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ABSTRACT

This study used data from the National Survey of Families and Households (NSFH) to explore the relationship between family functioning and adolescent behavior problems. The data covered five family types: married, two-biological parent families (TP); stepfamilies; divorced/separated female-headed families (DSF); never married female-headed families (NM); and single male headed families. The total sample included over 2,300 households with adolescents between 12 and 18 years. Data were collected through in-person surveys and self-administered questionnaires completed by respondent and spouse. Findings indicated that there was significant variation across family types in the ways in which family functioning measures related to adolescent behavior problems, with measures operating poorly for NM families. The TP families generally scored higher than other types on family strength measures. One-parent families attempted to compensate by reaching out to extended kin, friends, and neighbors, although these activities were not related to reduced adolescent behavior problems. Internal measures of family functioning were more important than external measures of family functioning in predicting adolescent problem behaviors. Marital conflict and depression were very powerful predictors of adolescent behavior problems in two-biological parent families, and marital conflict was a powerful predictor in step-families. Family functioning measures were about equal in predictive power to sociodemographic measures in predicting two of the three behavior problem measures. There were clear differences in the level of reporting by parent. (Seven tables detail findings. An appendix provides definitions of measures. Contains 15 references.) (KB)

FAMILY FUNCTIONING AND ADOLESCENT BEHAVIOR PROBLEMS: AN ANALYSIS OF THE NATIONAL SURVEY OF FAMILIES AND HOUSEHOLDS

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INTRODUCTION

A growing body of literature is exploring the ways in which both positive and negative family functioning affect the health and well-being of family members, particularly children. With rare exceptions, such research has been based on small, narrow and unrepresentative samples of families (for exceptions, see Furstenburg et. al. 1983, Zill et al. 1991, Zill et. al. 1993, Buchannon, Maccoby and Dornbusch 1992).

In this paper, we use the National Survey of Families and Households, a recent large random sample of U.S. families containing a wealth of family process and social support measures, to go beyond economic and demographic measures and systematically explore the relationship between family functioning and adolescent behavior problems.

QUESTIONS PURSUED IN THE ANALYSIS

The primary focus of the analysis will be on the relationship between family function and family type. Within this area, we will focus on the following questions.

- **To what extent are family functioning measures equally appropriate for all family types?** There has been a great deal of criticism within the child development literature that existing measures of family process and child behaviors may suffer from significant race/ethnicity and class biases. Groups may face distinct challenges from the environment, and draw on distinct cultural traditions which call for different family functioning strategies to maximize the well-being of children. This may result in significant variations in both the reliability and validity of such measures across groups. This critique is easily extended to the social dimension of family type. While different family types may not possess distinct cultural traditions, they do face distinct internal and external stressors which may produce differences in the reliability and validity and impact of family functioning measures.

- **How do the levels and mix of positive and negative family functioning characteristics differ by family type?** Different types of families differ both in the stresses they experience which can produce poor family functioning, and in the resources available to them to build family strengths. Single parent families of all sorts have one less parent to contribute to the raising of children and the financial support of the family. Step-families may have to deal with a third parent, the ex-spouse, and face unique challenges in defining the relationship between step-parents and children. These and other factors may be expected to produce both different levels of functioning, and different strategies to build family strength.

- **How might the effects of these family functioning characteristics on adolescent behavior problems differ by family type?** The relationship between a family functioning measure and an adolescent behavior measure may differ across family types for two reasons. First, the particular family functioning measure may be measuring different things for different family types (a validity issue). Second, it is likely that the origins of adolescent behavior problems vary by family type. For example, both a divorce and the introduction of a step-parent, defining characteristics of two common family types, may themselves be unique sources of behavior problems.

In addition to family type issues, we will explore the following broad issues:

- **How important are family functioning measures in explaining adolescent behavior problems, relative to conventional economic and sociodemographic measures?** Presently, family functioning measures are relatively rare and not always of the best quality in existing large scale surveys. If their inclusion adds substantially to our understanding of the behavior of family members, they should be further developed and included in more large federal surveys. The analyses for this project will not be definitive regarding this question, but will add important new information.

- **What dimensions of family functioning are the most important in determining adolescent behavior?** For the analysis, family functioning measures have been divided into internal and external measures. Internal measures refer to the processes and value orientations which operate within the immediate family. External measures indicate the relationship of the family to the outside world including extended kin, friends and neighbors, and organizations within the community. The ecological model described by Bronfenbrenner suggests that both will have important impacts on child development (Bronfenbrenner 1979). In the analysis, we will evaluate the relative importance of these two types of measures and, within these types, the importance of individual measures.

- **What is the relative importance of family dysfunction and positive family strengths in determining adolescent behavior?** The family strengths literature is founded on the notion that it is just as important to identify positive family strengths as it is to identify family dysfunction (Stinnett and DeFrian 1985). Also, it is suggested that distinct measures can and should be developed for each (Dunst and Trivette, 1992). For the present analysis we examine two negative measures, family conflict and parental depression. The remaining family functioning measures are operationalizations of constructs found in the family strengths literature (for a review of this literature, see Krysan et. al., 1990).

- **Does it matter who you ask?** In families with more than one parent, reports of behavior problems and family strengths may vary by the gender of the parent, and by whether the parent is the biological step-parent of the child. Both potential sources of variation are explored in the analysis. These results may have important implications for choice of respondent in future Federal surveys.

DATA

The data set for this analysis is the National Survey of Families and Households (NSFH), a large representative sample of U.S. households taken in 1987. The total sample size is 13,014, including over 2,300 households containing adolescents between the ages of twelve and eighteen. In-person surveys were conducted with a randomly chosen adult within the household (a parent in our sub-sample), and with self-administered questionnaires completed by both respondent and spouse. The survey was designed to support a wide variety of family-oriented research efforts. A five year follow-up survey has just been completed, and will be available for analysis in January of 1994.

The NSFH has a number of characteristics which make it particularly valuable in pursuing the research agenda outlined above. First, its large sample size allows us to perform comparative analyses which include less common family types such as never married female heads and single male heads. Second, it contains what is by large survey

standards a wealth of data from which a wide variety family functioning measures can be produced.

The survey also has several limitations which should be noted. First, the data are cross-sectional, which limits our ability to model the causal direction of the relationship between family strength measures and adolescent behavior problems. This is an important issue for analyses of adolescent behaviors, since adolescents are more likely than younger children to have direct impacts on the functioning of the family (Hetherington, personal communication).

Second, no information was gathered directly from the adolescent, a shortcoming that has been corrected in the five year follow-up survey. A previous analysis has shown child reports of some family functioning measures to be more closely related to adolescent behavior than parent reports (Zill et. al., 1991).

VARIABLES

Outcome Measures

We have constructed three outcome measures covering different aspects of adolescent behavior problems. Taken together, they allow us to evaluate the impact of family functioning measures across a broad spectrum of behaviors. The first measure, Behavior Problems I, is a seven-item scale composed of a subset of questions from the Behavioral Problems Index (Zill, 1991). The scale is comprised of everyday behaviors associated with anti-social acting out, hyperactivity, and depression-withdrawal. The second measure, Behavior Problems II, is a five-item scale composed of major events indicating

more serious problem behaviors and includes running away, school suspension, parent-teacher conferences over behavioral problems in school, trouble with the police, and seeing a psychologist or therapist. The third measure is a seven item scale that reflects the degree of conflict between parent and adolescent child in the following areas: dress, friends, staying out late, helping around the house, money, school, and getting along with other family members. For a detailed description of these and other measures used in the analysis, see Appendix A.

Family Functioning Measures

As we noted above, measures of family functioning have been categorized as internal or external for this analysis. Internal measures of family functioning include encouraging independence, commitment to family, spending time together, marital conflict, and parental depression. The first three constructs has been identified in the literature as measures of positive family functioning, and the last two as dysfunctional for the development of children.

The first two of these measures are abstract values measures reflecting degree of commitment to marriage and children, and to encouraging independence in one's children. The time together scale reflects the amount of time one spends with one's children eating meals, playing, working on projects, having private talks, helping with reading or homework, and engaging in leisure activities outside the home. The marital conflict scale is a seven item cumulative measure of the frequency of disagreement between spouses on the following topics: household tasks, money, spending time together, sex, the in-laws, the children, and

about having another child. The parental depression measure is a twelve item version of the standard CES-D depression scale.

External measures of family functioning were chosen to reflect the availability of social support networks (family, friends, and religious institutions), and parental involvement with organizations which serve youth. We use five external measures of family functioning in all: two measures of relationships with extended kin (geographical and emotional closeness), frequency of socializing with friends and neighbors, attending religious services, and involvement in youth organizations (PTA, team sports, religious and community youth groups). All are based on the activities of the parent(s), not the adolescent. Social support measures were defined in terms of availability rather than actual support behaviors, since actual support behaviors reflect need as well as actual available support.

It is hypothesized that all family functioning measures with the exception of marital conflict and depression, will be negatively associated with adolescent behavior problems. That is, higher scores on these measures should be associated with fewer behavioral problems. We expect the opposite relation for the marital conflict and parental depression measures.

Not all of the important constructs of family functioning could be operationalized using this data set. Important constructs not operationalized for this analysis include styles of family communication and conflict resolution, adaptability, cohesion, and the expression of appreciation among family members (see Krysan et. al. 1990 for a review of these and other constructs). Consequently, the analysis is not a comprehensive examination of family functioning measures in general, but only an exploration of representative constructs.

THE ANALYSIS PLAN

In our analyses, we begin by examining measurement reliability and raw correlations between family functioning measures and outcome measures of adolescent behavior problems. These are performed for the full sample, and separately by family type. Comparisons are also made by sex of adult respondent and, in the case of step-families, whether the parent was the biological or step parent. Next, we look at the mean values of both functioning and outcome measures by family type, to see how the levels and mix of family strengths and family difficulties differs across family types.

This is followed by a series of nested multivariate models for the entire sample which allow us to explore important questions discussed above which are not directly related to family type issues (e.g. the overall importance of family functioning measures, the relative importance of internal versus external measures of functioning). Finally, we compare the results of fully specified models (those with the full complement of measures explored in these analyses) across family types.

The analyses focus on five family types:

- married, two biological parent families:
- step-families:
- divorced/separated female headed families (DSF);
- never married female headed families:
- single male headed families.

Due to small sample sizes, our analyses of the two least common family types, never married female and single male headed families, must be limited to descriptive analysis. Multivariate analyses are carried out for the remaining three family types.

CREATING THE SCALES

All of the outcome and most of the family functioning measures that we are using in the analyses are multi-item scales representing unitary constructs. In creating these scales, factor analyses were performed to test whether the potential components of the scales all loaded reasonably well on at least one factor. Through this method a final set of component items were identified for each scale. The basic characteristics of each scale, including number of items, value range, and results from the final set of factor analyses are displayed in Table I.

SCALE RELIABILITY

One of the means of determining the quality of such scales is to assess their reliability. Reliability measures the extent to which a scale can be expected to yield stable results across repeated research trials or surveys. Measures with poor general reliability are to be avoided or, if marginal, to be used with appropriate caution. When making statistical comparisons across groups, it is important for purposes of interpretation that the level of reliability be similar across those groups. For these analyses we are using Cronbach's alpha as our reliability measure.

In assessing reliability we have concentrated on three issues:

- What is the reliability of each measure within the general population?
- To what extent does reliability differ by family type?
- To what extent does reliability differ according to which parent is the respondent?

There are several reasons to expect that a measure's reliability may differ significantly by family type. First, the scales may actually be measuring somewhat different things for different types of families. For example, what it means to "encourage independence" among one's children may be significantly different between single and two parent families. Where a parent in the two-parent family may be thinking of independence in the abstract, a single parent may be thinking more in terms of concrete activities which will help the family to function on a day to day basis. Second, if the range of values of the measure is much more restricted for certain family types (for example if certain types of behavior are rare for certain family types) it will tend to be a less reliable measure for that group even though it is measuring the same construct.

An awareness of differences in the reliability of a measure across family types is very important for proper interpretation of analysis results, since differences in the effects of the measure may be due in part to differences in reliability rather than differences in the way the construct actually operates within different types of families.

Measures may also differ in reliability according to the gender or the step versus biological parent status of adult respondents within the same family types. Interactions between parent and child differ significantly along both dimensions. Women and biological

parents appear to have a greater awareness of what is going on in the lives of their adolescent children. Such differences may result in lower measurement reliability from men and step parents, whose lesser knowledge could introduce more error and less variation to the measure.

Table II lists Cronbach's alpha scores of reliability for all of the scales used in our analysis. Scores are shown for the full sample and for each of the five family types. Separate scores are also shown for husbands and wives within two-biological parent families, and for biological mothers and step-fathers within step families.

For the total sample, all of the adolescent outcome measures and all but two of the family functioning measures have alphas in the .6 and .7 range or higher. This is a satisfactory degree of reliability, particularly for survey data (see Nunnaly 1978). Many of these measures are based on five or fewer items. The addition of appropriate additional items could significantly enhance their reliability. Though such additional items do not exist in this data base, the items in these scales could form the basis for even more reliable scales in future surveys.

Two of the scales, "socializing outside of family" and "commitment to family", showed marginal reliability scores of .44 and .54, respectively. While this suggests that they may not adequately represent the constructs which they are meant to represent, we use them in subsequent analyses given that we have no alternatives within the NSFH.

Across family types, there is surprisingly little variation in measurement reliability, and generally favorable reliability levels were observed for each family type. For most measures, variations in the alphas are no greater than .10. Several measures (parent-child

conflict, parent-child time together, parental depression and marital conflict) were particularly consistent across family types. This indicates that it may not be necessary to operationalize family functioning constructs differently for different family types, though of course there are other reasons in addition to variation in reliability for doing so. In addition, it means that the generally favorable reliability levels observed for the full sample also exist for each family type.

There are, however, a few notable exceptions to this general pattern of consistency.

- The reliability measure for "Behavior Problems II", the scale of more serious behavior problems, is considerably smaller for adolescents from two-biological parent families than for teens from other family types (.48 versus .62 for the full sample). It is not clear why this should be so. As we shall see in Table IV, such children show a very low mean value for this measure compared to children from other family types (.28 versus .54 or higher). The restricted range of values for children from two-biological parent families may account for its relatively poor performance.

- The "family friendship" measure, a measure of emotional closeness of the parent with adult extended kin, appears to be more reliable for two-biological parent families than for other types of families (.66 versus .48-.56). Unlike most of the other family types, most two-biological parent families have not had a major family disruption which could alter relationships with extended family members and friends. In addition, such families may be more traditional, placing greater emphasis on family relationships. Both factors may account in part for the greater reliability of the measure for two-biological parent families.

- The "socialize outside of family" measure, which showed the lowest overall reliability, also showed great variation by family type (.32 to .51) with the highest reliability again for two-biological parent families.

Within two-biological parent families, the reports of mothers and fathers have similar reliability levels for both adolescent outcome and family functioning measures across the board. Within step-families, however, there are several large and puzzling differences in reliability between step-fathers and biological mothers, all in favor of the step-father. For

"Behavior Problems I", the outcome measure requiring the most knowledge of the daily life of the child, step-fathers have alphas of .73 versus .58 for biological mothers. For "family friendship" and socialize outside of family", the spread is twice as large. For all three measures, step-fathers had the highest reliability score of the subgroups. While the reason for this is unclear, it may be that step-fathers more critically scrutinize the behavior of their non-biological offspring and develop more consistent and perhaps less flexible impressions.

CORRELATIONS BETWEEN MEASURES OF FAMILY FUNCTIONING

Some work within the family functioning literature seems to suggest that family functioning measures will be fairly highly correlated with one another (Olson 1989, Stinnett and DeFrain 1985). This also appeals to common sense; families who operate well in one dimension of family life will tend to operate well in other dimensions, while the converse might be true for dysfunctional families. On the other hand, within the family therapy literature there is a growing acknowledgement that even troubled families often have significant strengths to draw upon in addressing particular dysfunctions, indicating a certain independence across dimensions of family functioning. Some researchers have gone so far as to develop separate measures of strength and dysfunction for what are usually treated as single theoretical constructs (Dunst and Trivette, 1992).

An analysis of such correlations is, then, important in itself for the light it sheds on how dimensions of family functioning may affect each other. This also has specific implications for the analyses to follow. If the correlations are low, or are high only for selected pairs of measures, then it may be possible to say something useful about the total

effect of a measure both directly, and indirectly through its relation with other dimensions of family functioning. If many of these measures are highly correlated, however, we are limited to a discussion of direct effects. Alternatively, high correlation may indicate the desirability of constructing and examining a single family strengths scale.

Table III shows a correlation matrix for all measures of family functioning used in the analysis. All significant correlations are in the expected direction, with the exception of the relationship between "family within 25 miles" and "marital conflict". This is nevertheless an interesting exception, possibly indicating that family proximity can be something of a mixed blessing.

The most notable finding in Table III is the surprisingly low correlation between most measures. There is no correlation higher than .27, and most are in the single digits and teens. Many of the measures are statistically independent from one another.

There are a number of interesting and noteworthy patterns of relationships. First, there is the surprising lack of relationship between the negatively defined family functioning measures (marital conflict and parental depression) and the remaining measures of family strengths. They are reasonably well correlated with each other at .22. But parental depression is significantly correlated with only two of the remaining eight measures, and those correlations are very modest (.05 or below). Marital conflict is correlated with more measures, but again they are very modest, the highest being the correlation with "commitment to family" at -.13. This seems to bear out the observation of those theorists and family therapists who believe family dysfunctions and strengths often exist within the

same family. Moreover, they suggest that the several constructs are indeed tapping different dimensions of family functioning.

Second, the "family friendship" scale, representing the emotional closeness of the parent to adult kin outside the household, is at least marginally significantly associated with all of the other measures, though the level of correlation is often modest. It is, perhaps not surprisingly, most strongly correlated with the measure for geographic proximity of extended adult kin (the family within 25 miles measure) at .27, and the "commitment to family" measure at .17. This finding invites a number of possible interpretations. It may indicate the central importance of the support (emotional, financial, and/or practical) offered by a strong extended family system for the proper functioning within the immediate family. Alternatively, it may reflect a learning effect, namely that adults who come from loving families possess the skills and attitudes needed to create well-functioning families of their own.

Third, there are many significant correlations between the more positively constructed internal and the external measures of family functioning. External measures particularly related to these internal measures include family friendship, involvement with religious institutions, and parental involvement in youth organizations. These relations are to some extent definitional. For example, the relatively high correlation between parent/child time together and parental involvement in youth organizations is explained in part by the fact that the former "internal" measure includes joint activities outside the home (though the measures do not contain any overlapping items). Overall, however, this demonstrates a clear relation between internal family functioning processes and persons and organizations

beyond the immediate family. What cannot be determined with this cross-sectional data is causality, i.e. whether well-functioning families are more integrated into the wider community, or community involvement (including extended kin) promotes good family functioning, or both. Further research using longitudinal data is needed to determine the causal nature of this relationship.

LEVELS OF FAMILY FUNCTIONING AND ADOLESCENT BEHAVIOR PROBLEMS: VARIATIONS BY FAMILY TYPE

In this section, we explore differences in the incidence of both behavior problems and family functioning measures by family type. It has been amply demonstrated in previous research that the incidence of child behavior problems differ by family type. Further, we are interested to see how the availability and mix of family strengths, and the burden of family dysfunctions (conflict, depression), differs by family type.

Adolescent Behavior Problems

Table IV contains the mean values for each adolescent outcome and family functioning measure used in the analyses, for the full sample and separately by family type. For all three measures of adolescent behavior problems there is clear variation by family type. Children from two-biological parent families are reported to have the fewest problems for all measures. The difference is particularly striking for "Behavior Problems II", where the report of serious behavior problems is one half or less of what it is for other family types. Across the remaining family types, it is important to note that children from step-families are reported to exhibit problem behaviors at a rate closer to children from single

parent families than to those from two-biological parent families. In fact, when comparing the reports of biological mothers from step-families with those from both types of female headed families, levels of problem behavior are at least as high for children from step-families as for children from female-headed families.

It is interesting that step-fathers are considerably less likely than biological mothers in step-families to report serious adolescent behavior problems (Behavior Problems II). This may have to do with the fact that four of the five component measures for that scale require knowledge of the child's actions since age twelve (which a step-father may not possess), whereas the other two scales are related to behaviors around the time of the survey. Clearly, within step-families it is preferable to gather retrospective data of this sort from the biological parent.

It bears pointing out that the rate of behavior problems vary within a very restricted range across family types. Though the differences between some family types may be large proportionally, in absolute terms the differences are surprisingly modest. For example, though the "Behavior Problems I" measure has a range from seven to twenty-one, the largest difference in mean scores across family types was .83, less than a single point.

Family Functioning Measures

In examining the mean distribution of family functioning measures (Table IV), we are interested in differences across family types within measures, and differences in the mix of family functioning resources that each family type has to draw upon. First, as a general observation, the two-biological parent family, which reports the fewest adolescent behavioral problems, also has the most family strengths to draw upon and the fewest family

dysfunctions to deal with. Parents from such families are much less likely to be depressed, even after controlling for the gender of the parent. Marital conflict is also much lower for parents in two-biological parent families than those from step-families. Parents from two-biological parent families also attend religious services and activities more often, have more close relationships with extended kin, and are much more likely to be involved in youth organizations.

Second, we do observe what may be compensatory patterns of external support seeking for single parents in general, and for never married female heads in particular. All three single parent family types show much higher rates of socializing outside of the family, indicating that they may have a larger support network of friends outside the kinship system. In addition, never-married female heads have considerably more adult kin living close by than parents from other family types; almost one person more than mothers within two-biological parent families. In part this may reflect a cultural preference, since a disproportionate number of these women are African-American (see Stack, 1974). It may also reflect a deliberate strategy to remain close to kin who can provide support and assistance, or may be associated with the lower ages at birth and more limited resources associated with out-of-wedlock childbearing.

Beyond these general patterns, there are notable differences (and lack of differences) across family types in the mean levels of particular family functioning measures.

- Though parents from two-biological parent families show the highest score on the family friendship measure, the differences between them and the never married female and single male head families are surprisingly small given that single parents do not have the spouse's family to draw upon.

- Involvement with organizations within the community (both religious and youth-related) is much higher for two-biological parent families than for other family types. The gap is particularly large between single parent and two-biological parent families where involvement in youth organizations is concerned, perhaps reflecting the role overload experienced by single parents. This may be cause for concern, since these are precisely the types of organizations within the community (religious and youth organizations) that could be most helpful in supporting single parents and involving their children in constructive activities.

- Across the internal measures of family functioning, there is a notable consistency across family types in the values for "parent/child time together". This is both surprising and encouraging, since it indicates that any increased time pressures experienced by single parents do not seem to translate into less parent/child involvement in the day-to-day activities covered by this measure. It bears mentioning that this lack of variation across family types may not exist to the same extent for very young children, since parents (usually mothers) from two parent families are more likely to stay at home when there are young children in the house.

- Parental depression is extremely high among never married female heads (1.46) relative to other family types, particularly compared with parents in two-biological parent families (.61). This gulf remains even when controlling for gender effects; mothers in two-biological parent families still score very low (.68). The measures for the remaining family types fall about half way in between these two extremes. There may be several sources of this variation including selectivity into certain family types, and differences in income by family type. It seems likely, however, that pressures associated with parenting for single parent and step-families give rise to depression, which may in turn have negative impacts on children.

CORRELATIONS BETWEEN FAMILY FUNCTIONING MEASURES AND ADOLESCENT BEHAVIOR PROBLEMS

In this section of the analysis we look at the correlations between our ten family functioning measures and the three outcome measures of adolescent behavior problems. We look at these bivariate relations for the total sample, and separately for each family type. These correlations should tell us whether the family functioning measures are behaving roughly as anticipated in terms of impact and direction, and whether they operate similarly across family types. Table V shows bivariate correlations for the full sample and separately by family type. There is a separate page of the table for each of our three outcome measures.

Results for the Total Sample.

Looking at the first column in each table containing correlations for the full sample, each of the family functioning measures is significantly related (.05 level) to at least one of the three behavior problem measures. There was a great deal of variation, however, in terms of the strength of impact and the number of outcomes to which a measure was significantly related.

Three of the five "internal" measures of family functioning, (commitment to family, marital conflict, and parental depression) and one of the external measures (family friendship) are significantly related to all three outcomes. Four of the measures (parental involvement in youth organizations, socializing outside of the family, parent-child time together, and encouraging independence among one's children) are significantly related to two outcomes. Two of the measures (family within 25 miles, and involvement in religious

institutions) are significantly related to only one of the outcome measures, and when significant the correlations were small (.04 and .09 respectively).

For two of the three behavior problem measures, marital conflict and adult depression (the two negatively defined measures of family functioning), are the most strongly correlated with the behavior problem measures. Correlations are particularly strong for marital conflict, running from .28 to .35. For the scale representing more serious behavior problems, "Behavior Problems II", the correlations are much smaller both absolutely (.06 and .08), and relative to other family functioning measures in the model.

One of the measures of family functioning behaved counter to what had been expected. The bivariate correlations indicate that higher rates of parental socializing outside the family are associated with more adolescent behavior problems for two of the three outcome measures (Behavior Problems II and parent/child conflict). This would indicate that an active social life on the part of parents, whatever the benefits gained by him or her, may sometimes come at the expense of children. Alternatively, it may be that parents with troubled children have greater need for social contact and support.

Results by Family Type.

In general, family functioning measures seem to operate rather consistently across three of the five family types: two-biological parent, divorced/separated female (DSF), and single male headed families (Table V). Few of the coefficients for single male heads are significant, but they are similar in size and direction to those of the other two family types leading one to conclude that the main difficulty here is sample size. Between the two-

biological parent and the divorced/separated female headed families, only two measures seem to operate somewhat differently. The parental depression measure is always significantly correlated with adolescent behavior problems for two-biological parent families. The correlation is smaller and never significantly correlated for DSF families. In addition, the family friendship measure is significantly related to one of the behavior problem measures (Behavior Problems II) for DSF families, but is never significant for two-biological parent families.

For step-families, several of the measures operate somewhat differently than they do for other family types. The correlations for "family friendship" are small and insignificant for all three outcomes in step-families, whereas they are often significant for two-biological parent and DSF families. Conversely, the "encourage independence" scale, which measures the importance the parent attaches to encouraging independence in his or her children, is large and positively correlated with Behavior Problems I and II for step-families, but not for two-biological parent or DSF families. It may be that this construct takes on a different content in the case of step-families due to the often problematic relationship between step-parents and their step-children (Hetherington et. al, 1981).

The family functioning measures performed poorly as predictors of adolescent behavior problems for never married female headed families. For only one outcome, "Behavior Problems I", were any correlations significant at the .05 level. Parental depression and "socializing outside of the family" were both strongly and positively correlated with that outcome. To some extent this lack of significance undoubtedly results from the small sample sizes for this family type. But among the remaining correlations their size and direction are

often at odds with those from other family types, leading to the conclusion that many of these scales may not be particularly appropriate for families headed by never married mothers.

The very high correlation between parental depression and adolescent "Behavior Problems I" for never married female headed families bears particular mention. The correlation is .43, nearly three times the size of the correlation for two-biological parent families (the only other family type for which it was significant). Recall that these parents had much higher depression levels than parents in other family types, which may explain the higher correlation. It may be that a much greater proportion of these mothers are experiencing high levels of depression, and it is this high level of depression which is associated with behavior problems in their adolescent children. This relation merits further investigation using longitudinal data so that clear causal inferences can be made.

In sum, we have found that, with a few notable exceptions, family functioning measures correlate similarly to adolescent behavior problems for three family types: two-biological parent, divorced/separated female head, and single male headed families. Measures operated somewhat differently for step-families, but in ways which are understandable given the unique stresses within such families. Finally, these family functioning measures operated poorly for families of never-married mothers, indicating that efforts should be made to produce alternative measures for such families.

FULL SAMPLE MULTIVARIATE ANALYSES RELATING FAMILY FUNCTIONING TO ADOLESCENT BEHAVIOR PROBLEMS.

Table VI displays the results of a sequence of five models for each of the three outcomes. The models are nested, and have been designed to allow us to explore the following questions:

- To what extent are the associations between family type and adolescent behavior problems attributable to differences in other sociodemographic characteristics?
- Are there significant effects for individual measures of family functioning once economic, sociodemographic, and other family functioning measures have been controlled?
- If so, how important are family functioning measures in explaining adolescent behavior problems relative to conventional economic and sociodemographic variables?
- What is the relative importance of internal versus external measures of family functioning with regard to adolescent behavior problems?
- To what extent are the effects of other family functioning measures attributable to the effects of parental depression?

Model One is a simple regression which includes only family structure. Each coefficient represents a comparison between the family type listed and a two-biological parent family. As expected, the coefficients are large and positive for all family types. The coefficients are not significant for never-married female and single male heads for two of the three outcomes, probably a result of their small sample sizes. In terms of the predictive power of family structure alone, variance explained is quite modest ranging from 1.6 percent to 4.2 percent for parent/child conflict and Behavior Problems II, respectively.

In Model Two, we add the remaining economic and sociodemographic variables to the regressions. These include many characteristics which we would expect to be related

both to family type and adolescent behaviors, thus potentially reducing the direct impact of family structure. Such characteristics include family income, public assistance receipt, family size, parental educational attainment, and race. The introduction of these variables does increase the predictive power of the model for all three outcomes, but the reduction in the size of the coefficient for family structure is quite small, being proportionately the largest for the parent-child conflict outcome. Nor are their reductions for all family types. Surprisingly, coefficient sizes actually increase for never married female and single male heads in several cases in the presence of controls. For Behavior Problems I and parent-child conflict, the inclusion of these control variables reduces the coefficient for single male headship to marginal significance.

In Model Three, we expand the analysis by introducing all of the internal family functioning measures except for parental depression. In order to include marital conflict in this model, it was necessary to combine the marital status and conflict measures, creating separate high and low conflict versions for two-biological parent and step families. The omitted family type, that is, the one to which all other family types are compared, is the two-biological parent low conflict family.

The purpose of this model is to gauge the importance of such measures relative to the economic and sociodemographic measures included in the previous model. The results show moderately large increases in the predictive power of Model Three over Model Two for Behavior Problems I (.067 to .110) and parent/child conflict (.072 to .131), and a more modest increase for Behavior Problems II (.077 to .091). For two of the three outcomes, the

predictive power of the model is nearly doubled when these internal family functioning measures are introduced.

Overall, then, these analyses indicate that the inclusion of family functioning measures, particularly those assessing internal family processes, in future surveys may significantly enhance our understanding of adolescent behavior problems. These models are based on cross-sectional data and therefore we do not know the causal direction of the effects running between family functioning and adolescent behavior problem measures. Of the three internal measures included in model three, only the "commitment to family" variable is unlikely to be much affected by adolescent behavior problems. To solve this problem satisfactorily requires the proper longitudinal data. Such analyses will be feasible once data from the five year follow-up of the NSFH become available early next year.

Of the four family functioning variables included in model three (parent/child time together, commitment to family, encouraging independence in one's children, and marital conflict), three were significant for each outcome. All coefficients are in the expected direction. Interestingly, it was a different three in each case.

In Model Four, we add the external measures of family functioning to the model. These measures add very little to the overall explanatory power of the model and are usually not significant. The coefficients for the internal measures were little affected by the introduction of the external measures. In Table Five we saw that many of these external measures were significantly correlated with the behavioral outcomes. This leaves open the possibility that such external factors may be having an indirect effect through their impact on internal family processes. For example religious involvement may be indirectly affecting

parent/child conflict and the behaviors captured in the "Behavior Problems I" measure by encouraging parent/child time together and an increased commitment to family on the part of parents. Further research would be needed to clarify the relationship between these internal and external factors.

In Model Five, we add the parental depression measure to the model. We are interested in the extent to which the coefficients for other family functioning measures are reduced by the introduction of this variable. Parent depression shows significant direct effects on the Behavior Problems I and parent/child conflict outcome measures. The only independent variables in the model affected by the introduction of this variable are the family type/conflict measures. The coefficients for these variables are reduced across the board. though the reduction is never more than 20 percent. Comparing the variance explained between Model Five and Model Two (the economic and sociodemographic model) we find a doubling of the R-square for the Behavior Problems I and parent-child conflict outcomes. and a more modest increase of about 25 percent for Behavior Problems II. Clearly, family functioning measures are. as a group, important for our understanding of adolescent behavior problems.

Looking at the impact of individual measures in Model Five, we see that all of the internal family functioning measures, including parental depression, showed significant impacts for at least two of the three adolescent outcome measures; marital conflict was significant for all three. Among the external measures. parental involvement in youth organizations has a sizeable direct relation to the Behavior Problems I scale, and religious involvement has a modest but significant relation to the Behavior Problems II scale. There

were no other significant direct impacts of external measures. For the total sample, then, internal measures of family functioning are more closely and systematically related to adolescent behavior than external measures, at least in terms of their direct effects.

Of the three outcomes, family functioning measures appear to have the smallest impact on the scale measuring serious behavioral problems. This is interesting since it implies that, when it comes to the more serious "acting out" kinds of behaviors that most impact the community, family functioning is a relatively less important factor than it is for the day-to-day behavioral problems captured in the other two measures.

MULTIVARIATE MODELS RELATING FAMILY FUNCTIONING TO ADOLESCENT BEHAVIOR PROBLEMS: VARIATIONS BY FAMILY TYPE.

For our final analyses we have run the full model from the previous table (minus the family type indicators) separately by family type. These runs were performed for three family types: two-biological parent, step-parent, and separated/divorced female headed families. Small sample sizes for single male and never married female headed families precluded us from estimating multivariate models for these groups. For the sake of consistency with the full sample model, the marital conflict variable remains in the "family type" section of the table. Again, separate analyses were performed for each of the family types.

In analyzing the correlations in Table Five, we noted the different patterns of relationships between family functioning and adolescent outcome measures which exist for different family types. In this table we explore the same issues in a multivariate context. This

will allow us to evaluate differences controlling for economic and sociodemographic measures, and for other measures of family functioning.

Across the three outcomes, several distinct patterns of relationships appear by family type. First, parental depression is a strong predictor of adolescent behavior problems for two-biological parent families, but is small and insignificant for the other family types. It is unclear why this should be so. It may be that the causes of adolescent behavior problems differ across family types. Alternatively, and thinking in the other direction causally, it may be that adolescent misbehavior is a relatively more important determinant of depression among parents in two-biological parent families, since parents in other family types may face additional many additional life stresses which affect their emotional health.

Second, encouraging independence in one's children is a significant predictor of problems in several of the models for step-families (Behavior Problems I and II) and families headed by divorced or separated mothers (Behavior Problems II), but has no measurable impact among two-biological parent families. The effects seem particularly strong for step-families. It is reasonable to posit an increased need on the part of step and single parents for independence among their children. Single parents, lacking a spouse to share the load, are under increased time pressures, and may have a greater need for their children to be independent in their day-to-day activities. Parents in step-families may require more time to build the spousal relationship than two-biological parent parents. In addition, the special tensions which often exist between step-parents and their children, which can themselves lead to behavioral difficulties, may be minimized if the adolescent can achieve a degree of independence from parents. These unique needs may translate into differences

in the meaning of the measure itself across family types, since parents in different family types may have different notions of what constitutes "independence" given their distinct needs in this area.

Third, parental conflict is a significant predictor of all three behavior outcomes for both two-biological parent and step-families. For Behavior Problems II and parent/child conflict, the effect is very large. This large impact of parental conflict indicates that high conflict married households may be equally or more detrimental for children than single parent households, a point which has been made in the literature for some time (Zill, 1983). What is lacking from the present and previous analyses, and what is clearly needed, is some measure of adult domestic conflict within single parent households. It is likely that many single parents have regular interactions with boyfriends and girlfriends, partners, and extended kin who live in the household or are regular visitors. To do truly adequate comparisons across these family types, such a measure, which is critical to understanding the dynamics of married couple families, should be developed for single parent families as well.

Fourth, for the one outcome (Behavior Problems I) in which parental involvement in youth organizations was a significant predictor for the total sample, significance is lost for all but divorced/separated female headed households. Here the size of the effect is substantial, though the significance is marginal at .10. It is difficult to say whether this is in fact a true difference by family type, or is instead a matter of gender. It may be that it is the involvement of mothers in such organizations that is the critical factor; the gender specific correlations in Table Five appear to bear this out. Regardless, it suggests that when

single mothers are involved in community organizations, their children have fewer behavior problems.

CONCLUSIONS

In this analysis we have explored a number of important issues related to family functioning measures in general and, in particular, to the ways in which they operate across distinct family types. The major findings of the paper are as follows:

- There is a great deal of consistency in the reliability of the composite scales of family functioning across family types.
- Nevertheless, there is also significant variation across family types in the ways in which these measures relate to adolescent behavior problems. Available measures seemed to operate particularly poorly for never married female heads of household.
- There are significant differences across family types in terms of access to positive family strengths, and differences in levels of family dysfunction as well (particularly depression), with two-biological parent families generally higher on the measures of family strengths. Nevertheless, there was some evidence that single parent families attempt to compensate by reaching out to extended kin and to friends and neighbors. It is unclear whether such compensating strategies in fact operate to reduce the behavior problems of their adolescent children, however, since the measures were not positively related to reduced behavior problems for adolescents from such families in the multivariate analyses.
- With the few important exceptions noted above, the effects of external measures of family functioning are indirect at best, through their impact on internal family processes. Internal measures appear to be the most important, at least in terms of direct impacts on adolescent behaviors.
- The more negatively defined measures of family functioning (marital conflict, depression) were very powerful predictors of adolescent behavior problems in two-biological parent families both in themselves and relative to the impact of more positively constructed measures. Marital conflict was a powerful predictor for step-families as well.

- Family functioning measures showed themselves to be about equal in predictive power to sociodemographic measures in predicting two of the three behavior problem measures. Clearly measures of this sort merit serious consideration for inclusion in future federal surveys.

- Which parent one interviews in a survey appears to be important for specific measures in the analysis. There were clear differences in the level of reporting by gender. In addition, some measures, such as that for involvement in youth organizations, perform differently by gender in both correlational and multivariate analyses. Among step-families, there appears to be less knowledge of a child's behavioral history among step-parents.

RECOMMENDATIONS

Based on the findings presented in this paper, we have the following recommendations:

- The measures of family functioning constructed here indicate that such measures, particularly those we have termed "internal" measures, predict to adolescent behavior problems and thus merit inclusion in future large scale sample surveys. We recommend that work be done to further develop these types of measures for use in future large scale surveys.

- New work should be done to develop measures for never-married female headed households. Many of the measures explored here did not work as well for this group as they did for other family types. This is of some importance to the Federal government, particularly in light of plans to reorganize the welfare system. Such plans can benefit from a knowledge of what constitutes strong never married female headed families.

- A new measure of domestic conflict should be developed for single parent households. Conflict is a very important predictor of child well-being in married couple households, and we hypothesize that conflict with partners and/or resident adult kin may be similarly important for single parent families as well where significant conflict exists.

- When possible, surveys should interview both parents, and the child as well. Differences in reporting by both gender and biological/nonbiological status of the parent which were found in this analysis indicate that this would provide valuable additional information. In addition, as was demonstrated in the analysis of the

National Survey of Children also conducted for this project, child reports are often superior for topics such as adolescent behavior problems, child activities and the parent/child relationship.

- Further work should be done using longitudinal data for this sort of analyses (for existing efforts see accompanying papers). Such work can be done using the NSFH once data from the second wave of interviews becomes available in early 1994.

- Analyses similar to these should be performed for younger age groups. It is very likely that what constitutes a family strength differs according to the child's age and stage of development.

REFERENCES

Bronfenbrenner, U. (1979) The ecology of human development. Cambridge, MA: Harvard University Press.

Buchanan, Christy M., Maccoby, Eleanor E., and Dornbusch 1991. Caught Between Parents: Adolescents' Experience in Divorced Homes. *Child Development* 62: 1008-1029.

Dunst, Carl J. and Carol M. Trivette 1992. Measuring Family Functioning as an Outcome of Social Action Programs: A Framework and Relevant Indicators. A position paper on family functioning outcomes prepared for the PEW Charitable Trusts, as part of the Comprehensive Children's Services Initiative.

Furstenberg, F. F., Jr., Nord, C. W., Peterson, J. L., & Zill, N. (1983). The life course of children of divorce: martial disruption and parental contact. American Sociological Review, 48(10): 656-668

Hetherington, E.M., Cox, M. and Cox, R. Divorce and remarriage. Paper presented at the meeting of the Society for Research in Child Development, Boston, April 1981.

Krysan, M., Moore, K. A., & Zill N. (1990, May). Identifying successful families: An overview of constructs and selected measures. Paper presented at conference of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, Washington, DC.

Nunnaly, Jum C. 1978. *Psychometric Theory*. New York: McGraw-Hill Book Company.

Olson, D. H., Russell, C. S., & Sprenkle, D. H. (eds.) (1989). Circumplex model: Systemic assessment and treatment of families. New York: Haworth Press.

Stack, C. (1974). All our kin: Strategies for survival in a black community. New York: Harper and Row.

Stinnett, N., DeFrain, J. (1985). Secrets of strong families. Boston: Little, Brown & Co.

Swihart, J. (1988). "Characteristics of strong families." Unpublished paper, International Family Center, Logos Research Institute.

Zill, N. (1983, 22 and 24 March). Divorce, marital conflict, and children's mental health: Research findings and policy recommendations. Testimony before Broken Families: Hearings before the Subcommittee on Family and Human Services. Senate Hearing, 98-105.

Zill, N. (1991). The behavior problems index: Descriptive material. Washington, DC: Child Trends.

Zill, N., Morrison, D. R., & Coiro, M. J. (in press). Long -term effects of parental divorce on parent-child relationships, adjustment, and achievement in young adulthood. Journal of Family Psychology, special issue on Families in Transition.

Zill, N., & Rhoads. A. (1991). Assessing family strengths in a national sample of families with adolescent children. Washington, DC: Child Trends

APPENDIX A
DEFINITIONS OF FAMILY FUNCTIONING AND ADOLESCENT BEHAVIOR PROBLEM MEASURES USED IN THE NSFH ANALYSES

ADOLESCENT BEHAVIOR PROBLEM MEASURES

1. Adolescent Behavior Problems I

   A seven-item additive scale of responses to the following questions (with each item on a scale of 1-3 ranging from "often true" to "not true"):

   Child often:

   1. is irritable or sad (reverse coded)
   2. loses temper (reverse coded)
   3. is cheerful
   4. is fearful (reverse coded)
   5. bullies other children (reverse coded)
   6. does what you ask
   7. gets along with other kids

2. Adolescent Behavior Problems II

   A five-item scale with range of 0-5, with one point for an answer of "yes" to each of the following questions:

   1. child ever suspended/expelled from school since age 12?
   2. child ever run away since age 12?
   3. child ever in trouble with police since age 12?
   4. child ever see a doctor for emotional problems since age 12?
   5. met with teacher/principal concerning behavior problems of child in last year?

3. Parent/child conflict.

   A seven-item scale, with a range of 0-7, which reflects the degree of conflict between parent and adolescent child in the following areas: dress, friends, staying out late, helping around the house, money, school, and getting along with other family members.

INTERNAL FAMILY FUNCTIONING MEASURES

1. Parent-Child Time Together

   This is a simple additive scale of the following measures:

   1. number of times last week ate breakfast with child.
   2. number of times last week ate dinner with child.

3-6: How often spend time with children in the following activities (1 = never/rarely, 6 = almost every day):
3. in leisure activities outside the home;
4. working on a project or playing together;
5. having private talks;
6. helping with reading or homework.

2. Commitment to Family.

A simple additive measure of the following responses, all coded 1-5 on a strongly agree/strongly disagree continuum:

1. It is better to be married than to go through life single.
2. Marriage is for life, and not to be ended except under extreme circumstances.
3. It is better to have a child than to go through life childless.

3. Encourage Independence Among Children

A three item, simple additive scale which adds together the following responses, all coded 1-7 on a not at all important/very important continuum:
How important is it that your children:
be independent;
carry out responsibilities on their own;
try new things.

4. Marital Conflict

A five-item scale with one point awarded for frequent disagreement on each of the following topics:

1. household tasks
2.money
3. spending time together
4. sex
5. the in-laws
6. the children
7. having another child

5. Parental Depression

This is the 12 item version of the CES-D depression scale. It consists of the following items.
Number of days last week that you:

1. felt bothered
2. had a poor appetite
3. felt blue
4. had trouble concentrating
5. felt depressed
6. felt that everything was an effort
7. felt fearful
8. slept restlessly
9. talked less than usual

10. felt lonely
11. felt sad
12. couldn't get along.

One point was given for each time the answer was four days or more.

EXTERNAL FAMILY FUNCTIONING MEASURES

1. Extended Family Friendship

An additive scale with one point for each adult extended family with whom one is very close emotionally. This includes parents, siblings, spouses of siblings, of both the respondent and spouse.

2. Extended Family living within 25 miles

Number of adult extended family members living within 25 miles of respondent. This includes parents, siblings, spouses of siblings, of both the respondent and spouse.

3. Parental Church Involvement

Number of days per year that adult respondent attends services or a social function at a religious institution.

4. Parental Involvement in Youth Organizations

A four item measure reflecting regular involvement of respondent or spouse in the following types of organizations:
PTA or school activity;
Religious youth group;
Community youth group;
team sports/athletic clubs.

One point is given for involvement in each type of organization.

5. Socialize Outside Family

Number of days per year that adult respondent socializes in the evening with friends, neighbors, or co-workers.

Table I
Principal Components Factor Analyses for Indices Used in the Analysis

Index	Number of Component Items	Potential Range	Number of Factors Extracted (Eigen-value 1.00 or higher)	Number of Components Loading .30 or More on First Factor	Number of Components w/ Highest Loading on First Factor
Adolescent Outcome Measures					
Behavior Problems I	7	7-21	2	7	5
Behavior Problems II	5	0-5	1	5	5
Parent-Child Conflict	7	0-7	1	7	7
Family Functioning Measures					
External					
Family Friendship	9	0-open	4	8	4
Family Within 25 miles*	8	0-open			
Church Involvement	2	0-365	1	2	2
Parental Involvement in Youth Organizations	4	0-4	1	4	4
Socialize Outside Family	3	0-312	1	3	3
Internal					
Parent-Child Time Together	6	4-38	1	6	6
Commitment to Family	3	0-15	1	3	3
Encourage Independence	3	0-21	1	3	3
Marital Conflict	5	0-5	1	5	5
Parental Depression	12	0-12	1	12	12

* Treated as a summary index, not a scale.

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Table II
Measurement Reliability by Family Type: Cronbach's Alpha (Unstandardized)

Index	All Family Types	Major Family Type					Sex and Biological/Step Status of Married Adult Respondent			
		Divorced/ Separated Female Head	Never-Married Female Head	Single Male Head	Married, Both Bio Parents	Married, Bio+Step Parents	Married, Both Bio Male R	Married, Both Bio Female R	Married, Bio+Step Bio-Female R	Married, Bio+Step Step-Male R
Adolescent Outcome Measures										
Behavior Problems I	.66	.70	.67	.66	.61	.64	.57	.63	.58	.73
Behavior Problems II	.62	.63	.58	.65	.48	.64	.44	.50	.66	.68
Parent-Child Conflict	.72	.74	.74	.73	.69	.72	.73	.66	.69	.75
Family Functioning Measures										
External										
Family Friendship	.60	.52	.48	.56	.66	.51	.67	.64	.34	.69
Family Within 25 miles*										
Church Involvement	.62	.66	.66	.48	.56	.68	.60	.54	.67	.72
Parental Involvement in Youth Organizations	.63	.68	.57	.60	.61	.62	.61	.61	.56	.67
Socialize Outside Family	.44	.34	.32	.38	.51	.42	.57	.46	.34	.61
Internal										
Parent-Child Time Together	.72	.73	.69	.72	.71	.77	.66	.71	.69	.80
Commitment to Family	.54	.47	.42	.44	.54	.54	.54	.51	.56	.49
Encourage Independence	.61	.60	.69	.70	.60	.60	.63	.57	.58	.67
Marital Conflict	.71	--	--	--	.70	.74	.66	.72	.77	.71
Parental Depression	.89	.89	.87	.89	.88	.87	.90	.87	.87	.82
Sample Size Range										
Minimum	1,100	394	56	82	704	289	305	399	137	87
Maximum	2,463	567	103	113	1,118	432	480	638	209	131

* Treated as a summary index, not a scale.

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Table III
Correlation Coefficients Between Family Strength Measures: Pearson's Rho

Index	Family Friend-ship	Family Within 25 Miles	Church Involve-ment	Parental Involve-ment in Youth Organiz-ations	Socialize Outside Family	Parent-Child Time Together	Commit-ment to Family	Encourage Independ-ence	Marital Conflict	Parental Depression
Family Functioning Measures										
External										
Family Friendship	1.00									
Family Within 25 miles	.27***	1.00								
Church Involvement	.07***	-.02	1.00							
Parental Involvement in Youth Organizations	.04+	-.01	.20***	1.00						
Socialize Outside Family	.07**	-.02	.05*	.08***	1.00					
Internal										
Parent-Child Time Together	.05**	.00	.11***	.25***	.09***	1.00				
Commitment to Family	.17***	.05+	.15***	.06**	-.03	.03	1.00			
Encourage Independence	.07***	.02	.00	.07**	.07	.08***	.02	1.00		
Marital Conflict	-.05+	.06*	-.02	.02	.07	-.02	-.13***	-.04+	1.00	
Parental Depression	-.05**	.03	.01	.00	.05	.03	-.02	.01	.22***	1.00

Legend:
+ ≤.10
* ≤.05
** ≤.01
*** ≤.001

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Table IV
Mean Values for Adolescent Outcome and Family Functioning Indices, by Family Type (Weighted)

Index	All Family Types	Major Family Type: Divorced/ Separated Female Head	Never-Married Female Head	Single Male Head	Married, Both Bio. Parents	Married, Bio+Step Parents	Sex and Biological/Step Status of Married Adult Respondent: Married, Both Bio Male R	Married, Both Bio Female R	Married, Bio+Step Bio-Female R	Married, Bio+Step Step-Male R
Adolescent Outcome Measures										
Behavior Problems I	10.00	10.62	10.25	10.00	9.79	10.58	9.70	9.87	10.60	10.75
Behavior Problems II	.41	.77	.55	.57	.28	.54	.26	.31	.68	.39
Parent-Child Conflict	1.50	1.91	1.96	1.49	1.37	1.75	1.23	1.50	1.95	1.50
Family Functioning Measures										
External										
Family Friendship	3.88	3.09	3.63	3.73	4.05	3.80	4.21	3.91	3.61	3.95
Family Within 25 miles	2.72	2.19	3.39	2.46	2.84	2.76	3.22	2.48	2.77	2.74
Church Involvement	49.65	45.70	44.65	32.19	52.50	42.12	46.11	58.40	48.54	36.77
Parental Involvement in Youth Organizations	1.12	.81	.73	.71	1.23	1.02	1.22	1.24	.99	1.03
Socialize Outside Family	42.13	54.73	51.57	68.04	39.63	37.86	40.29	38.99	39.98	38.00
Internal										
Parent-Child Time Together	22.78	23.07	23.72	22.08	22.84	22.33	21.02	24.53	24.23	18.85
Commitment to Family	10.51	9.49	9.75	10.55	10.86	9.79	11.38	10.39	9.41	10.24
Encourage Independence	17.59	18.05	17.85	17.44	17.56	17.44	17.37	17.73	17.73	17.16
Marital Conflict	1.00	--	--	--	.97	1.21	.95	.99	1.28	1.22
Parental Depression	.74	1.11	1.46	1.09	.61	.93	.54	.68	1.11	.72

Table V
Correlations Between Family Functioning Measures and Adolescent Outcomes
Page 1 of 3: Behavior Problems I

Index	All Family Types	Major Family Type: Divorced/ Separated Female Head	Major Family Type: Never-Married Female Head	Major Family Type: Single Male Head	Major Family Type: Married, Both Bio. Parents	Major Family Type: Married, Bio+Step Parents	Sex and Biological/Step Status of Married Adult Respondent: Married, Both Bio Male R	Married, Both Bio Female R	Married, Bio+Step Bio-Female R	Married, Bio+Step Step-Male R
Family Functioning Measures										
External										
Family Friendship	-.05*	-.04	.13	.15	-.10**	.02	-.12*	-.09+	.13	.03
Family Within 25 miles	-.01	.00	.26+	-.12	-.03**	.07	.07	-.09*	.14+	.01
Church Involvement	-.04+	-.03	.11	-.00	-.02	-.05	-.01	-.03	-.01	-.09
Parental Involvement in Youth Organizations	-.10***	-.09+	-.10	-.22*	-.09*	-.04	-.09+	-.09+	-.03	-.02
Socialize Outside Family	.01	.00	.29*	-.16	.00	-.01	-.03	.03	.00	-.09
Internal										
Parent-Child Time Together	-.11***	-.15**	.19	-.29**	-.08*	-.06	-.09+	-.10*	-.06	-.03
Commitment to Family	-.07**	-.06	.09	-.06	-.08*	.05	-.11*	-.05	.15+	.06
Encourage Independence	-.09***	-.04	-.12	-.23*	-.07+	-.20***	-.10+	-.04	-.15+	-.24*
Marital Conflict	.28***	--	--	--	.28***	.28***	.31***	.26***	.26**	.29**
Parental Depression	.12***	.08	.43***	.10	.15***	-.00	.18***	.13**	.13	-.11
Sample Size Range										
Minimum	1,103	394	56	28	706	289	306	400	137	87
Maximum	1,887	463	72	92	837	315	354	483	151	97

Legend:
+ ≤.10
* ≤.05
** ≤.01
*** ≤.001

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Table V
Correlations Between Family Functioning Measures and Adolescent Outcomes
Page 2 of 3: Behavior Problems II

Index	All Family Types	Major Family Type: Divorced/ Separated Female Head	Major Family Type: Never-Married Female Head	Major Family Type: Single Male Head	Major Family Type: Married, Both Bio. Parents	Major Family Type: Married, Bio+Step Parents	Sex and Biological/Step Status of Married Adult Respondent: Married, Both Bio Male R	Married, Both Bio Female R	Married, Bio+Step Bio-Female R	Married, Bio+Step Step-Male R
Family Functioning Measures										
External										
Family Friendship	-.07***	-.10*	-.10	-.11	-.00	-.02	-.00	-.00	.01	-.01
Family Within 25 miles	-.04**	-.05	-.01	-.11	.00	-.02	.03	-.01	-.04	-.03
Church Involvement	-.09***	-.08+	-.07	-.08	-.09**	-.04	-.10*	-.09*	-.06	-.08
Parental Involvement in Youth Organizations	-.11***	-.09*	.05	-.09	-.10**	-.10+	-.03	-.15***	-.02	-.12
Socialize Outside Family	.04**	.04	.06	-.13	.02	.04	.01	.02	.10	-.06
Internal										
Parent-Child Time Together	-.11***	-.17***	.08	-.13	-.10***	-.02	-.09+	-.13**	-.10	-.12
Commitment to Family	-.12***	-.14***	-.02	-.20*	-.08**	.02	-.01	-.12**	.08	.11
Encourage Independence	-.02	-.04	.12	.06	-.01	-.13*	.01	-.02	-.16*	-.24**
Marital Conflict	.08**	--	--	--	.11***	.04	.08+	.13**	.03	.08
Parental Depression	.06**	-.01	.14	-.05	.08*	.06	.06	.09*	.02	-.03
Sample Size Range										
Minimum	1,488	489	80	101	955	387	410	545	187	116
Maximum	2,463	567	103	113	1,118	432	480	638	209	131

Legend:
+ ≤.10
* ≤.05
** ≤.01
*** ≤.001

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Table V
Correlations Between Family Functioning Measures and Adolescent Outcomes
Page 3 of 3: Parent/Child Conflict

Index	All Family Types	Major Family Type: Divorced/ Separated Female Head	Major Family Type: Never-Married Female Head	Major Family Type: Single Male Head	Major Family Type: Married, Both Bio. Parents	Major Family Type: Married, Bio+Step Parents	Sex and Biological/Step Status of Married Adult Respondent: Married, Both Bio Male R	Married, Both Bio Female R	Married, Bio+Step Bio-Female R	Married, Bio+Step Step-Male R
Family Functioning Measures										
External										
Family Friendship	-.10***	-.08+	.17	-.11	-.13***	.01	-.14+	-.12**	.14+	-.05
Family Within 25 miles	-.02	-.02	.08	-.08	-.03	.10+	.04	-.07	.22**	-.00
Church Involvement	-.04+	-.06	-.14	.01	-.04	.04	-.09+	-.03	.14+	-.08
Parental Involvement in Youth Organizations	-.02	.02	.05	.02	-.04	-.02	-.06	-.02	.04	-.05
Socialize Outside Family	.07**	.09+	.17	-.11	.05	.11+	-.03	.10*	.23**	-.01
Internal										
Parent-Child Time Together	-.01	-.05	-.05	.01	-.02	.08	-.03	-.05	.06	.06
Commitment to Family	-.12***	-.07	.01	-.14	-.13***	-.06	-.08	-.14**	.06	-.10
Encourage Independence	-.07**	-.11*	.04	-.21+	-.06+	-.08	-.13*	-.01	.01	-.08
Marital Conflict	.35***	--	--	--	.36***	.34***	.36***	.37***	.37***	.29**
Parental Depression	.14***	.08	.28	.26	.19***	.01	.14*	.22***	.01	-.02
Sample Size Range										
Minimum	1,100	394	56	82	704	289	305	399	137	87
Maximum	1,883	463	71	92	835	314	353	482	151	96

Legend:
+ ≤.10
* ≤.05
** ≤.01
*** ≤.001

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Table VI
Family Functioning and Adolescent Behavior Problems: Full Sample Models
Page 1 of 3: Behavior Problems I

Independent Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Socio-Demographic Controls					
Family Type					
Divorced/Sep. Female Head	.651***	.536**	.753***	.656***	.615**
Never-Married Female Head	.562+	.597	.809*	.701+	.607+
Single Male Head	.437	.581+	.824**	.693*	.610+
Step-Family	.771***	.633***			
Two-bio, High Conflict			.950***	.952***	.880***
Step, High Conflict			1.380***	1.362***	1.323***
Step, Low Conflict			.559**	.515**	.499*
Sex of Child					
Male		-.062	-.034	-.039	-.036
Age of Child		-.002	-.028	-.039	-.039
Sex of Respondent					
Male		-.077	-.170	-.149	-.121
Age of Respondent		-.034**	-.035***	-.037***	-.036***
Race/Ethnicity of Respondent					
Black		-.758***	-.722***	-.640***	-.630***
Hispanic		-.353	-.220	-.230	-.213
Other		-.484	-.424	-.367	-.399
Total Income					
Amount		-.004**	-.004*	-.004**	-.004*
Imputed		-.075	-.092	-.090	-.082
Combined Parental Education					
High-School Grad or Above		.252	.168	.179	.187
Public Assistance (Amount)		.191***	.197***	.193***	.185***
Number of Persons in Household		.126*	.120*	.124*	.120*
External Family Functioning					
Family Friendship				-.011	-.008
Family Within 25 miles				-.024	-.028
Church Involvement				-.000	-.000
Parental Involvement in Youth Organizations					
Level of Involvement				-.133*	-.141*
Imputed				.172	.178
Socialize Outside Family				.000	.000
Internal Family Functioning					
Parent-Child Time Together			-.034***	-.029**	-.030**
Commitment to Family			-.039	-.032	-.034
Encourage Independence			-.075**	-.072**	-.070**
Parental Depression					.103**
R-squared (Unadjusted)	.022	.067	.110	.116	.121

Legend:
+ ≤.10
* ≤.05
** ≤.01
*** ≤.001

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Table VI
Family Functioning and Adolescent Behavior Problems: Full Sample Models
Page 2 of 3: Behavior Problems II

Independent Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Socio-Demographic Controls					
Family Type					
Divorced/Sep. Female Head	.410***	.391***	.397***	.365***	.360***
Never-Married Female Head	.310**	.386***	.390***	.345**	.339**
Single Male Head	.448***	.434***	.458***	.427***	.420***
Step-Family	.229***	.209***			
Two-bio, High Conflict			.122+	.121+	.114+
Step, High Conflict			.333***	.326***	.320***
Step, Low Conflict			.165*	.156*	.153*
Sex of Child					
Male		.204***	.215***	.216***	.216***
Age of Child		.047***	.040***	.038**	.038***
Sex of Respondent					
Male		-.063	-.064	-.076	-.074
Age of Respondent		-.003	-.003	-.002	-.002
Race/Ethnicity of Respondent					
Black		-.177**	-.172**	-.148*	-.147*
Hispanic		-.142+	-.112	-.129	-.127
Other		.155	.175	.196	.194
Total Income					
Amount		-.000	-.000	-.000	-.000
Imputed		.113*	.109+	.108+	.109+
Combined Parental Education					
High-School Grad or Above		-.045	-.069	-.055	-.053
Public Assistance (Amount)		-.018	-.015	-.015	-.016
Number of Persons in Household		-.010	-.004	-.001	-.001**
External Family Functioning					
Family Friendship				-.003	-.003
Family Within 25 miles				.001	.001
Church Involvement				-.001*	-.001*
Parental Involvement in Youth Organizations					
Level of Involvement				-.028	-.028
Imputed				.137	.137
Socialize Outside Family				.001	.001
Internal Family Functioning					
Parent-Child Time Together			-.008**	-.006*	-.006*
Commitment to Family			-.028**	-.024**	-.024**
Encourage Independence			-.010	-.010	-.010
Parental Depression					.009
R-squared (Unadjusted)	.042	.077	.091	.098	.098

Legend:
+ ≤.10
* ≤.05
** ≤.01
*** ≤.001

C:\BOA10B\REG1-2.WP on HD 9 TS, 6-23-93

Table VI
Family Functioning and Adolescent Behavior Problems: Full Sample Models
Page 3 of 3: Parent/Child Conflict

Independent Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Socio-Demographic Controls					
Family Type					
Divorced/Sep. Female Head	.482***	.344**	.590***	.518***	.485***
Never-Married Female Head	.357	.296	.547*	.474+	.398
Single Male Head	.210	.373+	.599**	.495*	.428*
Step-Family	.282*	.156			
Two-bio, High Conflict			.951***	.931***	.873***
Step, High Conflict			1.120***	1.108***	1.077***
Step, Low Conflict			.133	.114	.101
Sex of Child					
Male		.368***	.382***	.383***	.386***
Age of Child		-.040+	-.043+	-.047*	-.048*
Sex of Respondent					
Male		-.254*	-.246*	-.260*	-.237*
Age of Respondent		-.023**	-.020**	-.017*	-.017*
Race/Ethnicity of Respondent					
Black		-.298*	-.292*	-.244*	-.235+
Hispanic		-.357*	-.281+	-.235	-.221
Other		-.532	-.621	-.601	-.627
Total Income					
Amount		-.002+	-.002	-.002+	-.002
Imputed		-.102	-.088	-.077	-.072
Combined Parental Education					
High-School Grad or Above		.375**	.311*	.330*	.337*
Public Assistance (Amount)		.050	.056	.063+	.057
Number of Persons in Household		.069*	.054	.058+	.055
External Family Functioning					
Family Friendship				-.012	-.009
Family Within 25 miles				-.001	-.004
Church Involvement				-.001	-.001
Parental Involvement in Youth Organizations					
Level of Involvement				-.037	-.043
Imputed				-.218	-.213
Socialize Outside Family				.002+	.002+
Internal Family Functioning					
Parent-Child Time Together			-.007	-.005	-.006
Commitment to Family			-.038*	-.031	-.033+
Encourage Independence			-.039*	-.038*	-.037*
Parental Depression					.084***
R-squared (Unadjusted)	.016	.072	.131	.137	.145

Legend:
+ ≤.10
* ≤.05
** ≤.01
*** ≤.001

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Table VII
Family Functioning and Adolescent Behavior Problems: Variations by Family Type
Page 1 of 3: Behavior Problems I

Independent Variable	Full Sample	2-BIO Family	Step-Family	Divorced/Separated
Socio-Demographic Controls				
Family Type				
Divorced/Sep. Female Head	.615**			
Never-Married Female Head	.607+			
Single Male Head	.610+			
Two-bio, High Conflict	.880***	.894**		
Step, High Conflict	1.323***		.903**	
Step, Low Conflict	.499*			
Sex of Child				
Male	-.036	-.102	.471	-.157
Age of Child	-.039	.030	-.050	-.168*
Sex of Respondent				
Male	-.121	-.075	-.196	22.000
Age of Respondent	-.036***	-.057**	-.018	.000
Race/Ethnicity of Respondent				
Black	-.630***	-.540*	-.880+	-.845*
Hispanic	-.213	-.024		.128
Other	-.399			
Total Income				
Amount	-.004*	-.000	-.001*	-.001*
Imputed	-.082	-.238	-.075	.415
Combined Parental Education				
High-School Grad or Above	.187	-.169	.183	.660+
Public Assistance (Amount)	.018	.011	.055	.017*
Number of Persons in Household	.120	.080	.028	.373**
External Family Functioning				
Family Friendship	-.008	-.037	.014	-.009
Family Within 25 miles	-.028	-.035	.009	-.004
Church Involvement	-.000	-.000	-.001	-.001
Parental Involvement in Youth Organizations				
Level of Involvement	-.141*	-.096	.105	-.219+
Imputed	.178	.327	1.501	-.544
Socialize Outside Family	.000	.000	-.001	.001
Internal Family Functioning		13.470	15.048	14.094
Parent-Child Time Together	-.030**	-.027*	-.029*	-.047
Commitment to Family	-.034	-.030	.040	-.076
Encourage Independence	-.070**	-.037	-.179**	-.017
Parental Depression	.103**	.129*	-.000	.039
R-squared (Unadjusted)	0.12	0.14	0.14	0.14

Legend:
+ ≤.10
* ≤.05
** ≤.01
*** ≤.001

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Table VII
Family Functioning and Adolescent Behavior Problems: Variations by Family Type
Page 2 of 3: Behavior Problems II

Independent Variable	Full Sample	2-BIO Family	Step-Family	Divorced/Separated
Socio-Demographic Controls				
Family Type				
Divorced/Sep. Female Head	.350***			
Never-Married Female Head	.339**			
Single Male Head	.420***			
Two-bio, High Conflict	.114+	.105*		
Step, High Conflict	.320***		.242*	
Step, Low Conflict	.153*			
Sex of Child				
Male	.216***	.138***	.345***	.240*
Age of Child	.038**	.024*	.064*	.028
Sex of Respondent				
Male	-.074	-.037	-.207+	
Age of Respondent	-.002	-.006	.008	.012
Race/Ethnicity of Respondent				
Black	-.147*	-.045	-.137	-.230+
Hispanic	.127	-.096	-.284	.010
Other	.194			
Total Income				
Amount	-.046	-.044	-.000	.000
Imputed	.109+	.038	.042	.466**
Combined Parental Education				
High-School Grad or Above	-.053	-.164*	-.078	.038
Public Assistance (Amount)	-.002	-.002	-.003	.000
Number of Persons in Household	-.001	.002	-.067	.073+
External Family Functioning				
Family Friendship	-.003	.006	-.002	-.023
Family Within 25 miles	.001	.001	-.002	-.001
Church Involvement	-.001*	-.000	-.001	-.001
Parental Involvement in Youth Organizations				
Level of Involvement	-.028	-.021	-.081+	-.009
Imputed	.137	-.195*	.225	.517*
Socialize Outside Family	.001	.000	.002	.001
Internal Family Functioning				
Parent-Child Time Together	-.006*	-.008*	.009	-.017*
Commitment to Family	-.024**	-.024*	.033	-.050*
Encourage Independence	-.010	-.008	-.040*	-.004
Parental Depression	.009	.013	.019	.002
R-squared (Unadjusted)	0.10	0.07	0.12	0.12

Legend:
+ ≤.10
* ≤.05
** ≤.01
*** ≤.001

Table VII
Family Functioning and Adolescent Behavior Problems: Variations by Family Type
Page 3 of 3: Parent/Child Conflict

Independent Variable	Full Sample	2-BIO Family	Step-Family	Divorced/Separated
Socio-Demographic Controls				
Family Type				
Divorced/Sep. Female Head	.485***			
Never-Married Female Head	.398			
Single Male Head	.428			
Two-Bio, High Conflict	.373*	.338***		
Step, High Conflict	1.077***		1.121**	
Step, Low Conflict	.101***			
Sex of Child				
Male	.336***	.298***	.152	.312***
Age of Child	-.048*	-.059+	-.047	-.036
Sex of Respondent				
Male	-.237	-.218+	-.334	-.016
Age of Respondent	-.017	-.015	-.012	
Race/Ethnicity of Respondent				
Black	-.235	-.091	-.423	-.215
Hispanic	-.221	-.063	.717	-.519
Other	-.627			
Total Income				
Amount	-.000	-.000	-.012	-.001
Imputed	-.072	-.128	-.170	.029
Combined Parental Education				
High-School Grad or Above	.337**	.214	.638+	.418
Public Assistance (Amount)	.006	.003	.015	-.001
Number of Persons in Household	.055	.021	-.087	.265**
External Family Functioning				
Family Friendship	-.009	-.031+	.023	-.037
Family Within 25 miles	-.004	-.007	.051	-.050
Church Involvement	-.001	-.001	-.001	-.001
Parental Involvement in Youth Organizations				
Level of Involvement	-.043	-.076	.006	.022
Imputed	-.213	.016	-.211	-.320
Socialize Outside Family	.002+	.000	.004+	.003+
Internal Family Functioning				
Parent-Child Time Together	-.006	-.015+	.016	.001
Commitment to Family	-.033+	-.032	.011	-.026
Encourage Independence	-.037*	-.022	-.019	-.098**
Parental Depression	.084***	.131***	-.051	.021
R-squared (Unadjusted)	0.14	0.18	0.17	0.16

Legend:
- + p<.10
- * p<.05
- ** p<.01
- *** p<.001

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