Parents’ Job Insecurity Affects Children’s Academic Performance Through Cognitive Difficulties

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The authors developed and tested a model in which children who perceive their parents to be insecure about their jobs are distracted cognitively, which in turn affects their academic performance negatively. Participants were 102 female and 18 male undergraduates (mean age = 18 years), their fathers (mean age = 49 years), and their mothers (mean age = 47 years). Students completed questionnaires measuring perceived parental job insecurity, identification with parents, and cognitive difficulties; 3 months later, they also reported their midyear grades. Fathers and mothers each completed questionnaires assessing their job insecurity. Support for the model was obtained using LISREL 8, and as predicted, children’s identification with their mothers and fathers moderated the relationship between their perceptions of their mothers’ and fathers’ job insecurity and their own cognitive difficulties.

To increase organizational efficiency and remain competitive in a global environment, North American companies have been cutting their operating expenses over the last 15 years (Cascio, 1993; Downs, 1995). Perhaps the most prevalent cost reduction strategy has been the use of massive layoffs (Estok, 1996). Given technological advances, stiff competition from foreign companies, and pressure from shareholders to increase profits (Downs, 1995; Uchitelle & Kleinfield, 1996), the tendency toward downsizing may well continue for years to come.

Whether downsizings achieve their intended goal is currently under debate (Cascio, 1993). What is of interest here is that downsizings have had unintended negative effects on organizations (De Meuse, Vanderheiden, & Bergmann, 1994) and employees (Dougherty & Bowman, 1995). The most prevalent of these negative effects is the chronic and pervasive feelings of job insecurity (see Uchitelle & Kleinfield, 1996), which may leave affected employees anxious, angry, and demoralized. Of more specific interest for this study is that, consistent with findings showing that employees’ work experiences affect their spouses/partners and children (cf. Barling, 1990), employees’ job insecurity also exerts negative effects on their family members (Uchitelle & Kleinfield, 1996).

In this study, we were interested in the effects of children’s perceptions of parents’ job insecurity. Given that parents are the primary source of information about the world of work for their children, they play a central role in children’s socialization about work (Piotrowski & Stark, 1987). Consistent with social learning theory (Bandura, 1977), the transmission of this information takes place in one of two ways, or both: Parents may verbally express to their children how they feel about their work, or they may communicate their feelings indirectly through mood or changes in behavior (Barling, 1990; Piotrowski & Stark, 1987). As a result, children develop clear perceptions of the world of work. From as young as 5 years of age, children understand such concepts as pay, labor disputes, unemployment, and welfare (Pautler & Lewko, 1985). Children between the ages of 10 and 17 years can describe accurately their parents’ work conditions; they are knowledgeable about the concepts of job loss, physical work environments, and hard work (Piotrowski & Stark, 1987). These perceptions of the world of work are especially relevant at this point given that the adolescent and early adult years are characterized by high susceptibility to attitude change, after which attitudes tend to stabilize. Consequently, any attitudes toward the world of work developed during this period are likely to persist well into adulthood (Krosnick & Alwin, 1989; Mortimer, Lorence, & Kumka, 1986).

Barling, Dupré, and Hepburn (1998) investigated whether...
perceptions of parents’ job insecurity affected children’s work attitudes and beliefs. They showed that children are accurate observers of their parents’ job insecurity. Moreover, believing that their fathers were insecure in their jobs affected children’s own work beliefs and work attitudes. Also, children’s identification with their fathers functioned as a moderator, such that the relationship between perceptions of their fathers’ job insecurity and their own work beliefs were significantly greater under conditions of higher (rather than lower) identification with fathers. However, similar relationships did not emerge for mothers.

It is also possible that perceptions of parents’ job insecurity affect other variables, and one possible outcome is children’s school performance. Focusing on school performance may be especially important. Krahn (1991), for example, noted that high school dropouts are most likely to find themselves unemployed, suggesting that any link between perceptions of parents’ job insecurity and children’s school performance would be of considerable social relevance. In a related study, Barling and Mendelson (1997) showed that perceptions of parents’ job insecurity were indirectly and negatively linked with undergraduate students’ grades through the mediating effects of beliefs in an unjust world and negative mood.

In this study, we suggest that the relationship between perceptions of parents’ job insecurity and school performance is mediated by cognitive difficulties. Exposure to overarousing stressors results in cognitive fatigue (Mowidlo, Packard, & Manning, 1986) and cognitive distraction (Fryer & Warr, 1984). We suggest that watching one’s parents experiencing job insecurity would be experienced as stressful, and would elicit feelings of uncertainty and powerlessness in children. As such, these stressors would be overarousing for children, and the energy consumed would be distracting and would detract from that required for optimal performance on different tasks, such as school performance. There is considerable empirical support for this phenomenon. First, parents’ work-related stressors result in cognitive distraction, which affects parenting performance (Barling, MacEwen, & Nolte, 1993; MacEwen & Barling, 1991), marital functioning (Barling & MacEwen, 1992), and job-related performance (Barling & MacEwen, 1991). Second, and of greater relevance to the present study, university students exposed to sexual harassment suffer cognitive distraction, which in turn leads to lower grades (Barling et al., 1996). Thus, we predicted that children’s perceptions of parents’ job insecurity would affect their school performance through the mediating effects of cognitive difficulties (see Figure 1).

Last, as in previous research (Barling et al., 1998), we anticipated that identification with one’s parents would exacerbate any effects of perceiving that they are insecure in their jobs. Specifically, the relationship between children’s perceptions of parental job insecurity and cognitive difficulties would be greatest if the children identified with their parents. There is some empirical support for the role of parental identification in exacerbating such stressor–outcome relationships (e.g., Barling et al., 1998; Kelloway, Barling, & Agar, 1996; Steele & Barling, 1996).

Method

Participants

Two hundred nineteen undergraduate student volunteers participated in the study, for which they received course credit. Both female and male students participated in the study. To enhance the likelihood that participants would still be influenced by their parents, they had to be 21 years of age or younger. In addition, to strengthen the possibility that parents might experience job insecurity, only parents employed part-time or full-time were included. Self-employed individuals were excluded. All participants completed a questionnaire and were then asked for permission to send questionnaires home to both of their parents. All but 2 students agreed. Each of those who agreed wrote a short note to both their parents asking them to participate in the study. In total, 434 questionnaires were sent out to the students’ mothers and fathers and 333 were returned (response rate = 77%). Three months later, students were asked to provide their previous semester’s grades.

A complete data set consisted of a student questionnaire, questionnaires from two employed parents, and the student’s grades. Once all the data were collected, there were complete data sets for 120 (18 males, 102 females) of the 220 original student volunteers (55%), and their mean age was 18.81 years (SD = 0.52; range = 17–21 years). We acknowledge that our use of the word children to describe our respondents may implicitly suggest that they are younger than they really are. Although it would be more appropriate from an age perspective to use the term adolescents or young adults to describe them, we choose the word children throughout to denote the relationship shared with the mothers and fathers in this study.

Their fathers’ mean age was 49.03 years (SD = 3.81; range = 39–59 years), and their mothers’ mean age was 47.17 years (SD = 3.72; range = 38–55 years). Seventy-five percent of the fathers and 82% of the mothers had attained some post-high school education. Ninety-seven percent of the fathers and 71% of the mothers were employed full-time. Seven percent of the fathers and 8% of the mothers had been laid off at least once in the previous 5 years. Thirty-two percent of the fathers and 15% of the mothers had lost their jobs at least once within the last 20 years.

Figure 1. Proposed model linking parents’ job insecurity and children’s grades.
Materials

Students’ perceptions of parental job insecurity were assessed using Barling et al.’s (1998) revision of Kuhnert and Vance’s (1992) 18-item Job Insecurity Questionnaire. Items were originally designed to assess one’s own job insecurity, and were reworded to reflect students’ perceptions of their parents’ job insecurity (e.g., “If my mother/father wanted to, she/he could easily find a comparable job elsewhere”; “My mother/father can be sure of his/her present job as long as he/she does good work”; both items reverse-coded). Students completed the questionnaire separately for each parent. Responses were on a 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree) and were coded so that high scores indicated higher perceptions of parents’ job insecurity. Predictive validity of the scale can be assumed from studies showing significant correlations with expected outcomes both for children’s perceptions of their parents’ job insecurity (e.g., Barling et al., 1998), as well as self-reports of job insecurity (Kuhnert & Vance, 1992; Stewart & Barling, 1996).

Cognitive difficulties were measured using the 12-item scale developed by Fryer and Warr (1984). Examples of items from the questionnaire, all of which ask respondents whether they have recently been experiencing the behaviors indicated, include “Been taking longer over things you do?”, “Been able to concentrate on whatever you are doing?” (reverse-coded), and “Found remembering things difficult?” Responses to these questions were on a 7-point Likert-type scale (1 = never to 7 = always). High scores reflect greater cognitive difficulties.

Identification with parents was assessed using MacEwen’s (1991) 4-item scale, which was completed separately for each parent. One of the items was replaced with a question devised by Barling et al. (1998) that asked the degree to which the participants share common beliefs and attitudes (rather than physical characteristics) with their mother/father (‘My personality is like my mother/father’s’, “My lifestyle is like my mother/father’s,” “I share common beliefs with my mother/father,” and “In general, I am like my mother/father”). All responses were on a 7-point Likert-type scale (1 = not at all true to 7 = very true). High scores reflect greater parental identification.

Grades for all courses were provided by the students themselves at the beginning of the next semester. We averaged the grades to ensure a more reliable index (Horowitz, Inouye, & Siegelman, 1979).

Parents’ job insecurity was assessed using Kuhnert and Vance’s (1992) 18-item Job Insecurity Questionnaire (e.g., “I am not really sure how long my present job will last”). Each item was rated on a 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree). High scores indicate greater feelings of job insecurity.

Results

Descriptive statistics for all measures in this study and intercorrelations of all variables are included in Table 1. Mothers and fathers exhibited no differences in reported levels of job insecurity, t(119) = −1.69, ns, and students perceived no difference in their mothers’ and fathers’ levels of job insecurity, t(119) = −0.36, ns.

Test of Model Fit

The proposed model was tested using structural equation modeling with maximum likelihood estimation in LISREL 8 (Jöreskog & Sörbom, 1993). The covariance matrix was used in the analysis. We treated the study variables as single indicators of latent variables in an attempt to account for measurement error. We fixed the unique variance of these variables at the product of (1 − reliability of the measure) and the variance, and the common factor loading was equal to one. We assumed a conservative reliability of .80 for the measure of grades. Students’ perceptions of their mothers’ and fathers’ job insecurity were significantly correlated, r(119) = .46, p < .001, and we allowed these two single indicator variables to covary. This is consistent with our previous research (Barling et al., 1998).

The proposed model offered a good fit to the data: χ²(8, N = 120) = 7.86, ns, goodness of fit index (GFI) = .98, adjusted goodness of fit index (AGFI) = .95. Two fit indices comparing the fit to the data with that of a null model were also used: normed fit index (NFI) = .95, and

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<th>Variable</th>
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<tbody>
<tr>
<td>1. Fathers’ self-reported job insecurity*</td>
<td>2.67</td>
<td>0.62</td>
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<td>2. Mothers’ self-reported job insecurity*</td>
<td>2.79</td>
<td>0.61</td>
<td>.24*</td>
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<td>3. Children’s perceptions of fathers’ job insecurity*</td>
<td>2.39</td>
<td>0.69</td>
<td>.59**</td>
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<td>4. Children’s perceptions of mothers’ job insecurity*</td>
<td>2.41</td>
<td>0.57</td>
<td>.26**</td>
<td>.60*</td>
<td>.46**</td>
<td>.82</td>
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<td>5. Cognitive difficulties*</td>
<td>3.45</td>
<td>0.80</td>
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<td>6. Average grades</td>
<td>67.60</td>
<td>9.99</td>
<td>−1.13</td>
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<td>−.16</td>
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<td>7. Identification with fatherb</td>
<td>4.72</td>
<td>1.17</td>
<td>−.08</td>
<td>−.02</td>
<td>−1.9*</td>
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<td>−.12</td>
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<tr>
<td>8. Identification with motherb</td>
<td>5.04</td>
<td>1.12</td>
<td>−.03</td>
<td>−.03</td>
<td>−.05</td>
<td>−.18*</td>
<td>−.08</td>
<td>−1.9*</td>
<td>.03</td>
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Note. Internal consistency is reported on the diagonal in italics.  
* p < .05. ** p < .01. 

* Measured on a 5-point scale.  
b Measured on a 7-point scale.
comparative fit index ($CFI = 1.00$). Because of the size of our sample, the CFI may be a superior indicator of fit than the NFI. Bentler (1990) showed that the CFI did not share the NFI's tendency to underestimate model fit in smaller samples.

The completely standardized solution for this model is presented in Figure 2. Students accurately perceived their parents' job insecurity ($\beta = .66$, $p < .01$ for fathers; $\beta = .71$, $p < .01$ for mothers), but only the perceptions of their fathers' job insecurity predicted cognitive difficulties ($\beta = .43$, $p < .01$ for fathers, $\beta = -.12$, ns for mothers). Cognitive difficulties negatively and significantly predicted grades ($\beta = -.25$, $p < .05$).

**Test of Moderator Effects**

We initially computed an omnibus multiple regression analysis to assess whether children's identification with their mothers and/or fathers would moderate the relationships between perceptions of parents' job insecurity and cognitive difficulties. To do so, we entered the children's perceptions of mothers' and fathers' job insecurity as well as their identification with their mothers and fathers in the first step. In the second step, we entered the two interaction terms (namely, the product of perceptions of mother's insecurity and identification with mother, and the product of perceptions of father's insecurity and identification with father). If the change in $R^2$ between the first and second steps is significant, students' identification with fathers/mothers moderates the relationship between perceptions of parents' job insecurity and cognitive difficulties. Together, the two interaction terms accounted for 7.3% of the variance, $\Delta F(2, 114) = 5.09$, $p < .01$. More important, both the interaction associated with the mothers, $t(116) = 2.50$, $p < .05$, and the fathers, $t(116) = 2.30$, $p < .05$, were significant in the final regression. Consequently, each interaction has merit, and we analyzed the two interactions separately (one analysis for mothers, one for fathers) using the same series of steps, that is, the first step containing predictor variables and the second the interaction term. Identification with fathers moderated the relationship between perceptions of fathers' job insecurity and cognitive difficulties, $\Delta F(1, 116) = 4.16$, $p < .05$; (3% of the variance accounted for). Identification with mothers moderated the relationship between perceptions of mothers' job insecurity and cognitive difficulties, $\Delta F(1, 116) = 4.79$, $p < .05$ (4% of the variance accounted for). Prior to testing for the separate interaction effects, we followed Aiken and West's (1991) procedure and centered the predictor variables around zero (i.e., the mean of each variable was subtracted from every score), which allowed us to know the strength of the relationship at the mean of parental identification (i.e., $M = 0$). The relationship between the perceptions of fathers' and mothers' job insecurity and cognitive difficulties was then calculated for parental identification at 1 SD above and 1 SD below the mean to determine if higher identification with fathers or mothers resulted in better predictions of cognitive difficulties. Figure 3 contains the simple regression lines and simple regression equations resulting from these calculations for fathers and provides unstandardized coefficients for the simple slopes and intercepts. Cognitive difficulties were strongly and positively related to perceived fathers' job insecurity when paternal identification was high.

![Figure 2](image-url)  
*Figure 2.* Results of LISREL 8 analysis linking parents' job insecurity and children's grades. *$p < .05$. **$p < .01$.*
(β = .49, p < .001). This relationship was also significant and positive at the mean (β = .31, p < .001), but it was not significant when identification was low, (β = .14, ns). Figure 4 contains the simple regression lines and equations for the analysis with mothers. Cognitive difficulties were significantly and positively related to perceptions of mothers’ job insecurity when identification was high, (β = .27, p < .05). However, this relationship was not significant at the mean or at 1 SD below the mean (i.e., when identification with the mother was low (βs = .08, and -.11, respectively, ns).

Figure 3. Children’s identification with fathers moderates the relationship between perceptions of fathers’ job insecurity and children’s cognitive difficulties.

Discussion

The aim of this study was to examine whether and how parental job insecurity affects children’s academic performance. We hypothesized that children accurately perceive their parents’ level of job insecurity, and that because of the overarousal involved when children see their parents to be insecure in their jobs, cognitive difficulties ensue. In turn, we posited that cognitive difficulties would result in poor academic performance. This model received strong support from the data, and this both refines and replicates previous research. The fact that children are accurate observers of their parents’ subjective work experiences (Barling, Kellogway, & Bremermann, 1991; Kelloway & Watts, 1994; Piotrkowski & Stark, 1987), including their parents’ job insecurity, replicates previous findings (Barling et al., 1998; Barling & Mendelson, 1997). In addition, as with previous research that showed a gender-specific effect, our findings also show that perceiving one’s father as insecure in his job affects children’s school performance, but that the relationship between perceptions of mothers’ job insecurity only predicts cognitive difficulties when identification with the mother is high.

Several aspects of these findings deserve comment. First, our results may underestimate the real strength of this phenomenon. Our study focused on university students, most of whom, we assume, had no longer been living at home for several months. Had they been living with their parents on a full-time basis, and had more opportunity to observe and listen to their parents, the effects of their parents’ job insecurity might have been even stronger. Second, perceiving one’s parents as insecure in their jobs is
especially critical for adolescents for two reasons. First, our results and those of Barling and Mendelson (1997) demonstrated negative, indirect effects of perceived parental job insecurity on grades, which may have critical implications for the future development of teenagers. Second, perceptions of parental job insecurity also influence teenagers’ work beliefs at a period during which adolescents’ attitudes are most susceptible to change (Krosnick & Alwin, 1989).

It is noteworthy that our results differ from those of Barling et al. (1998) in one important respect. Barling et al. (1998) found that identification with mothers did not moderate the relationship between perceptions of mothers’ insecurity and children’s work beliefs. In contrast, we found that the relationship between perceptions of mothers’ job insecurity and children’s cognitive difficulties was moderated by children’s maternal identification. Other studies have also shown that identification with mothers moderates the relationship between children’s perceptions of mothers’ behaviors and children’s attitudes and behaviors (Kelloway, Barling, & Agar, 1996; Steele & Barling, 1996). One possible reason for this is the different gender ratios in the two studies. Perhaps a more plausible explanation for the different findings of Barling et al. (1998) and those of the current study, however, is that the effects of maternal identification depend on the nature of the outcome. When children are cognitively aroused as a function of watching their mothers’ experience of job insecurity, greater identification with the mother will result in greater over arousal and hence more cognitive difficulties. This finding and explanation further limit the plausibility that fathers’ job insecurity exerts greater effects on teenagers because of fathers’ importance in terms of the breadwinning role, relative to the mothers’ role.

Several strengths in this study warrant attention. First, we avoid exclusive reliance on self-report data by using parents’ self-reports of their own job insecurity. Inferences from such research would be enhanced further if school records were used to ascertain grade scores. Second, the possibility of reverse causality is minimized somewhat, as data on job insecurity and cognitive difficulties were obtained before the measure of grades. However, because grade scores are relatively stable over time, causal inferences are not appropriate and could be addressed to some extent in studies (a) using greater time lags between collection of self-report data and grades, and (b) that control for grades at Time 1. This is particularly important given that poor grades may well cause cognitive difficulties or depression, or this relationship could be reciprocal. Nonetheless, as noted elsewhere (Barling & Mendelson, 1997), the methodology used in this study, in which both parents must respond if the data are to be included, limited the extent to which single parents would be included and overestimated the number of dual-income families. As such, until replicated with different samples, our findings should not necessarily be generalized beyond such groups.

Several avenues for further research can be identified. First, because we know from the current findings, as well as from those of a separate sample (Barling & Mendelson, 1997), that both cognitive and social factors mediate the effects of perceptions of parents’ job insecurity on grades, future research might investigate these diverse mediators in a single, omnibus model. At the same time, other predictor variables that are meaningfully related to the experience of parents’ job insecurity, such as violated psychological contracts and perceptions of injustice, might be included. Potential influence on children’s own job insecurity (e.g., whether they are employed part-time, and if so the number of hours worked per week, their own job insecurity, and the quality of their employment; see Barling & Kelloway, 1999) should also be investigated to understand how changing employment relationships affect family functioning (Barling & Sorensen, 1997). Second, in single-parent families, it is likely that children learn about parental job insecurity from one parent only. Thus, future research should be sensitive to the need not to bias the sample with an over inclusion of two-parent, dual-income families. Given that socioeconomic status may be confounded with single-versus two-parent families, future research might also assess the possible role of socioeconomic status. Third, the effects of watching one’s parent experiencing job insecurity (and feelings of injustice, for example) may be much greater for children exposed to their parents on a more regular basis. Fourth, whether job security is a realistic goal in most organizations is questionable; instead, employment security may be more so (i.e., employees are guaranteed a job in the organization, but not necessarily their current job). Future research might use the Kuhnert and Vance (1992) scale to assess whether job and employment security exert different effects.

Last, future research may benefit from attention to the construct validity of the cognitive difficulties scale (Fryer & Warr, 1984). Many of the items in this scale were derived from the General Health Questionnaire, raising questions as to whether cognitive difficulties or depression is being measured. Also, some of the items may measure the outcome of cognitive distraction and difficulties (e.g., “Been taking longer over things you do?” and “Found remembering things difficult?”). These two issues, together with prior findings showing that experienced stress results in depression (e.g., Grant & Barling, 1994), suggest that future research should clarify the nature of the mediating variable, paying particular attention to the possible role of depression.

In conclusion, the results of this study enhance our understanding of work and family in an era of changing employment relations in general (Barling & Sorensen,
1997), and of parents’ job insecurity in particular. Our findings show parents’ job insecurity exerts negative consequences on children’s cognitive abilities and, in turn, their academic performance. In addition, the relationship between perceptions of parents’ job insecurity and cognitive difficulties is exacerbated when children identify strongly with the affected parent. Together with other studies, our findings suggest that we need to take a much broader look at strategies and policies that may enhance job insecurity, and at programs and interventions that might reduce job insecurity.

References


Pautler, K. J., & Lewko, J. H. (1985). Student opinion of work in


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