, Susie D. Lamborn and Sanford M. Dornbusch (1991). "Authoritative parenting and adolescent adjustment across varied ecological niches." *Journal of Research on Adolescence* 1(1): 19-36.



*Adjusted for race, number of brothers and sisters, presence of sibling under age 6, whether older or only child, mother's education and work status, net family income

Figure 2. Any participation in decisions by age and mother's employment
By family structure, regression adjusted*



*Adjusted for race, number of brothers and sisters, presence of sibling under age 6, whether older or only child, mother's education and work status, net family income

Table 1
Sample statistics
Means (standard deviations)

			Full sample (N=6280)		2-parent HHs (N=4208)		Mother-only HHs (N=2072)	
	Min	Max						
Child characteristics								
girl	0	1	.50	(.50)	.50	(.50)	.51	(.50)
age (years)	10	14	11.78	(1.31)	11.76	(1.31)	11.84	(1.30)
oldest child	0	1	.43	(.49)	.44	(.50)	.39	(.49)
only child	0	1	.08	(.27)	.06	(.24)	.11	(.32)
# brothers	0	7	.95	(.94)	.94	(.91)	.98	(1.00)
# sisters	0	7	.95	(.97)	.94	(.94)	.95	(1.02)
BPI	-1.33	2.08	.00	(1.00)	-.08	(.96)	.16	(1.05)
close to mom	0	1	.66	(.47)	.67	(.47)	.65	(.48)
Mother characteristics								
< high school	0	1	.24	(.43)	.20	(.40)	.30	(.46)
some college	0	1	.26	(.44)	.25	(.44)	.26	(.44)
college+	0	1	.12	(.32)	.14	(.35)	.06	(.23)
AFQT	1	99	34.02	(26.28)	38.63	(27.19)	24.66	(21.48)
mom work	0	1	.72	(.45)	.73	(.45)	.70	(.46)
among workers								
hours/week	0	80	.78	(.42)	.75	(.44)	.84	(.37)
hours more than 30	0	1	37.47	(12.72)	36.51	(13.21)	39.51	(11.34)
Household characteristics								
sib < age 6	0	1	.26	(.44)	.27	(.44)	.25	(.43)
grandmother in hh			.06	(.23)	.02	(.15)	.13	(.33)
grandfather in hh			.03	(.16)	.01	(.11)	.05	(.23)
black	0	1	.32	(.47)	.20	(.40)	.55	(.50)
hispanic	0	1	.22	(.41)	.23	(.42)	.19	(.39)
income (\$10K)	0	97.41	4.59	(5.76)	5.58	(6.25)	2.59	(3.91)
mother-only	0	1	.33	(.47)				

Note: AFQT = Armed Forces Qualifying Test; BPI = Behavior Problem Index

Table 2
Decision indices

Decision area (% reporting self but not parent as usual decision-maker)	Full sample	<u>Sole decisions</u>		Child gender	
		Family structure 2 parents	Mother-only	Girls	Boys
Allowance	2.1 %	2.0 %	2.5 %	1.7 %	2.6 %
Clothes	28.3	27.3	30.4	29.7	26.9
Spending	50.1	49.2	51.7	49.4	50.7
Friends	48.5	49.5	46.6	48.3	48.7
Curfew	2.3	2.3	2.2	1.5	3.1
Television	41.6	40.1	44.8	43.3	39.9
Religion	21.8	20.0	25.4	23.0	20.6
Sum - sole decisions	1.77	1.75	1.81	1.79	1.75
Distribution					
sole say in 0 areas	28.4 %	28.3 %	28.7 %	28.0 %	28.9 %
1 area	19.9	20.6	18.5	19.2	20.6
2 areas	20.2	20.4	19.6	21.3	19.0
3	15.7	15.6	15.8	15.3	16.0
4	10.4	9.8	11.5	10.1	10.6
5	4.8	4.6	5.2	5.5	4.1
6	.6	.6	.6	.4	.7
7	.1	.1	.1	.1	.2
Decision area (% reporting self as usual decision-maker)	Full sample	<u>Any decisions</u>		Child gender	
		Family structure 2 parents	Mother-only	Girls	Boys
Allowance	8.6 %	8.8 %	8.2 %	9.4 %	7.8 %
Clothes	66.5	68.2	63.1	72.1	60.7
Spending	72.8	73.8	70.8	74.5	71.2
Friends	66.2	68.6	61.4	68.7	63.8
Curfew	12.5	13.6	10.1	12.6	12.4
Television	57.1	56.8	57.8	59.4	54.8
Religion	39.1	39.1	39.0	43.2	34.9
Sum - any decisions	3.09	3.16	2.97	3.27	2.91
Distribution					
say in 0 areas	9.6 %	8.9 %	11.0 %	8.4 %	10.8 %
1 area	11.0	10.6	11.7	9.2	12.8
2 areas	16.0	15.5	17.0	15.2	16.8
3	19.8	20.1	19.1	18.9	20.6
4	21.3	21.7	20.5	22.5	20.2
5	14.3	14.5	14.0	16.7	11.9
6	5.9	6.3	5.1	6.4	5.3
7	2.2	2.5	1.6	2.7	1.6

Table 3
Predictors of decision indices, full sample
 Full sample - children in single and two-parent families (N=6280)
 Ordered logit coefficient (standard error)

	Sole decisions	
	(1a)	(2a)
girl	.068 (.049)	.068 (.049)
age (years)	.339 (.017) ***	.339 (.017) ***
oldest child	-.165 (.057) ***	-.164 (.057) ***
only child	.121 (.114)	.121 (.114)
# brothers	-.038 (.028)	-.038 (.028)
# sisters	-.040 (.029)	-.040 (.029)
black	-.397 (.061) ***	-.398 (.061) ***
hispanic	-.272 (.065) ***	-.272 (.065) ***
< high school	-.043 (.069)	-.043 (.069)
some college	-.017 (.063)	-.016 (.063)
college+	-.204 (.076) ***	-.203 (.076) ***
income (\$10K)	.003 (.004)	.003 (.004)
mother works	.108 (.055) *	.120 (.065) *
single mother	.166 (.056) ***	.194 (.100) *
mworks*single		-.038 (.113)

	Any decisions	
	(1b)	(2b)
girl	.388 (.049) ***	.388 (.049) ***
age (years)	.431 (.017) ***	.431 (.017) ***
oldest child	.012 (.058)	.012 (.058)
only child	-.081 (.107)	-.080 (.107)
# brothers	-.109 (.029) ***	-.110 (.029) ***
# sisters	-.073 (.028) ***	-.073 (.028) ***
black	-.799 (.062) ***	-.801 (.062) ***
hispanic	-.627 (.065) ***	-.628 (.065) ***
< high school	-.256 (.067) ***	-.257 (.067) ***
some college	.067 (.062)	.069 (.062)
college+	.159 (.079) **	.161 (.079) **
income (\$10K)	.009 (.005) *	.009 (.005) *
mother works	.130 (.053) **	.165 (.063) ***
single mother	.093 (.056)	.167 (.095) *
mworks*single		-.104 (.109)

*p<.10, **p<.05, ***p<.01

Note: specification also includes dummy variables for income imputation (not significant) and wave of observation.

Table 4
Predictors of decision indices in full sample; mother, child and relationship covariates

Full sample - children in single and two-parent families (N=6280)

Ordered logit coefficient (standard error)

	Sole decisions							
	(1a)		(2a)		(3a)		(4a)	
girl	.068	(.049)	.066	(.049)	.054	(.049)	.051	(.049)
age (years)	.339	(.017) ***	.339	(.017) ***	.321	(.018) ***	.322	(.018) ***
oldest child	-.165	(.057) ***	-.164	(.057) ***	-.167	(.057) ***	-.166	(.057) ***
mother works	.108	(.055) *	.108	(.055) *	.091	(.055) *	.093	(.055) *
single mother	.166	(.056) ***	.170	(.056) ***	.162	(.057) ***	.165	(.057) ***
AFQT			.000	(.001)			.000	(.001)
AFQT msg			.254	(.142) *			.269	(.141) *
BPI					-.031	(.025)	-.031	(.025)
BPI msg					-.127	(.117)	-.129	(.117)
closer					-.276	(.052) ***	-.279	(.052) ***
closer msg					-.485	(.123) ***	-.493	(.124) ***

	Any decisions							
	(1b)		(2b)		(3b)		(4b)	
girl	.388	(.049) ***	.402	(.049) ***	.367	(.049) ***	.381	(.049) ***
age (years)	.431	(.017) ***	.435	(.018) ***	.419	(.018) ***	.423	(.018) ***
oldest child	.012	(.058)	.014	(.057)	.007	(.058)	.009	(.057)
only child	-.081	(.107)	-.090	(.107)	-.076	(.107)	-.084	(.107)
mother works	.130	(.053) **	.102	(.053) *	.113	(.053) **	.087	(.053)
single mother	.093	(.056)	.103	(.056) *	.106	(.057) *	.116	(.057) **
AFQT			.010	(.001) ***			.010	(.001) ***
AFQT msg			.003	(.112)			.016	(.113)
BPI					-.096	(.025) ***	-.091	(.025) ***
BPI msg					.067	(.111)	.093	(.110)
closer					-.128	(.051) **	-.110	(.051) **
closer msg					-.759	(.124) ***	-.733	(.124) ***

*p<.10, **p<.05, ***p<.01

Note: Dummy variables indicate when imputation for missing observations for AFQT, BPI or mother-child closeness ('closer') variables. Specification also includes household income, number of brothers and sisters; and dummy variables indicating if respondent is only child, race/hispanicity (3 categories), mother's education (4 categories), whether income was imputed, and wave of observation.

Table 5
Predictors of decision indices, mother-only households
 Ordered logit coefficient (standard error)

	Sole decisions			
	<u>All mother-only families (N=2072)</u>		<u>Employed mother-only families(N=1446)</u>	
	(1a)	(2a)	(3a)	(4a)
girl	.087 (.084)	.080 (.084)	.003 (.100)	.002 (.100)
age (years)	.328 (.032) ***	.314 (.033) ***	.362 (.038) ***	.351 (.039) ***
oldest child	-.164 (.102)	-.173 (.103) *	-.123 (.120)	-.132 (.121)
mother works	.052 (.096)	.019 (.097)		
hours			.013 (.011)	.013 (.011)
hours >30			-.019 (.014)	-.018 (.014)
AFQT		.003 (.003)		.002 (.003)
AFQT msg		.471 (.277) *		.369 (.358)
BPI		-.036 (.042)		-.042 (.051)
BPI msg		-.015 (.205)		.024 (.258)
closer		-.242 (.090) ***		-.181 (.107) *
closer msg		-.374 (.191) *		-.276 (.253)

	Any decisions			
	<u>All mother-only families (N=2072)</u>		<u>Employed mother-only families(N=1446)</u>	
	(1b)	(2b)	(3b)	(4b)
girl	.292 (.087) ***	.299 (.087) ***	.254 (.104) **	.263 (.104) **
age (years)	.439 (.031) ***	.430 (.031) ***	.469 (.038) ***	.460 (.038) ***
oldest child	.001 (.109)	-.009 (.109)	-.011 (.132)	-.021 (.133)
mother works	.063 (.094)	-.022 (.096)		
hours			.009 (.012)	.008 (.012)
hours >30			-.011 (.016)	-.012 (.017)
AFQT		.011 (.003) ***		.009 (.003) ***
AFQT msg		-.018 (.229)		-.129 (.300)
BPI		-.080 (.042) *		-.083 (.052)
BPI msg		.195 (.201)		.283 (.253)
closer		-.119 (.092)		-.079 (.109)
closer msg		-.466 (.187) **		-.365 (.249)

*p<.10, **p<.05, ***p<.01

Note: Dummy variables indicate when imputation for missing observations for AFQT, BPI or mother-child closeness ('closer') variables. Specification also includes household income, number of brothers and sisters; and dummy variables indicating if respondent is only child, race/hispanicity (3 categories), mother's education (4 categories), whether income was imputed, and wave of observation.

Table 6
Predictors of decision indices, employed mother-only households, proxies for house work need
 Ordered logit coefficient (standard error)

	Sole decisions							
	(1a)		(2a)		(3a)		(4a)	
girl	.001	(.100)	-.005	(.101)	.002	(.101)	.072	(.105)
age (years)	.349	(.039) ***	.353	(.039) ***	.349	(.039) ***	.366	(.041) ***
oldest child	-.108	(.126)	-.139	(.122)	-.107	(.126)	-.156	(.127)
hours	.012	(.011)	.012	(.011)	.012	(.011)	.013	(.011)
hours >30	-.018	(.014)	-.018	(.014)	-.017	(.014)	-.019	(.014)
AFQT	.002	(.003)	.002	(.003)	.002	(.003)	.001	(.003)
AFQT msg	.354	(.357)	.347	(.359)	.345	(.358)	.113	(.371)
BPI	-.041	(.051)	-.040	(.051)	-.040	(.051)	-.074	(.052)
BPI msg	.017	(.259)	.012	(.257)	.018	(.260)	.046	(.266)
closer	-.186	(.107) *	-.173	(.108)	-.183	(.108) *	-.195	(.109) *
closer msg	-.289	(.253)	-.277	(.255)	-.287	(.252)	-.088	(.257)
sib < age 6	-.109	(.128)			-.068	(.183)		
close-age sib			-.093	(.119)				
grandmother in hh			-.170	(.178)				
grandfather in hh			.232	(.231)				
no substitute					.042	(.120)		
no sub*sib<6					-.079	(.240)		
help expectations							-.135	(.057) **

	Any decisions							
	(1b)		(2b)		(3b)		(4b)	
girl	.262	(.104) **	.247	(.104) **	.252	(.104) **	.295	(.109) ***
age (years)	.464	(.038) ***	.462	(.039) ***	.467	(.039) ***	.468	(.040) ***
oldest child	-.052	(.134)	-.027	(.133)	-.058	(.133)	-.033	(.138)
hours	.008	(.012)	.008	(.013)	.009	(.012)	.009	(.012)
hours >30	-.012	(.017)	-.012	(.017)	-.014	(.017)	-.014	(.017)
AFQT	.009	(.003) ***	.009	(.003) ***	.009	(.003) ***	.008	(.003) ***
AFQT msg	-.112	(.301)	-.185	(.301)	-.158	(.301)	-.238	(.330)
BPI	-.084	(.052)	-.081	(.052)	-.083	(.052)	-.107	(.052) **
BPI msg	.296	(.253)	.251	(.249)	.263	(.250)	.293	(.260)
closer	-.073	(.109)	-.071	(.109)	-.059	(.108)	-.092	(.111)
closer msg	-.351	(.250)	-.368	(.253)	-.347	(.254)	-.260	(.258)
sib < age 6	.149	(.133)			.111	(.178)		
close-age sib			-.143	(.118)				
grandmother in hh			-.475	(.182) ***				
grandfather in hh			.348	(.256)				
no substitute					.197	(.118) *		
no sub*sib<6					.059	(.247)		
help expectations							-.063	(.056)

*p<.10, **p<.05, ***p<.01

Note: Dummy variables indicate when imputation for missing observations for AFQT, BPI or mother-child closeness ('closer') variables. Specification also includes household income, number of brothers and sisters; and dummy variables indicating if respondent is only child, race/hispanicity (3 categories), mother's education (4 categories), whether income was imputed, and wave of observation.

Appendix (p.1 of 2) - Decision index items

Full sample - children in single and two-parent families

(N=5721- 6276 due to item-specific response patterns)

Logit coefficient (standard error)

Domain:	Allowance	Spending	Clothes	Friends
	Sole decision			
girl	-.451 (.179) **	-.058 (.055)	.149 (.061) **	-.015 (.055)
age (years)	.074 (.071)	.233 (.019) ***	.376 (.022) ***	.242 (.020) ***
oldest child	-.194 (.220)	.118 (.064) *	-.135 (.071) *	-.108 (.064) *
only child	-.055 (.417)	.039 (.117)	.114 (.125)	-.008 (.117)
# brothers	.048 (.093)	.037 (.033)	-.098 (.037) ***	-.063 (.033) *
# sisters	-.112 (.118)	.018 (.032)	-.072 (.035) **	-.034 (.032)
black	.599 (.233) **	-.356 (.070) ***	-.411 (.078) ***	-.485 (.069) ***
hispanic	.220 (.262)	-.174 (.074) **	-.084 (.081)	-.285 (.074) ***
< high school	.514 (.222) **	.052 (.076)	-.189 (.083) **	-.240 (.076) ***
some college	-.279 (.256)	.096 (.071)	.051 (.077)	-.011 (.070)
college+	-.602 (.437)	-.033 (.096)	-.182 (.111)	.048 (.096)
income (\$10K)	-.002 (.023)	.002 (.005)	.005 (.005)	.005 (.005)
mother works	.375 (.283)	-.009 (.075)	.017 (.084)	.142 (.073) *
single mother	.400 (.352)	.218 (.111) *	.294 (.125) **	.011 (.111)
mworks*single	-.700 (.402) *	-.010 (.124)	-.024 (.138)	.079 (.124)
	Any decision			
girl	.189 (.097) *	.166 (.063) ***	.583 (.063) ***	.228 (.059) ***
age (years)	.156 (.036) ***	.322 (.023) ***	.415 (.025) ***	.325 (.022) ***
oldest child	.105 (.113)	.161 (.075) **	.117 (.074)	.068 (.070)
only child	-.433 (.215) **	-.097 (.139)	-.204 (.140)	-.063 (.131)
# brothers	-.118 (.066) *	.001 (.036)	-.163 (.037) ***	-.066 (.034) *
# sisters	-.195 (.069) ***	-.026 (.036)	-.092 (.036) **	-.023 (.034)
black	.074 (.120)	-.784 (.078) ***	-.901 (.080) ***	-.799 (.074) ***
hispanic	-.178 (.136)	-.623 (.083) ***	-.547 (.085) ***	-.654 (.079) ***
< high school	-.031 (.142)	-.161 (.084) *	-.353 (.086) ***	-.371 (.081) ***
some college	.041 (.124)	.098 (.081)	.159 (.081) **	.078 (.076)
college+	.411 (.159) **	.194 (.109) *	.218 (.114) *	.288 (.107) ***
income (\$10K)	.000 (.008)	.010 (.007)	.024 (.009) ***	.009 (.008)
mother works	.113 (.140)	-.007 (.084)	.013 (.085)	.157 (.079) **
single mother	.001 (.211)	.127 (.122)	.131 (.127)	-.007 (.116)
mworks*single	-.103 (.237)	.011 (.140)	-.009 (.143)	-.024 (.132)

Appendix (continued) - Decision index items

Full sample - children in single and two-parent families

(N=5721- 6276 due to item-specific response patterns)

Logit coefficient (standard error)

Domain:	Curfew	Television	Religion
	Sole decision		
girl	-.787 (.190) ***	.132 (.057) **	.136 (.067) **
age (years)	.061 (.066)	.283 (.020) ***	.322 (.024) ***
oldest child	.244 (.203)	-.263 (.067) ***	-.131 (.079) *
only child	.389 (.330)	.235 (.121) *	.264 (.137) *
# brothers	-.082 (.109)	-.057 (.033) *	-.058 (.039)
# sisters	-.041 (.129)	-.063 (.032) *	-.015 (.039)
black	.172 (.244)	-.029 (.070)	-.450 (.087) ***
hispanic	.209 (.230)	-.106 (.077)	-.303 (.091) ***
< high school	.207 (.225)	.003 (.077)	.316 (.090) ***
some college	-.035 (.233)	-.134 (.072) *	.014 (.085)
college+	-.636 (.347) *	-.548 (.105) ***	-.432 (.137) ***
income (\$10K)	.021 (.010) **	-.011 (.006) *	-.020 (.014)
mother works	.352 (.255)	.200 (.078) **	.064 (.092)
single mother	.098 (.384)	.143 (.116)	.362 (.134) ***
mworks*single	-.293 (.418)	-.071 (.129)	-.090 (.149)
	Any decision		
girl	.009 (.085)	.184 (.057) ***	.352 (.058) ***
age (years)	.174 (.030) ***	.309 (.020) ***	.305 (.021) ***
oldest child	.218 (.096) **	-.188 (.067) ***	-.060 (.068)
only child	-.239 (.182)	.050 (.124)	.130 (.125)
# brothers	-.045 (.057)	-.121 (.034) ***	-.081 (.036) **
# sisters	-.053 (.056)	-.074 (.033) **	-.012 (.034)
black	-.661 (.116) ***	-.218 (.072) ***	-.630 (.075) ***
hispanic	-.317 (.114) ***	-.280 (.076) ***	-.424 (.078) ***
< high school	-.185 (.127)	-.138 (.078) *	.045 (.082)
some college	.170 (.105)	-.113 (.073)	.087 (.074)
college+	.242 (.135) *	-.350 (.100) ***	.143 (.101)
income (\$10K)	.016 (.006) **	.002 (.005)	-.009 (.006)
mother works	.286 (.120) **	.216 (.078) ***	.041 (.078)
single mother	-.072 (.200)	.136 (.115)	.165 (.119)
mworks*single	.045 (.218)	-.107 (.129)	-.042 (.133)