Parental After-School Stress and Psychological Well-Being

The mismatch between employed parents’ work schedules and their children’s school schedules creates the structural underpinning for an as-yet-unstudied stressor, namely, parental after-school stress, or the degree of parents’ concern about their children’s welfare after school. We estimate the relationship between parental after-school stress and psychological well-being in a sample of 243 employed parents of children in grades K–12. Parental after-school stress is related to psychological well-being. This relationship did not differ by parent gender or child age but was significantly stronger for parents of girls versus boys. Our results suggest that parental after-school stress is an important stressor that affects the well-being of a large segment of the work force and warrants further research.

As of 2001, more than one third (37.2%) of the labor force consisted of parents of minor children (computed by the authors from data in U.S. Bureau of Labor Statistics, 2002, 2003), and most of those children are school age; that is, in grades K–12. For most full-time employed parents, the gap between the end of the school day and the time they arrive home from work is approximately 20–25 hours per week (American Youth Policy Forum, 1999). Given the lack of high-quality, affordable, and accessible after-school programs, many parents must make ad hoc and often unreliable and complicated arrangements for children’s after-school care (Heymann, 2000). This gap creates the structural underpinning for an as-yet-unstudied stressor, parental after-school stress, or the degree to which parents are concerned about the welfare of their children during the after-school hours. In this article, we estimate the relationship between parental after-school stress and psychological well-being in a sample of 243 employed parents who have at least one school-age child and who work at a large financial services institution.

BACKGROUND AND INTRODUCTION

There is a great deal of research relating the quality of employed parents’ relationships with their children to the parents’ psychological well-being (Barnett, Brennan, & Marshall, 1994; Barnett & Hyde, 2001; Barnett & Marshall, 1993; Barnett, Marshall, & Pleck, 1992). Generally, when parent-child relationships are positive, health and well-being are high for both fathers and mothers. Yet, none of these studies focuses on the special demands faced by employed parents of school-age children, even though far more working parents have school-age than preschool-age children, and after-school care options are less available for preschoolers than are day-care options (Heymann, 2000).

Given the scarcity of after-school care options, many parents are forced to leave their school-age children in less-than-appropriate care or even in self-care. Allen and Funkhouser (1998) found that 44% of 12-year-olds were in self-care after school, and many of these children were also

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caring for younger siblings. Such ad hoc arrangements tend to be dangerous and unreliable, creating distress for both parents and children (Heymann, 2000). Parents have good reason to worry about unsupervised children, who are at high risk for juvenile crime, loitering, truancy, substance use/abuse, sexual activity, and victimization (Cohen, Farley, Taylor, Martin, & Schuster, 2002; Kurz, 2002; National Center for Schools and Communities, 1999; Newman, Fox, Flynn, & Christeson, 2000).

Unsupervised teens are more likely than younger children to engage in risky behaviors, but younger children may be at higher risk for being victimized. Parents of daughters may worry more about their vulnerability to crime or the possibility of pregnancy, whereas parents of sons may worry more about their involvement in delinquent behavior. Because children of all ages and both genders are at risk when after-school care is inadequate, however, we do not expect the relationship between parental after-school stress and well-being to differ by child’s age or gender.

Are mothers more vulnerable than fathers to parental after-school stress? Research shows that women are more likely than men to (a) have primary responsibility for child care (Biemat & Wortman, 1991; Ozer, 1995), (b) adapt their work lives to accommodate child-related concerns (Glass & Estes, 1997), and (c) be more nurturant, relational, and responsive to the needs of others, especially children (Chodorow, 1978; Gilligan, 1982). Other theorists argue, however, that men and women are not inherently different in their capacity to care for children (Barnett & Hyde, 2001; Barnett & Rivers, 2004). In fact, several studies comparing mothers with fathers who have primary child-care responsibilities find no gender differences in nurturing behavior (Coltrane, 1996; Risman, 1986; Risman & Park, 1988). Thus, we do not expect mothers to report higher levels of parental after-school stress than fathers, and we do not expect the relationship between parental after-school stress and well-being to vary by parent’s gender.

In the present analysis, we test the hypothesis that parental after-school stress will be negatively related to psychological well-being and that this relationship will not be moderated by child gender, child age, or parent gender, nor will absolute level of parental after-school stress differ by parent gender. We test this hypothesis controlling for number of hours worked, negative affectivity, child’s time spent unsupervised after school, and household income.

METHOD

Sample and Procedures

Participants were recruited through a parenting group at a leading global financial services corporation. The parenting group consisted of parents of children of all ages, but only parents of school-age (i.e., K–12) children were eligible to participate in the present study. Survey packets were mailed to parents in six states: Arizona, Delaware, Florida, New Jersey, New York, and Texas. Packets included a brief (15-minute) self-administered survey, a postage-paid return envelope, and a postage-paid postcard to be mailed back separately in order to enter a drawing for one of five $100 American Express gift certificates.

Although the company has a range of family-friendly policies, not all employees are aware of these benefits (the company’s Senior Vice President of Leadership and Organizational Development, personal communication, April 9, 2004). For example, although all employees of the company are entitled to paid time off to deal with family matters, 3.7% of participants incorrectly reported that it was not available and 2.1% were unsure. For unpaid time off, there was even greater uncertainty, with 8.2% incorrectly reporting that it was not available and 19.3% being unsure. We mailed surveys to 1,059 members of the parenting group and received complete, usable surveys from 243 eligible parents by our requested deadline, with a response rate of 22.9%. This response rate is artificially depressed to an unknown degree by the fact that not all of the parents who received a study packet were eligible to participate. Some members of the group have children who are younger or older than school age.

Of the 243 participants, most (84.3%) are mothers; this percentage is similar to the percentage of mothers in the parenting group as a whole (81.5%). Participants work from 20 to 86 hours per week (M = 44.2, SD = 8.5), so some are able to be home after school; this range should ensure that our sample has variability on parental after-school stress scores. Participants have worked in their current jobs from 1 to 36 years (M = 7.4, SD = 6.6) and work at a wide range of jobs at all occupational levels from
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administrative assistants and clerks to project managers and senior vice presidents.

Participant ages range from 25 to 59 years ($M = 39.2, SD = 6.3$). Educational attainment ranges from a high school diploma to a graduate degree; the majority (62.4%) have some college or a bachelor’s degree, with the median being a bachelor’s degree. The median household income of participants fell into the range from $90,000 to $104,999. Three quarters of the parents (74.9%) are married (70.0%) or living with a partner (4.9%). Of the parents’ spouses and partners, 91.2% are also employed, working between 12 and 100 hours per week ($M = 46.4$, $SD = 11.6$).

Parents who have more than one school-age child answered the questions about after-school arrangements with regard to a randomly selected target child. Parents who had more than one child in grades K–12 were instructed to choose as the target child the one whose name comes first alphabetically. As expected with a random selection method, the target children are equally split between boys (49.8%) and girls (50.2%), with ages ranging from 4 to 18 years ($M = 9.2, SD = 3.5$). Participants have from one to five children at home, with an average of 2.0 children; most (78.9%) have one or two children.

Measures

Psychological well-being was assessed using the 10 adjective items from the positive affect scale of the Affectometer 2 (Kammann & Flett, 1983). Participants indicated on a 5-point scale from 1 (not at all) to 5 (all the time) how often over the past few weeks they had each of 10 feelings such as satisfied and optimistic; the overall score is the mean response to all items answered. Internal consistency was excellent, with a Cronbach’s alpha of .91 in the present sample.

Parental after-school stress was assessed using a 10-item measure developed for this project (see Appendix). Participants used a 4-point scale from 1 (not at all) to 4 (extremely) to indicate their level of concern about their target child’s after-school arrangements in a variety of domains including safety, travel, productive use of time, and reliability, among others; the overall score is the mean response to all items answered. Scale items were developed through a series of focus groups with employees of a Boston area utility company. Participants varied in gender, occupational level, and ages of their school-age children. All participants were asked to think about their own after-school care arrangements and to share what was and was not working for them; we also asked them to complete a draft measure and tell us whether anything was missing, needed clarification, or should be dropped. On the basis of their responses, we added new items and reworded old items. Internal consistency of the revised 10-item measure was very good, with a Cronbach’s alpha of .87 in the present sample.

For child’s time spent unsupervised after school, parents were asked how many hours per week their target child spends in each of a number of different after-school arrangements. We summed parents’ reports of the number of hours the child spends alone or with peers and the number of hours the child spends watching younger siblings to create an overall measure of the amount of time the child spends unsupervised by an adult after school.

Parent gender and target child gender were coded as dichotomous variables (1 = male, 2 = female). Target child age was self-explanatory. Work hours was assessed by asking participants how many hours they work per week, on average, including overtime. Household income was assessed by asking participants to indicate their yearly household income from all sources before taxes using the following categories: 1 (less than $30,000), 2 ($30,000–$44,999), 3 ($45,000–$59,999), 4 ($60,000–$74,999), 5 ($75,000–$89,999), 6 ($90,000–$104,999), 7 ($105,000–$124,999), and 8 ($125,000 or more).

Negative affectivity is a mood-dispositional trait to view the world negatively that is thought to account for spuriously high correlations between self-report measures of predictor and outcome variables, especially in cross-sectional analyses (Brennan & Barnett, 1998). Negative affectivity was assessed with the 10-item Trait Anxiety Scale (Spielberger, 1983) on which participants indicated on a 4-point scale from 1 (almost never) to 4 (almost always) how characteristic each trait was of them; items include “I am a steady person” and “I have self-confidence.” The overall negative affectivity score is the mean response to all items answered. Internal consistency is excellent, with a Cronbach’s alpha of .92 in the present sample.
RESULTS

Descriptive Results

Over one third (35.8%) of the target children participated in some kind of formal after-school program; children in formal programs spent an average of 11.37 hours per week there ($SD = 6.14$; range = 1–25). In contrast, about one fifth (21.5%) of the target children spent at least some time unsupervised after school each week; on average, children who were ever unsupervised spent 9.77 hours per week alone or watching younger siblings ($SD = 7.19$; range = 1–30). On average, parents were somewhat stressed about the target child’s after-school arrangements, with an average score of 1.72 ($SD = 0.61$) on a scale ranging from 1 (not at all stressed) to 4 (extremely stressed). The obtained range of 1.00–3.80 stops just short of the maximum possible score, indicating that at least some parents in the present sample are experiencing quite a bit of stress about their target child’s after-school arrangements. On average, parents reported experiencing signs of well-being some of the time, with an average score of 3.26 ($SD = 0.72$) on a scale ranging from 1 (not at all) to 5 (all the time). The obtained range of 1.30–5.00 starts just above the minimum and extends up to the maximum possible score.

With respect to the bivariate correlations (see Table 1), parental after-school stress was negatively correlated with psychological well-being ($r = -.38$, $p = .000$). In addition, parental after-school stress was positively correlated with the child’s time spent unsupervised after school ($r = .27$, $p = .000$) and negatively correlated with household income ($r = -.20$, $p = .002$). Parental after-school stress was not significantly correlated with parent gender, nor was target child gender significantly correlated with any of the variables of interest. Not surprisingly, older target children spent more time unsupervised after school ($r = .47$, $p = .000$). Neither parental after-school stress nor psychological well-being was significantly correlated with work hours. Negative affectivity, however, was positively correlated with parental after-school stress ($r = .32$, $p = .000$) and negatively correlated with psychological well-being ($r = -.74$, $p = .000$), highlighting the importance of controlling for this variable. Psychological well-being was also negatively correlated with parent gender ($r = -.22$, $p = .001$); that is, mothers tended to report lower psychological well-being than did fathers.

Hypothesis Testing

To test the hypothesis that parents who have greater concerns about their children’s after-school arrangements would report significantly lower psychological well-being than their counterparts with fewer concerns, we estimated a simultaneous regression model using parental after-school stress to predict psychological well-being, with covariates of parent gender, work hours, and negative affectivity; target child age, gender, and time spent unsupervised after school; and household income. The hypothesis was supported. As shown in Table 2, the two variables that are significant predictors of psychological well-being are parental after-school stress and child age.
well-being are low parental after-school stress and low negative affectivity. Interestingly, parent gender is not a significant predictor of psychological well-being when the other covariates are in the model. As an indication of the size of the main effect of parental after-school stress on well-being, Cohen’s $d$ is $0.42$, which is classified as a medium-sized effect (Cohen, 1988).

We also tested whether the relationship between parental after-school stress and psychological well-being was moderated by target child gender by adding the interaction term Parental After-School Stress $\times$ Target Child Gender to the main effects model described above (see Table 2). The addition of the interaction term resulted in a significant increment to $R^2$ over and above that associated with the main effects model, $F_{\text{change}}(1, 219) = 8.97, p = .003$. Specifically, as shown in Figure 1, the relationship between parental after-school stress and psychological well-being is significantly stronger for parents of girls than for parents of boys. (The $t$ tests showed no significant differences between parents of boys and parents of girls on any of the variables of interest.) As an indication of the size of the effect of the interaction between parental after-school stress and target child gender on well-being, Cohen’s $d$ is $-0.41$, again classified as a medium-sized effect (Cohen, 1988). The remaining main effect of parental after-school stress on well-being after removing the effects of the interaction corresponds to a $d$ of $-0.44$.

To test whether the relationship between parental after-school stress and psychological well-being was moderated by target child age, we added the interaction term Parental After-School Stress $\times$ Child Age to the main effects model described above. The increment to $R^2$ was not significant, $F_{\text{change}}(1, 219) = 0.47, \text{ns}$, indicating that the relationship between parental after-school stress and psychological well-being is equally strong for parents of younger versus older children.

We also predicted that (a) mothers and fathers would not differ in their reports of parental after-school stress and (b) the relationship between parental after-school stress and psychological well-being would not be moderated by

**TABLE 2. RELATIONSHIP BETWEEN PARENTAL AFTER-SCHOOL STRESS AND PSYCHOLOGICAL WELL-BEING**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Main Effects</th>
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<th>Moderation by Target Child Gender</th>
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<td></td>
<td>$B$</td>
<td>$\beta$</td>
<td>SE</td>
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<td></td>
<td>$B$</td>
<td>$\beta$</td>
<td>SE</td>
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<td></td>
<td>$-.187^{**}$</td>
<td>$-.157$</td>
<td>.057</td>
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<td>Parent gender</td>
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<td></td>
<td></td>
<td>$-.093$</td>
<td>$-.048$</td>
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<td>Work hours</td>
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<td>$-.030$</td>
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<td></td>
<td></td>
<td>$-.003$</td>
<td>$-.035$</td>
<td>.004</td>
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<td>Negative affectivity</td>
<td>$-.784^{***}$</td>
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<td>.054</td>
<td></td>
<td></td>
<td>$-.772^{***}$</td>
<td>$-.675$</td>
<td>.054</td>
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<td>Target child age</td>
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<td>.011</td>
<td></td>
<td></td>
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<td>.065</td>
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<tr>
<td>Target child gender</td>
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<td>.013</td>
<td>.064</td>
<td></td>
<td></td>
<td>.016</td>
<td>.011</td>
<td>.063</td>
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<tr>
<td>Child time unsupervised</td>
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<td></td>
<td></td>
<td>$-.010$</td>
<td>$-.075$</td>
<td>.007</td>
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<td>Household income</td>
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<td></td>
<td></td>
<td>$-.007$</td>
<td>$-.024$</td>
<td>.014</td>
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<tr>
<td>Parental After-School Stress $\times$ Child Gender</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
<td>$-.308^{**}$</td>
<td>$-.129$</td>
<td>.103</td>
</tr>
</tbody>
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*Note: $N = 243$. For parent and target child gender, $1 = \text{male}, 2 = \text{female}$.  
$p < .05$. **$p < .01$. ***$p < .001$.  

![FIGURE 1. MODERATING EFFECT OF TARGET CHILD GENDER ON THE RELATIONSHIP BETWEEN PARENTAL AFTER-SCHOOL STRESS AND PSYCHOLOGICAL WELL-BEING](image-url)
parent gender. As predicted, fathers’ parental after-school stress scores did not differ significantly from mothers’ scores, \( t(236) = -1.63, \text{ns} \). To test the moderation effect, we added the interaction term Parental After-School Stress × Parent Gender to the main effects model described above. The increment to \( R^2 \) was not significant, \( F_{\text{change}}(1, 219) = 0.05, \text{ns} \), indicating that the relationship between parental after-school stress and psychological well-being is equally strong for fathers and mothers.

CONCLUSION

The main finding of this study of 243 employed parents is that, as predicted, parental after-school stress was associated with low psychological well-being, even after controlling for a number of covariates. This relationship did not vary by child age but did vary by child gender, with a stronger link between after-school stress and well-being for parents of daughters than for parents of sons. Although we can only speculate about what produces this effect, it is possible that daughters are viewed as more vulnerable than sons to victimization and as suffering more severe consequences (e.g., pregnancy) because of risky behaviors they may engage in when there are problems with their after-school arrangements. When parents experience stress related to their daughters’ after-school activities, it may therefore be more consequential for parent well-being than is stress related to sons’ after-school activities. It is noteworthy that among parents, there was no significant gender difference in the level of parental after-school stress, nor did the relationship between parental after-school stress and psychological well-being differ by parent gender. Because of the small number of fathers in the sample, however, conclusions about the effect of parent gender should be regarded as tentative.

This study, like all studies, has its limitations. One is the reliance on cross-sectional, correlational data, making it impossible to disentangle the question of whether parental after-school stress affects well-being or whether well-being influences parental after-school stress. In addition, we relied on self-report data to assess both the predictor and the outcome. Thus, the data are vulnerable to common-method variance bias. In an attempt to control for this bias, we included negative affectivity as a covariate. In this way, we control for the dispositional tendency to experience the world negatively, which could bias both the estimation of the predictor and the estimation of the outcome, thereby increasing the likelihood of spurious findings. Controlling for negative affectivity increases our confidence that the findings are not simply spurious. The findings remain vulnerable to other forms of bias associated with self-reported data, however.

Another limitation is that the sample has relatively high income, which might limit the generalizability of the findings. In post hoc analyses, we found that the relationship between parental after-school stress and well-being was not moderated by household income. Given the significant negative raw correlation between household income and parental after-school stress, however, and given the relatively small number of low-income parents in our sample, the finding that income did not moderate the relationship between parental after-school stress and psychological well-being should be regarded as tentative.

An additional limitation is that the data were gathered from employees in one business sector with its own, perhaps unique, work force. Although participants represented a wide range of organizational levels, we have no way of knowing how representative they are of other employed parents. At this time, therefore, it is not possible to know how widely generalizable the findings are.

Also, this study looked only at employed parents, most of whom were employed full time. Full-time employed parents may experience higher parental after-school stress than their part-time counterparts. Indeed, 7.9% of the parents in our sample were employed part time, and post hoc analyses indicated a trend for part-time employed parents to report lower parental after-school stress, \( t(25.3) = -2.05, p = .051 \). Thus, our sample slightly understates the level of parental after-school stress among full-time employed parents of school-age children. The relationship between parental after-school stress and well-being, however, did not differ by number of hours worked.

Future research in this area should include nonemployed parents, some of whom may nevertheless experience high parental after-school stress. Even if parents are not employed and are, therefore, potentially available to provide supervision after school, it is unlikely that most children, especially in the tween and teen years, will be content to spend all of their after-school hours with their parents. Given the paucity of
supervised after-school options, at-home parents may also be at risk for parental after-school stress.

Finally, we did not include as outcomes frequency of stress-related physical health symptoms. It may be that parental after-school stress is related to such physical health symptoms as fatigue and insomnia. In a suggestive survey of a nonrepresentative sample, Galinsky and Hughes (1987) found that child-care breakdowns (a component of our measure of parental after-school stress) was significantly associated with such stress-related symptoms as shortness of breath, pounding or racing heart, back and neck pain, overeating, drinking more alcohol, smoking more, and taking more tranquilizers. Future research should explore these associations in representative samples.

These limitations notwithstanding, our results suggest that parental after-school stress is an important, albeit previously unstudied, stressor that affects the psychological well-being of a large segment of the workforce (i.e., employed parents of school-age children) and that warrants further research.

**NOTE**

Data for this analysis were gathered under a grant from the Alfred P. Sloan Foundation to the first author.

**REFERENCES**


**APPENDIX**

Parental After-School Stress (PASS) Items

During your workday, on average:

1. How difficult is it for you to contact your target school-aged child after school while you are still at work?

2. How difficult is it for your target school-aged child to contact you after school while you are still at work?

3. How much do you worry about your target school-aged child’s travel to and from (his/her) after-school arrangements?

4. How much do you worry about your target school-aged child’s safety getting to and from (his/her) after-school arrangements?

5. How much do you worry about your target school-aged child’s overall safety during the after-school hours?

6. How much do you worry that your target school-aged child’s after-school arrangements will fall through?

7. How much do you worry that your target school-aged child might get into trouble during the after-school hours?

8. How much do you worry about whether your target school-aged child is spending (his/her) after-school time productively?

9. How much do you worry about whether your target school-aged child is unhappy with (his/her) after-school arrangements?

10. How much do you worry that your target school-aged child’s after-school arrangements aren’t meeting (his/her) needs?

*Note:* Response scale ranged from 1 (not at all) to 4 (extremely).