

**Family Structure and Adolescent Labor Market Participation: Examining the  
Motives for and Effects of At-Risk Students' Work for Pay during High School**

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## **Abstract**

In this paper, I argue that focusing on only one type of fragile family structure—generally single-parent families, without distinguishing how these families were formed—obscures important processes and mechanisms among different types of families. I focus on a specific adolescent risk behavior, high-intensity work, and theorize that adolescents in certain types of fragile families will work more hours because of financial needs, while teens in other types of fragile families will extend their work hours to avoid family conflict and stress. Using data from the 1990 and 1992 waves of the National Education Longitudinal Study, I examine the effects of living in a never married, divorced, widowed, stepparenting, or cohabiting family on work hours. I then look at whether work hours and the motives behind their scheduling can help to explain why teachers assess students from fragile families more negatively than those from intact families. Results for the specific hypotheses are mixed, providing support for the more general argument that scholars hoping to understand fragile families must more carefully distinguish among different family structures and processes.

## **Family Structure and Adolescent Labor Market Participation: Examining the Motives for and Effects of At-Risk Students' Work for Pay during High School**

As the number of children living in poverty or in non-traditional families grows, so too does the concern over whether living in such situations has effects on child development (Bumpass and Lui, 2000; Fields and Casper 2001). Much evidence suggests that growing up in poverty has negative effects on a variety of child outcomes, including health, academic and occupational achievement, and socialization (Duncan, Brooks-Gunn, Yeung, and Smith, 1998; Pagani, Boulerice, and Tremblay, 1997; Smith, Brooks-Gunn and Klebanov, 1997), as does growing up with high levels of family stress (Yamoor and Mortimer, 1990; Menaghan, Kowaleski-Jones, and Mott, 1997) or in non-traditional, or fragile, families (McLanahan and Bumpass, 1988; McLanahan and Sandefur, 1994).

Even as scholars lavish attention on these issues, however, few delve into the specifics of how different types of fragile families may work and how these various processes may affect the children who grow up in such families. While focusing on the differences between, for example, single-parent families and two-parent families, as is commonly done, has uncovered important information that can be used to help fragile families, focusing only on such analyses obscures potential important differences among several different types of fragile families (never married, divorced, stepparenting, widowed, and cohabiting families). There are solid theoretical reasons to believe that the processes and mechanisms causing these families to be fragile might differ; for example, we might expect some types of single-parent families, such as never married and divorced families, to be at greater risk for poverty because of the presence of only one

potential breadwinner, while other types of single-parent families, such as widowed families, might have financial safety nets in place that protect children from experiencing severe and extended poverty. Similarly, while stepparent and cohabiting families may be less prone to poverty because of the presence of two potential breadwinners, they may have a tendency toward higher rates of conflict than families where children's biological parents are married to each other. When discussing fragile families, focusing only on single-parents prevents us from fully understanding the challenges facing different types of single-parent families and ignores entirely the problems certain kinds of two-parent families face. In this paper, I focus on a particular risk factor for adolescents—high-intensity work—as an example of how investigating the structures and processes in multiple types of fragile families may give scholars and policy makers a better understanding of the challenges these families face.

## **Adolescent Employment**

### *Academic Achievement*

Most studies on the effects of adolescent employment have utilized a “zero-sum” perspective (D’Amico, 1984; Warren, 2002). This perspective defines time as a finite resource and assumes that time spent in paid work activities is time that cannot be used in educational, social, or family activities. A natural outgrowth of the zero-sum perspective is a focus on educational outcomes; as students spend time working outside the home for pay, they may have less time to devote to homework or studying. As a result, adolescent labor force participation may be associated with lower academic achievement.

Early studies of adolescent employment supported the zero-sum argument: students who worked for pay during the school year reported lower grades (Greenberger,

Steinberg, Vaux, and McAullife 1980; Steinberg, Greenberger, Vaux, and Ruggiero, 1981); D'Amico (1984) and Lewin-Epstein (1981) found that early employment reduced time spent on homework. Further, adolescents who work spent less time reading books not assigned for school (Greenberger and Steinberg, 1986).

Subsequent research, however, demonstrated that the effects of student employment could be better understood by studying work intensity, or the number of hours students worked, rather than merely whether they worked. Students who work in low-intensity, part-time jobs tend to have better academic outcomes than those who do not work at all, possibly because they learn how to better manage their time in order to accomplish all of their goals (D'Amico, 1984). Challenging the zero-sum perspective, Schoenhals, Tienda, and Schneider (1998) found that students who worked watched less television than those who did not. In addition, a study of 251 low-income, at-risk African American youth found that stable, low-intensity work may be linked to high school completion and, for boys, college attendance, suggesting the possibility that positive work environments could be particularly helpful for at-risk students (Leventhal, Graber, and Brooks-Gunn, 2001).

However, students who participate in more intense work situations (generally described as working 20 or more hours per week during the school year) have lower grades and lower educational aspirations (Finch and Mortimer, 1985; Barton, 1989; Lillydahl, 1990; Marsh, 1991; Steinberg and Dornbusch, 1991; Finch, Mortimer, and Ryu, 1991; Mortimer, Finch, Ryu, and Shanahan, 1996; Markel and Frone 1997; Mihalic and Elliott, 1997; Jakob-Chien and Dukes, 1998), are more often absent from school (Marsh, 1991; Steinberg, et al., 1993), and more often seem fatigued in class than do their

peers who do not work or who work in lower intensity situations (Bills, Helms, and Ozean, 1995). High-intensity work is also associated with lower enrollment in post-secondary schooling for boys (Mortimer and Johnson, 1997). Although findings regarding the effects of adolescent employment on academic outcomes while in high school are somewhat mixed, most scholars now contend that high-intensity work poses the most danger, while low-intensity work may actually be beneficial for schooling.

### *Nonacademic Outcomes*

The effects of adolescent employment are not limited, however, to academic outcomes. Many parents believe that adolescent participation in the workforce imbues positive socialization that will encourage teenagers to embrace a work ethic, to appreciate the value of punctuality, and to seek paid employment more readily after high school. Research has generally borne out these parental assumptions: teenagers who work during high school are less likely to be unemployed in the first four years after high school (Marsh, 1991; Steel, 1991; Mortimer and Finch, 1996) and further into adulthood (Mihalic and Elliott, 1997), and they enjoy higher wages in the jobs they hold (Marsh, 1991; Stone and Mortimer, 1998). Adolescent workers also have greater workplace skills (Greenberger, Steinberg, Vaux, and McAullife, 1980) and higher work orientation (Steinberg, Greenberger, Vaux, and Ruggiero, 1981) than those who have not worked. Adolescents who work in family-owned businesses, where their parents can presumably take an active role in workplace socialization, perceived greater parental support for their labor force and academic goals and reported less drug and alcohol use than teens working in the private sector (Hansen and Jarvis, 2000).

Adolescent work experience may influence affective outcomes, as well. Working outside the home for pay adds additional sources of stress to adolescents' lives that may have deleterious effects on their overall well-being. Markel and Frone (1997) found that students engaged in high-intensity work experienced more work-school conflict, which was related to a lack of school readiness and greater stress. Poor work-school connections are associated with depressed mood for girls; female respondents also reported more stress linked with feelings of responsibility for things outside of their control, including work issues. Similarly, boys report that work stress influences their depression (Shanahan, Finch, Mortimer, and Ryu, 1991). Adolescents who report problems at work were more likely to be depressed and to have negative views of themselves than were those who did not work or who did not report work problems (Simons and Miller, 1987). Students who work also report more cynicism about the workplace and more acceptance of unethical business practices (Steinberg, et al., 1981).

Participation in the paid labor market may also influence adolescents' relationships. Teenagers who work spend less time with their families and report less closeness with their families than do nonworkers (Greenberger, et al., 1980; Shanahan, Elder, Burchinal, and Conger, 1996; Mihalic and Elliott, 1997; Pickering and Vazsonyi, 2002; Roisman, 2002). Again, work intensity was an important factor in these relationships; the effects of working on family relationships are stronger for teens working more than 20 hours per week than for those in low-intensity work (Pickering and Vazsonyi, 2002; Roisman, 2002). Adolescents working in high-intensity situations may also have strained relationships at school, where they are less integrated into school

activities (McNeal, 1995) and may be assessed less positively by their teachers (Yamoor and Mortimer, 1990).

Finally, working more than 20 hours per week may encourage adolescents to engage in delinquent or inappropriate behavior. Some scholars have argued that adolescents are exposed to non-familial adults in the workplace, some of whom may model delinquent or illegal behavior (such as drug use), while others may merely model behavior that is deemed appropriate for adults but inappropriate for minors (such as alcohol use or sexual activity). Other researchers maintain that teens who work more are able to engage in delinquent behaviors because they are not subject to the same level of parental monitoring as are adolescents who, because they work less, are around their parents more. Proponents of both perspectives, however, agree that high-intensity work is related to negative risk behaviors. Adolescents who work more than 20 hours per week engage in more sexual risk-taking behavior (Ku, Sonenstein, and Pleck, 1993; Valois and Dunham, 1998) and delinquent behavior such as smoking and petty crime (Jakob-Chien and Dukes, 1998; Miller and Matthews, 2001). High-intensity workers are also more likely to use alcohol and drugs when still in school (Jenkins, 1996; Mihalic and Elliott, 1997; Jakob-Chien and Dukes, 1998; Hansen and Jarvis, 2000; McMorris and Uggen, 2000; Kouvonen and Lintonen, 2002) and to report higher rates of marijuana and alcohol use in their late 20s (Mihalic and Elliott, 1997).

Adolescent participation in the paid labor force, then, is something of a mixed bag. Although low-intensity work may help youth learn positive work ethic and time-management skills, leading to improved academic outcomes and increased attachment to the labor force, high-intensity work may leave teens at risk for work-school conflict,



strained family relationships, and increased participation in delinquent and inappropriate behavior.

### **Fragile Families**

Given the above, it seems reasonable to ask what effect growing up in a fragile family structure might have on adolescent work force participation. First, we know that children who grow up in various fragile family structures tend to be at risk for doing poorly in arenas linked to high-intensity work (education, delinquency, family relationships, etc.); yet few researchers have investigated whether differences in working environments and motives could explain why these families struggle. For example, living in a mother-headed household has been linked to lower academic achievement (Duncan et al., 1998; Pagani, Boulerice, and Tremblay, 1997; Smith, Brooks-Gunn and Klebanov, 1997). Although teens who work many hours per week also have lower academic outcomes, little research has examined whether any link exists.

Similarly, although poverty is a major factor in making certain family types fragile, children who grow up in single-parent families are less likely to graduate from high school and more likely to engage in delinquent behaviors than their counterparts in two-biological-parent families even when they are not in poverty (McLanahan and Sandefur, 1994). Adolescents in stepparent families, with two potential adult earners in the family, are less likely to be in severe financial distress than are those in single-parent families, as are children from widowed families, who are more often supported by financial safety nets such as life insurance settlements. Yet adolescents in both of these family types exhibit problematic behaviors and outcomes when compared to their counterparts in two-biological-parent families (with children in stepparent families

similar to those in single-parent families and those in widowed families occupying a position between the other two). For example, teens in stepparent families are less likely to graduate from high school than teens who live with their biological parents, but are more likely to engage in risky sexual or substance abuse behaviors (Tygart, 1990; Flewelling and Bauman, 1990; Aquilino, 1991; Sandefur, McLanahan, and Wojtkiewicz, 1992; Hoffmann, 1994; Downey, 1995; Jenkins and Zunguze, 1998); teens in widowed families, while somewhat more successful than those in stepparent families, are also less likely to graduate from high school than teens who live with their biological parents (Saucier and Ambert, 1983; Ambert and Saucier, 1984). Again, these outcomes are similar to those found for adolescents who are in high-intensity work situations, but little effort has been made to examine any possible links between living in a fragile family and working long hours.

Perhaps most important, the differences in adolescents' lives that make some of their families fragile may be similar to the factors that help determine how much they work. For example, teens in poor, mother-headed families might work more hours in order to help their families make ends meet or to be able to afford status markers parents in wealthier families could purchase for their children; they therefore may incur some of the academic penalties associated with high-intensity work as a result. However, few studies examining academic outcomes have investigated the extent to which work and family demands may be helping to drive the negative effects of living in this type of fragile family structure. Similarly, if family conflict or stressors encourage youth to spend less time at home and more time at work, the time and social pressures associated with high-intensity work may contribute to academic trouble or delinquent behavior. In other

words, although we know that teens from fragile families struggle because of poverty and family stressors, we have yet to thoroughly investigate how these factors play out in different kinds of fragile families and how their effects may be mediated by known influences in children's lives, such as labor market participation.

Although there are theoretical reasons to believe that the work habits of adolescents from fragile families may be contributing to their struggles, few studies have examined this relationship. Most of the work that looks at whether family structure affects adolescent work habits examines European countries where secondary schooling ends earlier than it does in the United States and full-time work is the most common experience for those in late adolescence (Patten and Noller, 1991; de Goede, Spruijt, Maas, and Duindam, 2000). The few that do examine the effect of family structure on adolescent work in the U.S., such as Schoenhals, Tienda, and Schneider's (1998) careful piece on the effects of work on academic success, tend to focus on comparisons between single-parent and two-parent families, with no distinction made as to how the single-parent families were formed.

This lack of attention to family structure is likely due to several factors. First, early studies predicting whether teens worked for pay found few notable differences among family structures (even Schoenhals, Tienda, and Schneider's 1998 piece finds the most interesting outcomes related to family structure for single mothers who do non-traditional work; single mothers in and of themselves do not seem to drive the effects observed). These findings (or the lack thereof) may have led researchers to believe that they would find no differences in the hours worked among teens from different family structures. In addition, much of the work in this field is drawn from studies involving

relatively small samples. Such samples would likely cause difficulties in garnering enough cases to distinguish among family types (in fact, the few studies that do include family structure focus only on single-parent versus two-parent families, without distinguishing between divorced and never-married parents or between step, cohabiting, or married, biological parents). Unfortunately, these data problems have led scholars to ignore theoretical reasons to believe that adolescents in fragile families might engage in a risk-behavior: high-intensity work. We also have been unable to investigate whether different mechanisms and processes within different kinds of fragile families drive potential differences in working patterns (i.e., if financial issues encourage children in divorced families to work more hours, or whether family conflict drives children in stepfamilies to work more).

I use a large, nationally representative data set (described below) to test hypotheses regarding the relationship between living in a fragile family structure and engaging in high-intensity work. I also examine whether these factors are related to the ways teachers, who control many educational experiences and outcomes for adolescents, assess youth from fragile families.

H1: Adolescents in fragile family structures will work more hours than those in two-parent-biological families.

H2: Socioeconomic factors, including spending patterns, will explain why teens from divorced and never-married families work more hours than those in two-parent-biological families.

H3: Family interaction and atmosphere variables will explain why teens from stepparent, widowed, and cohabiting families work more hours than those in two-parent-biological families.

H4a and 4b: High-intensity work, linked to SES and family interaction and atmosphere variables, will explain the more negative assessments teachers give to adolescents in fragile family structures, including appraisals of a) homework completion and b) alertness.

## **Data and Methods**

### *Data*

To test these hypotheses, I use data from the first and second follow-up waves of the National Education Longitudinal Study (NELS), conducted by the National Center for Educational Statistics (NCES). The NELS is a nationally representative study that gathered data from students, parents, teachers, and school administrators. The first wave of the study was conducted in 1988, drawing random samples of approximately 25 eighth-grade students from 1000 randomly selected schools. Students were surveyed again in 10<sup>th</sup> grade (1990), 12<sup>th</sup> grade (1992), two years after their class would have graduated from high school (1994), and six years after their class would have graduated from high school (2000). I utilize data from the 10<sup>th</sup> and 12<sup>th</sup> grade surveys. Because the focus of this study was whether living in fragile family structure influences work participation, I excluded respondents who had missing data for family structure and work participation variables. This provided a sample of 10,585, of whom 64 percent lived in two-parent biological families, 14 percent lived in stepparent families, 15 percent lived in

divorced families, four percent lived in widowed families, three percent lived in never married families, and one percent lived in cohabiting families.

### *Measures*

Table 1 describes the variables used in these analyses.

[Table 1 about here]

*Currently employed* is a dummy variable that captures whether the respondent was working outside the home for pay in 1992 (12<sup>th</sup> grade). *Number of hours worked* is a continuous variable that measured how many hours per week the respondent worked in her primary job during the 1991-1992 school year; higher scores indicate greater work intensity. Teacher assessments of how often respondents handed in their homework on schedule or were alert in class are measured by two dummy variables: *always turns in homework* and *always alert in class*. Family structure was measured by a set of dummy variables that tapped the respondents' parents' marital status: *married*, *never married*, *divorced*, *widowed*, *remarried* (which I refer to throughout the rest of the paper as *stepparent*), and *living in a marriage-like relationship* (which I refer to throughout the rest of the paper as *cohabiting*); married is the reference category. Although many studies, including this one, often refer to families where the biological parents of the respondents are married to each other as two-biological parent families, I should note that we have no way of determining whether the small (just over 100) number of children living in cohabiting families are living with one or both biological parents.

The NELS does not contain a perfect measure of whether respondents spend their money on necessities to help the family make ends meet. The closest variable to this concept is likely one that asks whether the respondent spends most of his money on rent.

As might be expected, less than one percent of respondents chose this response. To tap *money spent on necessities*, I use a variable that asks whether respondents spend most of their money on rent, food, or education. Although this variable may not perfectly capture whether the respondent is working in order to help support the family of origin or pay for education—money spent on food, for example, could reflect leisure activities—this variable does distinguish money spent on rent, food, and education from money spent on cars or “going out.”

*Family interaction* is a scale tapping how often the respondent talks to her parents about various subjects. In order to try to address issues of causality, I include measures of family interaction in both 10<sup>th</sup> grade and 12<sup>th</sup> grade; if the change in family interaction over time is associated with work intensity, this provides more convincing evidence that adolescents choose to work more intense hours in order to avoid their homes and families. The 10<sup>th</sup> grade family interaction variable includes five items concerning discussion about matters such as class schedules and educational aspirations and has an alpha of .79; the 12<sup>th</sup> grade family interaction variables nine items similar to those used in the 10<sup>th</sup> grade measure and has an alpha of .86. Higher scores indicate more interaction. *Negative family atmosphere* is a single item that asks how important it is to the respondent to get away from his parents. Again, family atmosphere is measured in both 10<sup>th</sup> and 12<sup>th</sup> grades. Higher scores indicate more desire to get away from parents and a less desirable family atmosphere.

*Socioeconomic status* is a composite measure created by the NCES that reflects parents' income, education, and occupational status. *Sex* is a dummy variable where 1=male. Race is tapped by a set of dummy variables: *white*, *black*, *Asian/Pacific Islander*,

*Hispanic*, and *American Indian*; white is the reference category. I also control for region (*Northeast*, *Midwest*, *South*, and *West*; Northeast is the reference category) and urbanicity (*urban*, *suburban*, and *rural*; suburban is the reference category). Finally, because I include measures of family interaction, I also control for *sibship size* to tap whether adolescents in larger families interact less with parents because parental time is diluted across multiple children (Downey, 1995).

I employ binary logistic regression to examine whether living in a fragile family influences whether an adolescent worked in 12<sup>th</sup> grade, whether teachers believed the adolescent always turned in homework, and whether teachers felt the adolescent was always alert in class because of the binary nature of the dependent variable in those models. Because only half of the respondents were linked to data for these teacher assessment variables, the Ns for those two models are 5,035. Because of the criteria used for inclusion in the sample, the only other missing data were found on continuous variables; I used mean substitution to address the missing data for these variables and included dummy variables indicating that substitution to account for potential bias<sup>1</sup> (Cohen and Cohen, 1975). I entered the key variables in steps to examine their separate effects: Model 1 demonstrates the effects of living in different types of fragile families. For the model predicting work intensity, Model 2 adds spending habits; Model 3 includes family interaction and atmosphere variables; Model 4 controls for demographic background variables including SES, and Model 5 includes important interaction effects. For the models predicting teacher assessments of their students, Model 2 adds work intensity; Model 3 includes spending habits; Model 4 adds family interaction and

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<sup>1</sup> These dummies were not significant in any of the models so I do not include them on the tables.



atmosphere variables; Model 5 controls for demographic background variables, and Model 6 includes significant interaction effects between fragile family structures and other effects.

## **Findings**

Table 2 displays the mean levels of the variables included in the model by family structure.

[Table 2 about here]

Adolescents in married and stepparent families are more likely to work than those in never married, divorced, widowed, and cohabiting families<sup>2</sup>. There are significant differences among family structures in work intensity: teens in fragile family structures work more hours than do teens in married families (although, at the mean level, no group on average meets the 20+ hours per week generally described as high-intensity).

Adolescents in never married and stepparent families work on average about two and one-half hours more per week than do those in married families. The small number of youth in cohabiting families (just over 100) work on average nearly five and one-half more hours per week than their peers in married families. Students in fragile family structures are also assessed more negatively by their teachers than those in married families.

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<sup>2</sup> Although many studies of adolescent work have found no difference in likelihood of working among different family types, Schoenhals, Tienda, and Schneider [1998] use the 10<sup>th</sup> grade wave of the NELS and find small differences when comparing single-parent and two-parent families; these findings, derived from a very similar sample, are similar.

Adolescents in married families are slightly more likely to interact with their parents in both 10<sup>th</sup> and 12<sup>th</sup> grade than are adolescents in fragile families; these respondents also are slightly less likely to want to get away from their parents. Married families report significantly higher SES than do fragile families. Teens in never married families are much more likely to be black, while most teens in married, divorced, or stepfamilies are white. Interestingly, adolescents in married families have the fewest siblings, while those in reconstituted families report the most, and those in married and stepfamilies are more likely to live in suburbs than adolescents in other family types. More teens in never married families live in the South, perhaps reflecting the racial distribution of these families.

Table 3 shows the results of the binary logistic regression analysis predicting whether the adolescent worked at all for pay outside the home in 12<sup>th</sup> grade. As expected, none of the fragile family structures produces adolescents more likely to work, a finding similar to those that may have discouraged previous researchers from further investigating work patterns.

[Table 3 about here]

The results in Table 4, however, suggest that ignoring more detailed work patterns may be a mistake.

[Table 4 about here]

Model 1 in Table 4 shows that adolescents who live in stepparent, never married, divorced, and cohabiting families all work significantly more hours than do adolescents

in married families. Although it is difficult to tell if working one-1.5 hours more per week will have a detrimental effect in and of itself, this finding suggests that analyses testing only whether youth work outside the home are not sufficient. Living in a fragile family structure is in fact associated with working more hours while still in high school. Model 2 demonstrates that spending most of one's money on rent, food, or education is also associated with increased work intensity, although this variable does not alone explain away the effects of living in certain types of fragile families (notably divorced and never married families, as predicted in Hypothesis 2). Model 3 includes changes between 10<sup>th</sup> and 12<sup>th</sup> grades in family interaction and atmosphere variables. Improved family interaction is associated with lower work intensity, while worsening family atmosphere is associated with slightly higher work intensity. In this model, the effect of living in a never married family is no longer significant, suggesting that changes in family interaction and atmosphere have a greater effect on whether adolescents in that fragile family type work long hours than do financial aspects (contrary to the hypothesis regarding that family structure).

Model 4 introduces background characteristics, including SES. Adolescents from families with greater SES work significantly fewer hours; although other demographic characteristics are significant in this model, it is the effect of SES that explains away the effects of living in a divorced or cohabiting family structure (separate analyses not shown). The effects of other demographic variables (boys work more than girls; urban and rural teens work less than suburban teens, etc.) are consistent with previous research on adolescent work. In Model 4, only the effect of growing up in a stepparent family persists.

Model 5 introduces interactions between fragile family types and other explanatory variables. Youth who live in stepparent families and who feel more strongly about getting away from their parents work more hours than do those in stepparent families with positive atmospheres (Figure 1a). It is this interaction effect that finally explains away the effect of stepparent family structure. The effect of increased SES lowers work hours more for adolescents in married families than in divorced families (Figure 1b), with a similar pattern occurring when comparing widowed families to married families (Figure 1c). Finally, Hispanic teens in stepparent families work fewer hours than do white teens in stepparent families (Figure 1d).

[Figure 1 about here]

This model provides support for Hypothesis 1 (teens in fragile family structures will work more hours than those in married families), some evidence for Hypothesis 2 (the effects of living in a divorced family disappear with SES and spending habits), and some support for Hypothesis 3 (stepparented teens in deteriorating family atmospheres work more hours than stepparented teens in improving family atmospheres).

Turning to academic issues, Table 5 presents the analyses predicting whether teachers believe the respondent turns in homework on time.

[Table 5 about here]

Teachers have significantly more negative opinions of students' task completion for adolescents from all but cohabiting fragile families than they do for students from married families. When work intensity is controlled, the effects of living in a never

married or divorced family become somewhat less significant but do not go away entirely. Students who spend most of their money on necessities actually have more positive assessments from teachers (Model 3), as do those in families with more interaction, while students in families with deteriorating atmospheres are less likely to turn in their homework (Model 4). Still, none of these factors fully explain the effects of living in fragile family structures. The inclusion of background characteristics (Model 5) explains the negative effect of living in a never married family, with being black the key variable (separate analyses not shown). The interaction effect in Model 6 seems to bear this out, with black students in never married families more likely to turn in homework than white students in the same family structure (Figure 2).

[Figure 2 about here]

Table 6 reports similar findings for teachers' assessment of students' alertness in class.

[Table 6 about here]

Again, teachers have significantly more negative opinions of students from all but cohabiting fragile families than they do of students from married families. When work intensity is controlled, this explains the negative effect of students from widowed families. Students who spend most of their money on necessities are actually reported as being more alert (Model 3). Model 4 shows that students who interact more with their parents are more alert in class, while those who have a more negative family atmosphere are reported to be less alert (note that these models do not reflect change in family interaction or atmosphere; the change models were not significant in predicting alertness

in class). These family interaction and atmosphere variables explain away the effect of living in a never married family. Model 5 includes background characteristics, which decrease the effects of living in a stepparent or divorced family. However, the effects of living in these types of fragile families persist even after controlling for SES and race. Model 6 introduces an interaction term between living in a never married family and being black (see Figure 3); as was the case for the models predicting teacher assessment of timely homework completion, this interaction indicates that teachers rate black students from never married families as more alert than white students in the same kind of family.

[Figure 3 about here]

## **Discussion**

Although many of the factors that make non-traditional families fragile are similar to those that encourage adolescents to engage in the high-risk activity of high-intensity work, little research has examined possible relationships between work behaviors and growing up in a fragile family. In this study, I use a nationally representative data set to examine whether youth in fragile families are at risk for working high-intensity hours and whether the mechanisms operating in the different kinds of fragile families to encourage high-intensity work vary by family type. Results provide mixed support for the specific hypotheses: Teens in fragile family structures work more hours than their peers in married families, and socioeconomic status was influential in explaining the effect of living in a divorced family on work hours. Similarly, youth who had lost a parent through death were less susceptible to the effects of SES on high-intensity work than were teens in married families, perhaps reflecting the financial safety nets many widowed families

are able to call upon. However, it was the effect of family interaction and atmosphere variables, rather than SES, that explained the effects of living in a never married family. Although we might assume that youth in cohabiting families might have access to more financial resources than youth in single-parent families, it was the effect of socioeconomic status that explains why these youth work more hours. However, family atmosphere did help to explain why adolescents from stepparent families work more intense hours, as stepparented teens who express more desire to get away from their parents work more than do stepparented teens who are less worried about getting away.

Similarly, students who engaged in high-intensity work received lower assessments from their teachers, but this effect did not entirely explain away the negative assessments teachers give students from fragile families. Even after controlling for work hours, spending habits, and family interaction and atmosphere, as well as demographic characteristics, youth in stepparent, divorced, and widowed families more often fail to turn in the homework on time and are less alert in class than youth in married families. This may be due to additional important factors not in the models; while focusing on issues of work intensity and family structure, I have not yet examined the role of other possible influences, such as other extracurricular activities, academic aspirations and orientations, and self-concept that may affect how teachers view students. Future work should examine how fragile family structures and work intensity may act in conjunction with these other variables to explain how teachers assess students from fragile families. These models also point out the importance of considering other demographic variables, such as race, in conjunction with fragile family status. Interaction effects between never married family status and being black showed that white teens in never married families

were assessed more negatively by teachers than were black teens in the same family structure, perhaps indicating more normative acceptance for black families of this structure. Given that 52 percent of never married families in this sample are black, it is possible that these families are more accepted in communities as a normative family type, or that more families of this type live in the same area and can provide social support for each other (never married families are also concentrated in the South). Never married white families, however, may have fewer social resources or may be considered less normative and may draw more attention and disapproval from people outside the family, such as teachers. Unless we consider each type of fragile family separately, we risk missing out on these processes.

In addition, adolescents' spending habits provided mixed evidence for the influence of work on youth from fragile families. I hypothesized that youth in fragile families, particularly those in families at greater risk for poverty (most of the single-parent family types), would work more hours if they needed money to spend on necessities, possibly leading to lower academic outcomes and greater exposure to risky behavior. In fact, spending most of their money on food, rent, and education was associated with teens' working more hours, but youth who spent their money in this fashion also received more favorable assessments from teachers, a counterintuitive finding. It is possible that, as D'Amico (1984) and Carr, et al., (1996) suggest, students who work gain greater time management skills, and that students who take early responsibility for their own support may be more responsible in general or may have more serious intentions about college; future work could examine such issues as the role of educational aspirations for these students. However, it is also possible that the variable



as comprised does not fully capture spending money on necessities; respondents may think of “food” as snacks or of money for education as savings for college, a common reason youth in middle class families work while still in high school (Steelman and Powell, 1991). More detailed measures of adolescents’ spending habits and obligations may be better able to determine whether youth in certain types of fragile families are driven to high-intensity work by financial need.

While the hypotheses were not entirely supported, the results do support the more general idea that scholars and policy makers cannot fully understand the risks and problems children face living in fragile families by merely comparing single-parent families to two-parent families and labeling the former as fragile. In other words, not all fragile families operate in the same way—to paraphrase Chekov, perhaps each type of family is fragile in its own way. There are theoretical reasons to believe that youth living in different types of fragile families may be experiencing different family processes and mechanisms related to their family structure. For example, families that are more susceptible to poverty—single-mother families, notably those with minority heads of household—may endure financial pressures that encourage their children to engage in higher-intensity work; on the other hand, members of racial groups that are more commonly in fragile families may find social capital with others in the same. Families that may not be as susceptible to poverty—such as non-traditional two-parent families, cohabiters and stepparent families—may still have stressors that encourage youth the work longer hours in order to avoid family conflict. Collapsing these family types into single-parent versus two-parent families would obfuscate the actual processes affecting adolescents, frustrating our attempts to both understand and to help them. The idea that

we must pay closer attention to different types of fragile families is one that could be applied to many studies about family structure and youth outcomes. For example, the distinct patterns among different types of families found in this study support recent work looking at whether single mother and single father families operate in similar ways.

Although previous studies suggested that there may be significant gender-based differences between single mothers and single fathers, most of those assumptions have been based on studies that compare single mother families to two-parent families and conclude that father-absence damages children in unique ways. When studies actually compare single mothers to single fathers, they find very few gender-based differences in parenting behaviors and child outcomes (Downey, Ainsworth-Darnell, and Dufur, 1998).

Future research should take advantage of large-scale, longitudinal data sets such as the NELS or the National Survey of Adolescent Health (AddHealth) that can both provide information at more than one time point, allowing for better inference of causal connections between family structure and youth outcomes, and provide a large enough sample to allow scholars to look at family structure more finely. Such studies could look at short-term effects of high-intensity work for youth from fragile families, such as the effect of longer work hours on grades and test scores, dropping out of school, attending college, and delinquency and psychosocial effects, as well as long-term effects on outcomes such as family formation, occupational attainment, and college completion. Additional research could look at the effects high-intensity work has on the most fragile of families—those in greatest poverty, where putting food on the table may be a consideration for adolescent workers, or those who have engaged in early childbearing and have formed fragile families of their own. Although such data were not available in

the NELS, more detailed information on spending habits, financial need, and family stressors could allow for more detailed tests of the mechanisms within different types of fragile families that drive adolescents to work longer hours, possibly putting them at risk for negative academic and behavioral outcomes. Finally, although this study suggests that such mechanisms may operate differently in different fragile family structures, it was not able to fully explain the work habits and teacher assessments of youth in such families. Additional research including the effects of high-intensity work and detailed family structure on youth outcomes could also include other variables of interest that could affect work choices and teacher opinion, such as participation in other extracurricular activities, school social capital, or self-concept to see if the effects of growing up in a fragile family could be fully explained.

## References

- Ambert, Anne-Marie, and Jean Francios Saucier. 1984. "Adolescents' Academic Success and Aspirations by Parental Marital Status." *Sociology and Anthropology* 21(1): 62-74.
- Aquilino, William S. 1991. "Family Structure and Home-Leaving: A Further Specification of the Relationship." *Journal of Marriage and the Family* 53(4): 999-1010.
- Barton, P. 1989. *Earning and Learning: The Academic Achievement of High School Juniors with Jobs*. National Assessment of Educational Progress, Educational Testing Service: Princeton, NJ.
- Bills, David, Lelia Helms, and Mustafa Ozcan. 1995. "The Impact of Student Employment on Teachers' Attitudes and Behaviors toward Working Students." *Youth and Society* 27: 169-193.
- Bumpass, Larry, and Hsien Hen Lu. 2000. "Trends in Cohabitation and Implications for Children's Family Contexts in the United States." *Population Studies* 54(1): 29-41.
- Carr, Rhoda V., James D. Wright, and Charles J. Brody. 1996. "Effects of High School Work Experience a Decade Later: Evidence from the National Longitudinal Survey." *Sociology of Education* 69(1): 66-81.
- Cohen, J. and P. Cohen. 1975. *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. Hillsdale, NJ: Lawrence Erlbaum.
- D'Amico, Ronald. 1984. "Does Employment During High School Impair Academic Progress?" *Sociology of Education* 57: 152-164.
- de Goede, Martijn, Ed Spruijt, Cora Maas, and Vincent Duindam. 2000. "Family Problems and Youth Unemployment." *Adolescence* 35(139): 587-601.
- Downey, Douglas B. 1995. "Understanding Academic Achievement among Children in Stepphouseholds: The Role of Parental Resources, Sex of Stepparent, and Sex of Child." *Social Forces* 73(3): 875-894.
- , James W. Ainsworth-Darnell, and Mikaela J. Dufur. 1998. "Sex of Parent and Children's Well-Being in Single-Parent Households." *Journal of Marriage and the Family* 4: 878-893.
- Duncan, Greg J., Jeanne Brooks-Gunn, W. Jean Yeung, and Judith R. Smith. 1998. "How Much Does Childhood Poverty Affect the Life Chances of Children?" *American Sociological Review* 63:406-423.

- Fields, Jason, and Lynne M. Casper. 2001. *America's Families and Living Arrangements: Population Characteristics*. Current Population Reports, P20-527. Washington, D.C.: U.S. Bureau of the Census.
- Finch, Michael D., and Jeylan T. Mortimer. 1996. "Future Directions for Research on Adolescents, Work, and Family." Pp. 129-166 in *Adolescents, Work, and Family*, Jeylan T. Mortimer and Michael D. Finch (Eds.). Thousand Oaks, CA: Sage.
- Flewelling, Robert L., and Karl E. Bauman. 1990. "Family Structure as a Predictor of Initial Substance Use and Sexual Intercourse in Early Adolescent." *Journal of Marriage and the Family* 52(1): 171-181.
- Greenberger, Ellen, and Laurence Steinberg. 1986. *When Teenagers Work: The Psychological and Social Costs of Adolescent Employment*. Basic Books.
- , Laurence Steinberg, Alan Vaux, and Sharon McAuliffe. 1980. "Adolescents Who Work: Effects of Part Time Employment on Family and Peer Relations." *Journal of Youth and Adolescence* 9(3): 189-202.
- Hansen, David, and Patricia Jarvis. 2000. "Adolescent Employment and Psychological Outcomes: A Comparison of Two Employment Contexts." *Youth and Society* 31(4): 417-436.
- Hoffmann, John P. 1994. "Investigating the Age Effects of Family Structure on Adolescent Marijuana Use." *Journal of Youth and Adolescence* 23(2): 215-235.
- Jakob-Chien, Cynthia Y. A., and Richard Dukes. 1998. "Understanding Adolescent Work in Social and Behavioral Contexts." *Free Inquiry in Creative Sociology* 26(1): 55-62.
- Jenkins, Jeanne E., and Sabina T. Zunguze. 1998. "The Relationship of Family Structure to Adolescent Drug Use, Peer Affiliation, and Perception of Peer Acceptance of Drug Use." *Adolescence* 33(132): 811-822.
- Kouvonen, Anne, and Tomi Lintonen. 2003. "Adolescent Part-time Work and Heavy Drinking in Finland." *Addiction* 97(3): 311-318.
- Ku, Leighton, Freya L. Sonenstein, and Joseph H. Pleck. 1993. "Neighborhood, Family, and Work: Influences on the Premarital Behaviors of Adolescent Males." *Social Forces* 72(2): 479-503.
- Leventhal, Tama, Julia A. Graber, and Jeanne Brooks-Gun. 2001. "Adolescent Transitions to Young Adulthood: Antecedents, Correlates, and Consequences of Adolescent Employment." *Journal of Research on Adolescence* 11(3): 297-323.

- Lewin-Epstein, Noah. 1981. *Youth Employment during High School: An Analysis of High School and Beyond*. National Center for Educational Statistics.
- Lillydahl, H. 1990. "Academic Achievement and Part-time Employment of High School Students." *Journal of Economic Education* 21: 307-316.
- Markel, Karen S., and Michael R. Frone. 1997. "Job Characteristics, Work-School Conflict, and School Outcomes among Adolescents: Testing a Structural Model." Presented at the Annual Meetings of the American Sociological Association, Washington, D.C.
- Marsh, Herbert W. 1991. "Employment during High School: Character Building or Subversion of Academic Goals?" *Sociology of Education* 65: 172-189.
- McLanahan, Sara, and Gary Sandefur. 1994. *Growing Up with a Single Parent: What Hurts, What Helps*. Cambridge, MA: Harvard University Press.
- and Larry Bumpass. 1988. "Intergenerational Consequences of Family Disruption." *American Journal of Sociology* 94(1): 130-152.
- McMorris, Barbara J., and Christopher Uggen. 2000. "Alcohol and Employment in the Transition to Adulthood." *Journal of Health and Social Behavior* 41(3): 276-294.
- McNeal, Ralph B., Jr. 1997. "Are Students Being Pulled Out of High School? The Effect of Adolescent Employment on Dropping Out." *Sociology of Education* 70(3): 206-220.
- Menaghan, Elizabeth G., Lori Kowaleski-Jones, and Frank L. Mott. 1997. "The Intergenerational Costs of Parental Social Stressors: Academic and Social Difficulties in Early Adolescence for Children of Young Mothers." *Journal of Health and Social Behavior* 38(1): 72-86.
- Mihalic, Sharon Wofford, and Delbert Elliot. 1997. "Short- and Long-term Consequences of Adolescent Work." *Youth and Society* 28(4):464-498.
- Miller, William J., and Rick A Matthews. 2001. "Youth Employment, Differential Association, and Juvenile Delinquency." *Sociological Focus* 34(3): 251-268.
- Mortimer, Jeylan T., Michael D. Finch, Seongryeol Ryu, and Michael Shanahan. 1996. "The Effects of Work Intensity on Adolescent Mental Health, Achievement, and Behavioral Adjustment: New Evidence from a Prospective Study." *Child Development* 67(3): 1243-1261.
- and Monica Kirkpatrick Johnson. 1997. "Adolescent Work and the Transition to Adulthood." Presented at the Annual Meetings of the American Sociological Association, Washington, D.C.

- Pagani, Linda, Bernard Boulerice, and Richard E. Tremblay. 1997. "The Influence of Poverty on Children's Classroom Placement and Behavior Problems." Pp. 311-339 in *Consequences of Growing Up Poor*, edited by G. J. Duncan and J. Brooks-Gunn. NY: Russell Sage Foundation.
- Patton, Wendy and Patricia Noller. 1991. "The Family and the Unemployed Adolescent." *Journal of Adolescence* 14(4): 343-361.
- Pickering, Lloyd E., and Alexander T. Vazsonyi. 2002. "The Impact of Adolescent Employment on Family Relationships." *Journal of Adolescent Research* 17(2): 196-218.
- Roisman, Glenn I. 2002. "Beyond Main Effects Models of Adolescent Work Intensity, Family Closeness, and School Disengagement: Mediational and Conditional Hypotheses." *Journal of Adolescent Research* 17(4): 331-345.
- Sandefur, Gary D., Srar McLanahan, and Roger A. Wojtkiewicz. 1992. "The Effects of Parental Marital Status during Adolescence on High School Graduation." *Social Forces* 71(1): 103-121.
- Saucier, Jean Francois, and Anne Marie Ambert. 1983. "Parental Marital Status and Adolescents' Health-Risk Behavior." *Adolescence* 18(70): 403-411.
- Schoenhals, Mark, Marta Tienda, and Barabara Schneider. 1998. "The Educational and Personal Consequences of Adolescent Employment." *Social Forces* 77(2): 723-761.
- Shanahan, Michael J, Glen H. Elder Jr., Margaret Burchinal, and Rand Conger. 1996. "Adolescent Paid Labor and Relationships with Parents: Early Work-Family Linkages." *Child Development* 67(5): 2183-2200.
- , Michael Finch, Jeylan T. Mortimer, and Seongryeol Ryu. 1991. "Adolescent Work Experience and Depressive Affect." *Social Psychology Quarterly* 54(4): 299-317.
- Simons, Ronald L., and Martin G. Miller. 1987. "Adolescent Depression: Assessing the Impact of Negative Cognitions and Socioenvironmental Problems." *Social Work* 32(4): 326-330.
- Smith, Judith R., Jeanne Brooks-Gunn, and Pamela K. Klebanov. 1997. "Consequences of Living in Poverty for Young Children's Cognitive and Verbal Ability and Early School Achievement." Pp. 132-189 in *Consequences of Growing Up Poor*, edited by G. J. Duncan and J. Brooks-Gunn. NY: Russell Sage Foundation.

- Steel, Lauri. 1991. "Early Work Experience among White and Non-white Youths: Implications for Subsequent Enrollment and Employment." *Youth and Society* 22: 419-447.
- Steelman, Lala Carr, and Brian Powell. 1991. "Sponsoring the Next Generation: Parental Willingness to Pay for Higher Education" *American Journal of Sociology* 96(6): 1505-1529.
- Steinberg, Laurence D., and Sanford M. Dornbusch. 1993. "Negative Correlates of Part-time Employment during Adolescence: Replication and Elaboration." *Developmental Psychology* 29(2): 304-313.
- , S. Fegley, and S. M. Dornbusch. 1993. "Negative Impact of Part-time Work on Adolescent Adjustment: Evidence from A Longitudinal Study." *Developmental Psychology* 29(2): 171-180.
- Steinberg, Laurence D., Ellen Greenberger, Alan Vaux, and Mary Ruggiero. 1981. "Early Work Experience: effects on Adolescent Occupational Socialization." *Youth and Society* 12(4): 403-422.
- Stone, James R. III, and Jeylan T. Mortimer. 1998. "The Effect of Adolescent Employment on Vocational Development: Public and Educational Policy Implications." *Journal of Vocational Behavior* 53(2): 184-214.
- Warren, John R. 2002. "Reconsidering the Relationship between Student Employment and Academic Achievement." *Youth and Society* 33(3): 366-393.
- Yamoor, Catherine M., and Jeylan T. Mortimer. 1990. "Age and Gender Differences in the Effects of Employment on Adolescent Achievement and Well-Being." *Youth and Society* 22(2): 225-240.



**Table 1. List of Concepts, Variables and Metrics.**

Concept/Variable	Description	Metric
<b>Dependent Variables</b>		
Currently Working in 12 <sup>th</sup> Grade (1992)	Student's report of whether or not s/he worked for pay outside the home in 12 <sup>th</sup> grade	1=Yes, currently working 0=Not working
Work Hours	Student's report of the number of hours worked each week at current job.	0-40 hours
Always Completes Homework	Teacher's report of how often student completes homework assignments on time.	1=always complete 0=other
Always Alert in Class	Teacher's report of how often student is attentive in class.	1= always attentive 0=other
<b>Key Concepts and Independent Variables</b>		
<b>Family Structure, Money Use, and Family Interaction and Atmosphere</b>		
Family Structure	Parent's report of current marital status	Dummy variables differentiating stepparent, never married, married, divorced or separated, widowed, and cohabiting. Married is the omitted category.
Spending Habits	Student's report of whether they used most of their money on rent, food, or education	1=Most money spent on rent, food, or education 0=otherwise
Family Interaction in 10 <sup>th</sup> Grade (1990)	A scale of 5 items measuring student's report of how often they discuss things with parents, including school courses, school activities, things studied in class, grades, and going to college. $\alpha=.79$	0-5; higher scores indicate more interaction
Family Interaction in 12 <sup>th</sup> Grade (1992)	A scale of 9 items measuring student's report of how often they discuss things with parents, including the 5 items above as well as plans and preparations for the ACT/SAT, job possibilities after high school, current events, and troubling events. $\alpha=.86$	0-9; higher scores indicate more interaction
Negative Family Atmosphere in 10 <sup>th</sup> Grade (1990)	Student's report of how important it is to get away from parents.	1=not important 3=very important

**Table 1 (continued).**

Concept/Variable	Description	Scales
Negative Family Atmosphere in 12 <sup>th</sup> Grade (1992)	Student's report of how important it is to get away from parents.	1=not important 3=very important
<b>Background Variables</b>		
Socioeconomic Status	NELS composite created using parent's report of education, occupation, total household income in 1988.	-3.091-2.753
Sex	NELS composite of student sex.	1=male 0=female
Number of Siblings	Student's report in 10 <sup>th</sup> grade (1990) of number of older siblings, younger siblings, and if student has a twin.	0=none 8=eight or more
Race/Ethnicity	NELS composite based on student report of race.	Dummy variables differentiating Asian and Pacific Islanders, Hispanic, Black, American Indian and Alaskan, and white respondents. White is the reference group.
Suburban neighborhood	NELS assessment of school setting	Set of dummy variables: urban, suburban, rural. Suburban is the omitted category.
Region	NELS assessment of school region	Dummy variables differentiating: Northeast, Midwest, South and West. Northeast is the reference group.

**Table 2: Means and ANOVA for Variables by Family Structure**

	Never married	Married	Divorced	Widowed	Cohabiting	Stepparent	ANOVA: Family type
N	278	6868	1536	339	108	1456	
Currently employed	.31	.48	.41	.37	.39	.46	***
Work hours	15.55	13.14	14.50	13.99	18.53	15.59	***
Always completes homework	.08	.19	.11	.10	.10	.11	***
Always alert in class	.09	.17	.09	.10	.10	.10	***
Spending habits	.18	.15	.16	.13	.14	.14	*
Family interaction in 10 <sup>th</sup> grade (1990)	2.11	2.19	2.12	2.06	2.01	2.12	***
Family interaction in 12 <sup>th</sup> grade (1992)	1.92	2.05	1.99	1.96	1.86	1.97	***
Negative family atmosphere in 10 <sup>th</sup> grade (1990)	1.78	1.69	1.75	1.66	1.71	1.83	***
Negative family atmosphere in 12 <sup>th</sup> grade (1992)	1.73	1.63	1.67	1.62	1.74	1.73	***
SES	-.70	.11	-.23	-.36	-.51	-.12	***
Male	.44	.48	.45	.48	.42	.50	
Number of siblings	2.81	2.29	2.80	2.49	3.44	3.60	***
Asian/Pacific Islander	.05	.09	.03	.07	.03	.04	***
Hispanic	.14	.11	.14	.15	.14	.11	***
Black	.52	.06	.16	.22	.18	.10	***
White	.28	.73	.66	.54	.63	.75	***
Native American	.02	.01	.02	.02	.02	.01	**
Urban	.39	.27	.30	.31	.28	.24	***
Suburban	.28	.41	.35	.34	.27	.36	***
Rural	.30	.30	.31	.28	.37	.35	***
Northeast	.20	.20	.19	.13	.23	.14	***
Midwest	.22	.28	.25	.24	.13	.26	***
South	.40	.31	.34	.39	.41	.36	***
West	.14	.19	.18	.17	.15	.19	***

**Table 3. Logistic Regression of Family Structure (Model 1) on Current Employment. N=10,585 (standard error in parentheses)**

<b>Variable</b>	
<b>Family Structure</b>	
Stepparent	.140 (.080)
Never Married	-.302 (.186)
Divorced	-.138 (.076)
Widowed	-.181 (.150)
Cohabiting	-.045 (.269)
Constant	.116
Cox and Snell R <sup>2</sup>	.002
-2 Log likelihood	9627.992

\* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$  two-tailed tests

**Table 4. Regression Coefficients of Family Structure (Model 1), Uses of Money (Model 2), Family Interaction and Atmosphere (Model 3), Background Variables (Model 4), and Interactions (Model 5) on Number of Hours Worked. N=10,585 (standardized coefficients in parentheses)**

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
<b>Family Structure</b>					
Stepparent	1.420*** (.048)	1.431*** (.049)	1.262*** (.043)	.994*** (.034)	-.010 (-.001)
Never Married	1.114* (.018)	1.145* (.019)	.919 (.015)	.235 (.004)	.118 (.002)
Divorced	.631* (.022)	.652* (.023)	.520* (.018)	.167 (.006)	.304 (.011)
Widowed	.233 (.004)	.258 (.005)	.048 (.001)	-.418 (-.008)	-.008 (.000)
Cohabiting	2.372** (.025)	2.377** (.034)	2.002* (.021)	1.412 (.015)	1.336 (.014)
<b>Uses of Money</b>					
Spending habits		1.296*** (.034)	1.518*** (.040)	1.761*** (.047)	1.736** (.047)
<b>Family Interaction and Atmosphere</b>					
Family Interaction in 10 <sup>th</sup> Grade (1990)			-1.061*** (-.048)	-.537** (-.024)	-.546* (-.025)
Family Interaction in 12 <sup>th</sup> Grade (1992)			-2.363*** (-.101)	-1.877*** (-.080)	-1.836*** (-.078)
Negative Family Atmosphere in 10 <sup>th</sup> Grade (1990)			.371** (.027)	.388** (.029)	.390** (.029)
Negative Family Atmosphere in 12 <sup>th</sup> Grade (1992)			-.336* (-.023)	-.297* (-.021)	-.388** (-.027)
<b>Background Variables</b>					
SES				-1.711*** (-.145)	-1.860*** (-1.58)
Male				.562*** (.030)	-1.355*** (-.080)
Asian				-1.497*** (-.040)	-1.465*** (-.039)
Hispanic				.144 (.005)	.289 (.010)
Black				-.972** (-.030)	-.941** (-.029)
Native American				-.887 (-.010)	-.849 (-.010)
Urban				-.853*** (-.040)	-.845*** (-.040)
Rural				-1.003*** (-.049)	-1.003*** (-.049)

**Table 4 (Continued).**

<b>Variable</b>	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>
Midwest				.975*** (.045)	.963*** (.045)
South				.647** (.033)	.657** (.033)
West				.253 (.011)	.217 (.009)
Number of Siblings				-.013 (-.003)	-.013 (-.003)
<b>Interactions</b>					
Stepparent* Negative Family Atmosphere in 12 <sup>th</sup> Grade (1992)					.791** (.047)
Divorced*SES					.785* (.024)
Widowed*SES					1.384* (.022)
Stepparent*Hispanic					-1.706* (-.020)
Constant	13.711	13.618	20.619	18.419	18.494
R Squared	.003	.004	.022	.046	.048

\* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$  two-tailed tests

**Table 5. Logistic Regression of Family Structure (Model 1), Number of Hours Worked (Model 2), Uses of Money (Model 3), Family Interaction and Atmosphere (Model 4), Background Variables (Model 5), and Interactions (Model 6) on Homework always complete. N=5,035 (standard error in parentheses)**

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<b>Family Structure</b>						
Stepparent	-.530*** (.119)	-.488*** (.119)	-.474*** (.120)	-.425*** (.120)	-.346** (.123)	-.345** (.123)
Never Married	-.903* (.353)	-.878* (.354)	-.878* (.355)	-.822* (.356)	-.615 (.362)	-1.350* (.599)
Divorced	-.466*** (.112)	-.454* (.113)	-.444*** (.113)	-.414*** (.114)	-.325** (.116)	-.318** (.116)
Widowed	-.874*** (.266)	-.866*** (.267)	-.841** (.267)	-.793** (.269)	-.644* (.271)	-.636* (.271)
Cohabiting	-.237 (.392)	-.163 (.394)	-.202 (.395)	-.142 (.398)	.021 (.402)	.023 (.402)
<b>Work Intensity</b>						
Hours Worked		-.023*** (.003)	-.024*** (.003)	-.020*** (.003)	-.016*** (.003)	-.016*** (.003)
<b>Uses of Money</b>						
Spending habits			.529*** (.100)	.486*** (.101)	.421*** (.103)	.424*** (.103)
<b>Family Interaction and Atmosphere</b>						
Family Interaction in 10 <sup>th</sup> Grade (1990)				.143 (.088)	.054 (.090)	.055 (.090)
Family Interaction in 12 <sup>th</sup> Grade (1992)				.322*** (.089)	.210* (.093)	.209* (.093)
Negative Family Atmosphere in 10 <sup>th</sup> Grade (1990)				-.198*** (.053)	-.205*** (.054)	-.206*** (.054)
Negative Family Atmosphere in 12 <sup>th</sup> Grade (1992)				-.144** (.055)	-.149** (.055)	-.149** (.055)
<b>Background Variables</b>						
SES					.327*** (.051)	.382*** (.051)
Male					-.355*** (.070)	-.333*** (.070)
Asian					.431*** (.125)	.434*** (.125)
Hispanic					-.093 (.139)	-.090 (.139)
Black					.006 (.159)	-.065 (.165)
Native American					-.424 (.482)	-.412 (.483)
Urban					-.046	-.045

					(.085)	(.085)
Rural					.186*	.187*
					(.082)	(.082)
Midwest					.254**	.255**
					(.095)	(.095)
South					.191	.192*
					(.098)	(.098)
West					.077	.079
					(.110)	(.110)
Number of Siblings					-.024	-.023
					(.018)	(.018)
<b>Interactions</b>						
Never married*black						1.561*
						(.281)
Constant	-1.295	-1.006	-1.058	-1.532	-1.241	-1.242
-2 Log likelihood	5883.363	5828.706	5802.203	5720.686	5626.286	5621.888
Cox & Snell R Square	.009	.018	.022	.035	.050	.051

\* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$  two-tailed tests



**Table 6. Logistic Regression of Family Structure (Model 1), Number of Hours Worked (Model 2), Uses of Money (Model 3), Family Interaction and Atmosphere (Model 4), Background Variables (Model 5), and Interactions (Model 6) on Always attentive in class. N=5,035 (standard error in parentheses)**

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<b>Family Structure</b>						
Stepparent	-.488*** (.123)	-.434*** (.123)	-.416*** (.124)	-.384** (.124)	-.284* (.127)	-.283* (.127)
Never Married	-.708* (.353)	-.742* (.354)	-.739* (.355)	-.678 (.356)	-.466 (.362)	-1.59* (.725)
Divorced	-.472*** (.118)	-.459*** (.119)	-.449*** (.119)	-.436*** (.119)	-.329** (.122)	-.321** (.122)
Widowed	-.481* (.242)	-.465 (.243)	-.434 (.244)	-.407 (.245)	-.258 (.248)	-.246 (.248)
Cohabiting	.051 (.374)	.149 (.377)	.110 (.379)	.181 (.380)	.271 (.385)	.274 (.285)
<b>Work Intensity</b>						
Hours Worked		-.029*** (.003)	-.030*** (.003)	-.028*** (.003)	-.022*** (.004)	-.022*** (.004)
<b>Uses of Money</b>						
Spending habits			.594*** (.102)	.561*** (.103)	.501*** (.105)	.504*** (.105)
<b>Family Interaction and Atmosphere</b>						
Family Interaction in 12 <sup>th</sup> Grade (1992)				.385*** (.080)	.232** (.086)	.232** (.086)
Negative Family Atmosphere in 12 <sup>th</sup> Grade (1992)				-.252** (.054)	-.250*** (.054)	-.249*** (.054)
<b>Background Variables</b>						
SES					.309*** (.052)	.309*** (.052)
Male					-.350*** (.072)	-.347*** (.072)
Asian					.570*** (.126)	.573*** (.126)
Hispanic					-.111 (.145)	-.106 (.145)
Black					-.038 (.163)	-.136 (.172)
Native American					-.589 (.532)	-.570 (.533)
Urban					.154 (.086)	.155 (.086)
Rural					.137 (.086)	.138 (.086)
Midwest					-.113	-.111**

					(.096)	(.096)
South					-.020 (.097)	-.019 (.097)
West					-.346** (.114)	-.344** (.114)
Number of Siblings					-.025 (.019)	-.023 (.019)
<b>Interactions</b>						
Never married*black						2.100* (.858)
Constant	-1.465	-1.106	-1.165	-1.591	-1.241	-1.244
-2 Log likelihood	5638.525	5557.322	5525.505	5465.245	5360.155	5352.833
Cox & Snell R Square	.006	.019	.024	.033	.050	.051

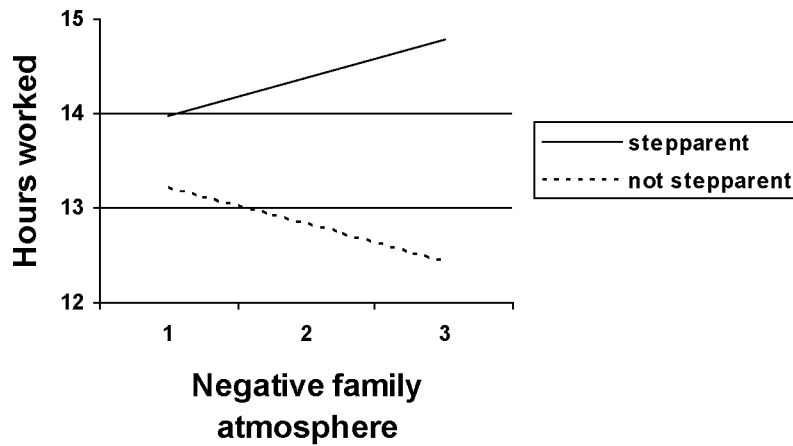
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\* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$  two-tailed tests

**Figures 1a-1d: Interaction Effects from Table 4, Model 5: Effects on Adolescent Work Hours**

**Figure 1a: Effects of Stepparent Family\*Family Atmosphere on Work Hours**

**Stepparent \* Negative Family Atmosphere (12th grade)**



**Figure 1b: Effects of Divorced Family\*SES on Work Hours**

**Divorced \* SES**

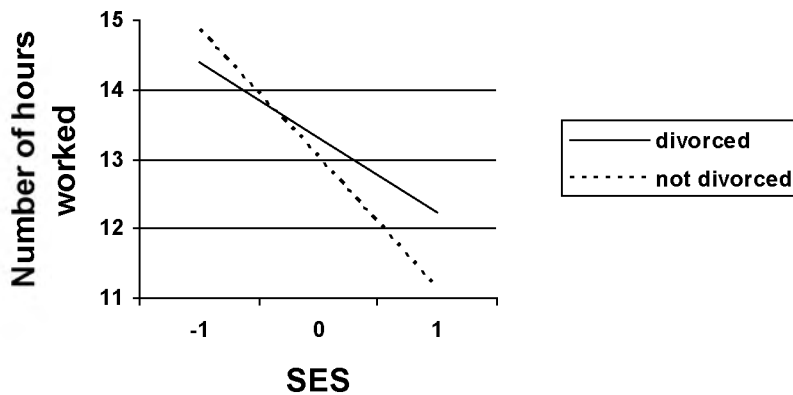


Figure 1c: Effects of Widowed Family\*SES on Work Hours

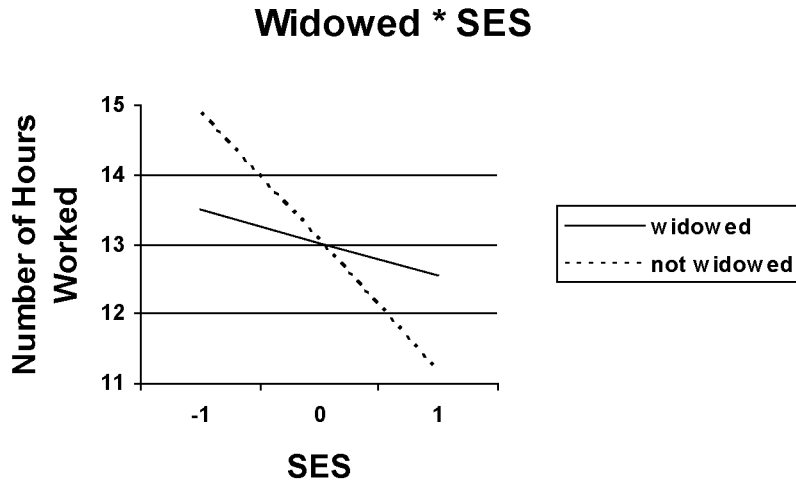


Figure 1d: Effects of Stepparent Family\*Hispanic on Work Hours

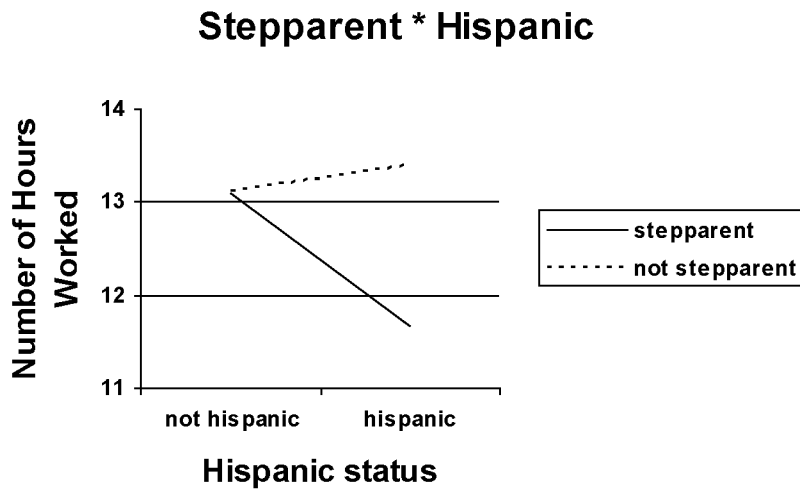


Figure 2: Interaction Effect from Table 5, Model 6: Effects Never Married\*Black on Teacher Assessment of Homework Completion

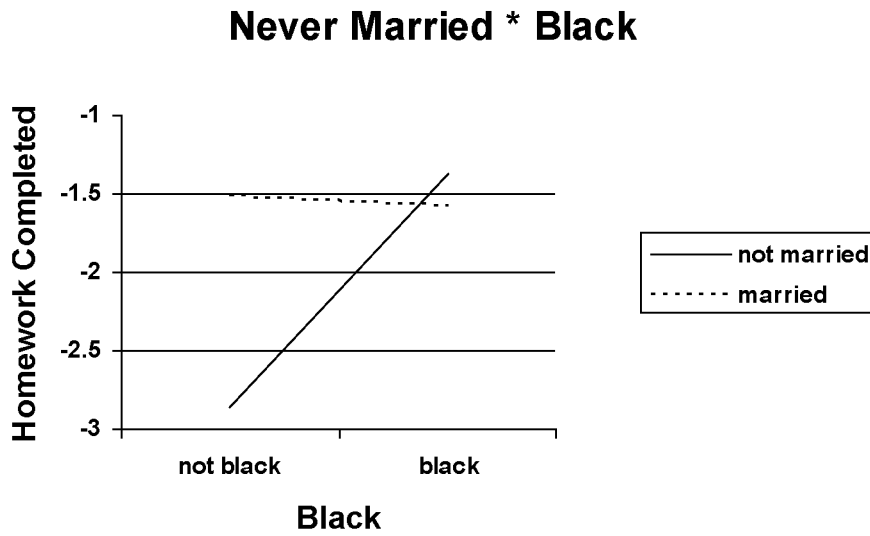


Figure 3: Interaction Effect from Table 6, Model 6: Effects Never Married\*Black on Teacher Assessment of Alertness

