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Children's Emotional Distress, Family Emotional Labor, and Mothers' Earnings: Evidence from China

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Abstract

As children's mental health risks increase, families are assuming growing responsibilities for emotional support. This paper examines whether children's emotional distress affects mothers' earnings through family emotional labor. Using panel data from the 2014, 2016, 2018, and 2020 waves of the China Family Panel Studies (CFPS), we identify whether children's emotional support needs are primarily directed toward parents based on adolescents' reports of whom they usually turn to when distressed, and we use this information to characterize parents' exposure to child-related emotional labor within the household. The results show that when adolescents usually turn to their parents when distressed, mothers' earnings decline significantly, whereas fathers' earnings do not. These findings suggests that the family emotional labor triggered by children's emotional distress is not evenly shared between parents, but is disproportionately borne by mothers and translated into earnings losses. Mechanism analyses indicate that this effect operates mainly through two channels: reduced maternal working hours and increased maternal housework hours. Heterogeneity analyses further show that the negative effect is stronger among mothers with lower emotional intelligence, a more negative emotional disposition, lower educational attainment, unstable employment, and lower occupational status. Overall, the paper shows that family emotional labor induced by children's emotional distress is an important yet largely overlooked source of the motherhood penalty. More broadly, it reveals how the gendered allocation of emotional caregiving responsibilities within the household spills over into labor market outcomes and contribute to broader patterns of gender inequality.

Keywords Family emotional labor · Motherhood penalty · Mothers' earnings · Gender inequality · China

JEL Classification J13 · J16 · J22 · D13

1 Introduction

Adolescent mental health problems have become increasingly salient in recent years. The *Global Risks Report 2022,* published by the World Economic Forum, identified mental health risks as one of the top global social risks. In China, the prevalence of depression among young people is substantial: reported rates reach 11.4% among upper-elementary students and 26.6% among junior high school students[1]. As children's mental health risks become more widespread, families are expected to provide not only traditional forms of care such as daily housework and physical care, but also increasing amounts of emotional support. Parents are therefore required not only to meet children's basic needs but also to respond continuously to their emotional fluctuations and psychological distress, which substantially increases the caregiving burden within the household.

This trend has also received an institutional response in China. The *Family Education Promotion Law*, implemented in 2021, explicitly requires guardians of minors to attend to and promote children's psychological development. While this legal framework strengthens parental responsibility in general, it may also increase parents'—and especially mothers'—actual involvement in children's emotional care. Mothers have long been regarded as the "ideal caregivers" in childrearing (Tao & Feng, 2020). When children experience emotional distress, mothers are often treated as the primary targets of emotional disclosure and as key providers of

[1] The "Report on the Development of National Mental Health in China (2019-2020)" shows that the prevalence of depression among primary school students in grades four to six and junior high school students in China is as high as 11.4% and 26.6%, respectively.

emotional support and psychological buffering (Daniels, 1987; Duncombe & Marsden, 1993; Ehrensaft, 1990; Erickson, 2005; Wharton & Erickson, 1993). This invisible yet continuous form of family emotional labor may have far-reaching consequences for mothers' working time, occupational choices, and earnings. Fathers, by contrast, are less likely to be viewed as primary emotional supporters because of persistent role expectations and social norms, and their careers are correspondingly less disrupted by such caregiving responsibilities. Differences in how these responsibilities are allocated may therefore deepen gender inequalities in earnings within the household.

Gender inequality in earnings has long been a central concern in labor market research and public policy. Existing studies have typically explained gender earnings gaps in terms of differences in human capital, labor market discrimination, and career interruptions caused by childbirth (Deng & Ding, 2012; Li & Li, 2008; Yang, 2019). Yet even as women's educational attainment has risen and gender egalitarian attitudes have strengthened, the gender earnings gap in China has not narrowed appreciably and may even have widened in recent years[2]. This suggests that, beyond these conventional explanations, additional micro-level mechanisms may be impeding the reduction of gender pay disparities. Research on the motherhood penalty has documented the labor market disadvantages women face due to childcare responsibilities, but much less attention has been paid to the emotional dimensions of parenting. In the context of worsening child mental health problems, child-related emotional labor within the household may represent a new and still underexplored source of earnings penalties for mothers.

Against this background, this paper asks two related questions. First, when children experience emotional distress, is the resulting family emotional labor disproportionately borne by mothers in a systematic and gendered way? Second, does this unequal allocation of emotional caregiving responsibilities have significant consequences for mothers' labor market returns? To address these questions, we use nationally representative household panel data to identify whether children's emotional support needs are primarily directed toward parents and, on this basis, examine the differential effects of child-related emotional labor on mothers' and fathers' earnings. We further investigate the mechanisms through which these effects operate and assess whether they vary across different groups of mothers. By doing so, the paper seeks to show how gendered divisions of labor within the household, in the course of safeguarding children's mental well-being, may be translated into earnings inequality in the labor market.

This paper makes three main contributions. First, it brings the concept of emotional labor—traditionally used to analyze interactions in the workplace—into the context of family childrearing, and shows how family emotional labor induced by children's emotional distress can be transformed, through gendered intra-household allocation, into mothers' earnings losses. In this way, the paper extends existing explanations of the motherhood penalty and gender earnings inequality. Second, using nationally representative panel data, this paper provides micro-level evidence on the labor market consequences of family emotional labor. While prior studies have focused primarily on parent-child relationships, mental health, and family well-being, this paper demonstrates that family emotional labor also spills over into labor market outcomes and generates observable earnings consequences. Third, the paper shows that children's mental health problems are not confined to the private sphere of family life; rather, through the gendered allocation of family emotional labor, they spill over into labor market outcomes. It therefore offers new evidence on how caregiving responsibilities within households are linked to gender inequality and income differentiation. Although the empirical setting is China, China should be understood here primarily as an empirical site for identifying this mechanism rather than as the boundary of

[2] For example, the "China Gender Pay Gap Report" released by BOSS Zhipin shows that in 2016, the average monthly salary of Chinese women was about 77% of that of men, and by 2020, that proportion had dropped to 75.9%.

the paper's conclusions. The core question—how children's emotional support needs are translated, through gendered family division of labor, into mothers' labor market disadvantages—has broader significance for understanding how children's mental health risks, invisible family labor, and gender inequality in labor market outcomes are connected.

The remainder of the paper is organized as follows. Section 2 presents the theoretical framework and develops the hypotheses. Section 3 describes the empirical strategy, data, and variables. Section 4 reports the empirical results. Section 5 discusses the findings. Section 6 concludes and outlines the paper's contributions.

2 Theoretical Framework and Research Hypotheses

2.1 From Workplace Theory to Childrearing Practice: The Family Turn in Emotional Labor

The concept of emotional labor was originally introduced by Hochschild (1983) to describe the labor involved in managing one's own emotions and the emotions of others in order to meet occupational role expectations. As the service economy expanded, the concept spread rapidly and was first applied mainly to frontline service workers; later research extended it to employees and managers across a wide range of organizational settings (Ashforth & Humphrey, 1993; Grandey et al., 2007). Despite this expansion, both theoretical and empirical research on emotional labor has remained largely centered on the workplace, with far less attention devoted to how emotional labor operates within families.

Yet emotional labor is also pervasive in family relationships, especially in everyday interactions between parents and children. During much of the twentieth century, emotional management within the family was often treated as a spontaneous expression of parental love rather than as a form of labor (Hochschild, 1983). As the women's movement challenged traditional assumptions about parental roles, Daniels (1987) argued that these everyday practices of emotional management should be understood as work, because the recognition of an activity as work itself confers moral legitimacy and social dignity on it and encourages an appreciation of the effort and skills involved in performing it. Along similar lines, Coltrane (2000) argued that the exclusion of emotional management from the domain of family labor constitutes a major limitation of family research.

Within parent–child relationships, the core content of family emotional labor includes recognizing children's emotional states, regulating emotional interactions, expressing emotions appropriately, and providing supportive responses. In the course of childrearing, parents are often required to listen, comfort, encourage, and empathize with their children in order to help them cope with negative emotions and recover from frustration. Schrodt and O'Mara (2019) show that parents may suppress inappropriate anger and frustration and strive to display patience and care for their children, even when children are difficult or demanding. These practices are, in essence, forms of child-related emotional labor: a largely invisible form of labor that involves sustained emotional investment in parent–child relationships. Such labor is crucial for maintaining children's psychological well-being and healthy family relationships, yet it often remains underrecognized by both family members and society at large.

2.2 The Gendered Division of Family Emotional Labor

Emotional caregiving and emotion management within the family are deeply influenced by gender norms and family role expectations, and exhibit a clear gendered division of labor (Hochschild, 2012; Erickson, 2005). For a long time, patriarchal culture and gender ideology have constructed women as family-centered, self-sacrificing, and naturally suited to caregiving. Even in contemporary societies, this division of labor has not fundamentally disappeared. Survey evidence from China shows that in dual-earner families, mothers still spend

substantially more time on household tasks than fathers, averaging 154 minutes per day—nearly twice as much as fathers[3]. This pattern is especially pronounced in childrearing: in 76.1% of families, mothers are primarily responsible for children's daily care; in 67.5%, they are mainly responsible for supervising homework; and in 63.6%, they are primarily responsible for taking children to and from school or other activities[4]. Beyond these routine tasks, mothers also bear the primary responsibility for emotional caregiving: roughly 70% of mothers report that they often or always notice and respond promptly to their children's emotional needs and proactively express affection through hugging, kissing, or physical touch[5]. These patterns are consistent with prior research showing that, relative to fathers, child-related emotional management is more likely to be carried out by mothers within the household (Ehrensaft, 1990; Fingerman et al., 2020; Hochschild, 2012).

A deeper reason for this division of labor is that the gender norm of "fathers as breadwinners and mothers as caregivers" continues to exert a powerful influence on family decision-making. Existing studies suggest that masculinity norms reinforce expectations that fathers should prioritize economic provision and paid work, thereby weakening normative expectations for their involvement in day-to-day caregiving and emotional support. At the same time, cultural ideals of "good parenting" continue to define attentive care and emotional responsiveness largely as core components of motherhood (Perälä-Littunen, 2007; Petts et al., 2018). In this context, women are assigned primary responsibility for responding continuously to children's emotional needs and consequently undertake a larger share of emotional labor within the household. Emotional labor thus becomes a structurally imposed caregiving responsibility placed on women rather than a matter of individual preference.

It is important to emphasize that emotional labor within the family is not simply the effortless expression of love. Like physical labor and cognitive labor, it requires time, energy, and skill (Erickson, 2005; Hackman, 2023). Daniels (1987) also argues that skills related to emotional management must be learned and practiced. To perform emotional caregiving effectively, women often engage in the repeated regulation and expression of emotions in everyday life, and the cultivation of such emotional skills itself consumes time and energy. Accordingly, when children experience emotional distress, the time and effort mothers invest in emotional caregiving are necessarily crowded out from other domains, with paid work being among the first areas affected.

2.3 Children's Emotional Distress and Mothers' Earnings Loss

Building on the preceding discussion, the paper proposes the following theoretical chain: children's emotional distress → rising demand for emotional support → a gendered concentration of caregiving responsibility on mothers within the household → crowding out of work-related resources → earnings losses.

More specifically, when children experience emotional distress, the need for disclosure, comfort, and emotional responsiveness increases accordingly. Under the combined influence of traditional gender roles and family structure, mothers are more likely to become the primary recipients of children's emotional disclosure and requests for comfort, and to assume the main responsibility for emotional support within the household. Taking on this additional emotional labor requires mothers to devote more time and energy to accompanying children and to recognizing, soothing, and regulating their emotions.

Because individual time and energy are scarce resources, such labor inevitably crowds out mothers' investments in market work and career development, directly eroding their work-related resources. Importantly, however, these labor costs are not evenly shared within the household. Instead, they are disproportionately

[3] The data comes from the Fourth China Women's Social Status Survey.

[4] The data comes from the Fourth China Women's Social Status Survey.

[5] Data source: "A Survey Study on the Role of Parents in the Family Education of Children Aged 0-6 in China (1995-2017)".

shifted onto mothers along existing gendered divisions of labor. In other words, the reallocation of emotional labor is not merely a redistribution of household resources; it also entails an unequal transfer of labor costs across gender. Through this time-allocation mechanism, emotional labor affects mothers' labor supply and earnings.

It is also important to note that this process is not confined to micro-level choices within the household, but unfolds through the interaction between family and workplace institutions. Gender norms define mothers as the primary bearers of family care and emotional support, while workplace role expectations often presume that women have greater family responsibility and greater family availability (Becker, 1985; Webster et al., 2025). Prior research shows that when work and family obligations come into conflict, individuals are not evaluated in a gender-neutral way; rather, evaluations are shaped by gender role expectations (Butler & Skattebo, 2004; Korabik et al., 2008; Ridgeway & Correll, 2004). More specifically, men whose work is affected by family responsibilities are more likely to be seen as deviating from the norm that men should remain work-centered, and may therefore face more negative evaluations and lower expected rewards. By contrast, when women reduce work investments because of family responsibilities, such behavior is more easily interpreted as consistent with prevailing gender expectations (Butler & Skattebo, 2004).

Within this framework, the workplace is not a neutral environment. At the level of evaluation and perception, it often implicitly accepts—or even reinforces—the resource transfers generated by gendered family divisions of labor. On the one hand, the potential penalty imposed on men for family involvement discourages their participation in emotional caregiving within the household. On the other hand, normative expectations surrounding women's family responsibilities make them more likely to absorb emotional support demands arising from children's distress. As a result, gendered divisions of labor within the household and gendered role expectations in the workplace become mutually reinforcing, producing a systematic asymmetry in the allocation of emotional labor between women and men.

At the same time, these external norms are further reinforced through internal psychological mechanisms. Existing research suggests that women are more likely to experience guilt when confronting work–family role conflict and are more inclined to respond to family responsibilities by reducing work investment (Simon, 1995). This internalized mechanism further deepens the crowding-out effect of emotional labor on mothers' labor supply.

Taken together, children's emotional distress affects mothers' labor supply and earnings through a set of interconnected mechanisms involving unequal family division of labor, resource crowding-out, and norm-based reinforcement. Fathers, by contrast, are to a much greater extent able to avoid comparable claims on their time and emotional energy, and their work investments and earnings are therefore relatively stable. Emotional labor, then, should not be understood simply as a matter of individual preference or voluntary choice. Rather, under the joint influence of gender norms and institutional arrangements, it is systematically allocated to women and transformed into a structural constraint with clear economic consequences.

2.4 Hypotheses

Building on the preceding framework of unequal family division of labor, resource crowding-out, and norm-based reinforcement, this paper proposes the following testable hypotheses to examine the structural impact of children's emotional distress on mothers' earnings and the mechanisms through which this impact operates.

Hypothesis 1. Family emotional labor triggered by children's emotional distress significantly reduces mothers' earnings, while having little or no effect on fathers' earnings. Because mothers bear the primary responsibility for emotional support, they face a structural earnings penalty, whereas fathers, who are less

involved, incur more limited costs.

Hypothesis 2. A reduction in mothers' working hours is an important mediating mechanism through which children's emotional distress lowers mothers' earnings. As mothers respond to children's emotional support needs, they reduce time devoted to paid work, which in turn lowers earnings.

Hypothesis 3. An increase in housework hours is another key mechanism. When mothers take on greater emotional caregiving responsibilities, they may also become more deeply involved in the routine organization and maintenance of daily family life, which increases the time they spend on regular housework. As a result, less time and energy remain available for paid work and career development, thereby reducing earnings.

Beyond identifying the overall effect and its mechanisms, this paper also examines heterogeneity in the impact of family emotional labor. More specifically, the costs of emotional labor and the extent to which it disrupts work are unlikely to be evenly distributed across all mothers; instead, they are shaped by mothers' individual traits and labor market resources. The following subgroup hypotheses therefore identify which types of mothers are more vulnerable to the negative consequences of child-related emotional labor.

Hypothesis 4. Mothers with lower emotional intelligence are more likely to experience stronger negative effects. Emotional intelligence generally refers to the ability to perceive, understand, and regulate one's own and others' emotions (Goleman, 1995; Mayer et al., 2011). Existing research also suggests that higher emotional intelligence helps individuals cope more effectively with emotional labor (Mikolajczak et al., 2007). Although these studies focus primarily on emotional labor in occupational settings, the underlying mechanism is also informative for family emotional labor. In responding to children's emotional needs, mothers with higher emotional intelligence are more likely to recognize and regulate emotions effectively and therefore incur lower family emotional-labor costs. By contrast, mothers with lower emotional intelligence may face greater difficulty in identifying, regulating, and expressing emotions, which raises the costs of family emotional labor and intensifies its interference with career development.

Hypothesis 5. Mothers with a more negative emotional disposition are more likely to be adversely affected. Emotional labor generally requires individuals to regulate their emotions and suppress emotional expressions that are inconsistent with situational expectations (Grandey, 2000; Morris & Feldman, 1996). Mothers with a more negative emotional disposition are therefore likely to incur higher emotion-regulation costs when responding to children's emotional needs, which may increase fatigue and stress and undermine work investment and job performance.

Hypothesis 6. Mothers with lower educational attainment are more likely to be negatively affected. More educated women are generally more likely to seek a more equal division of family labor, including greater paternal involvement in emotional caregiving. Highly educated mothers may be more reflective about traditional gender roles and more able to encourage their partners to assume part of the emotional caregiving responsibility, thereby reducing their own burden (Chen, 2018). At the same time, they are more likely to possess stronger labor market skills and to obtain higher-quality jobs with greater flexibility and better family-related support. These advantages can buffer the adverse effects of emotional labor on work. By contrast, mothers with lower educational attainment are more disadvantaged both in negotiating the division of labor within the household and in obtaining support in the labor market, making their earnings more vulnerable to the negative consequences of child-related emotional labor.

Hypothesis 7. Mothers in unstable employment—defined as lacking a formal labor contract or not being fully protected by labor law—are more likely to be adversely affected. Employment instability weakens workers' bargaining power vis-à-vis employers and often forces them to accept overtime, extended hours, or inflexible schedules (Xing, 2021). Under such conditions, women have greater difficulty finding the time and emotional energy needed to respond to children's emotional needs. When they are unable to manage both domains, they

may experience intense guilt and stress (Simon, 1995). These pressures and emotional burdens can reduce work efficiency and productivity, leading to poorer performance and lower earnings. By contrast, mothers in stable employment usually enjoy more predictable working hours and more comprehensive support, such as paid leave, flexible schedules, or child-related benefits, which make it easier to balance family emotional labor and reduce its negative earnings effects.

Hypothesis 8. Mothers in lower-status occupations are more likely to be adversely affected. Compared with mothers in administrative or managerial positions, mothers in lower-level jobs are generally at a disadvantage in terms of work flexibility and support: their schedules are often more rigid, and they have less access to remote work, paid leave, and other forms of family accommodation. As a result, when children need emotional care, these mothers have less room to adjust their work arrangements and are more likely to sacrifice paid work time, thereby harming performance and earnings. In addition, workplace research suggests that higher-status positions are associated with more positive emotional experiences and a greater sense of control, whereas lower-status positions are associated with greater stress and helplessness (Taylor et al., 2022). The psychological burden generated by family emotional labor is therefore more likely to be magnified among mothers in lower-status jobs, making it more difficult for them to cope with both work and family demands and leading to larger earnings losses. By contrast, mothers in higher-status occupations are more likely to have access to organizational resources and benefits that buffer the impact of family demands, making them less vulnerable to the negative effects of child-related emotional labor.

Taken together, these hypotheses describe a multidimensional theoretical picture: under the joint influence of gendered family divisions of labor and institutionalized norms, family emotional labor triggered by children's distress is borne primarily by mothers and affects their labor supply and earnings through time crowding-out, resource diversion, and the accumulation of psychological burdens. At the same time, the magnitude of this effect is conditioned by mothers' individual traits and labor market positions.

3 Empirical Strategy, Data, and Variables

To quantify the effects of child-related emotional labor on parents' earnings and to examine its underlying mechanisms, this section introduces the baseline empirical model and the mediation models, and then describes the operationalization of the key variables, the data source, and sample construction. It should be noted that the survey data do not allow us to directly observe the actual intensity of emotional labor performed by parents. Therefore, in the empirical analysis, we identify parents' exposure to child-related emotional labor mainly through whether adolescents usually turn to their parents when distressed.

3.1 Model Specification

This paper employs a two-way fixed-effects model to estimate the effect of child-related emotional labor on parents' earnings and to test Hypothesis 1. The baseline specification is as follows:

$$\ln wage_{it} = \alpha + \beta_1 emo_demand_{it} + \beta_2 X_{it} + \mu_i + \lambda_t + \varepsilon_{it} \quad (1)$$

where i indexes an individual (either a mother or a father) and t indexes the survey year. $\ln wage_{it}$ denotes the natural logarithm of the earnings of individual i in year t; emo_demand_{it} indicates whether individual i in year t is exposed to a child-related emotional labor context, with its precise operationalization described in

the variable section below; X_{it} is a vector of control variables; λ_t denotes year fixed effects; μ_i denotes individual fixed effects; and ε_{it} is the error term.

Compared with pooled ordinary least squares estimation, the two-way fixed-effects model is better able to mitigate omitted-variable bias. More specifically, individual fixed effects control for unobserved characteristics that are relatively stable over the sample period but may simultaneously affect both whether adolescents usually turn to parents when distressed and parents' earnings, such as ability endowments, personality traits, long-standing family culture, and stable gender-role beliefs. For example, some mothers may consistently place greater emphasis on parent–child communication, which may both increase the likelihood that adolescents usually turn to parents when distressed and be associated with persistently lower work investment and earnings. If such stable differences are not accounted for, pooled OLS may overstate the effect of child-related emotional labor. Year fixed effects, in turn, absorb common time shocks across survey waves, including changes in the macroeconomic environment, labor market conditions, and the policy context. Thus, the empirical strategy exploits within-individual variation over time in exposure to child-related emotional labor to estimate its association with changes in earnings, thereby improving the credibility and robustness of the results.

Building on Equation (1), the paper further estimates mediation models to examine the mechanisms through which child-related emotional labor affects earnings. The specifications are as follows:

$$M_{it} = \gamma_0 + \gamma_1 emo_demand_{it} + \gamma_2 X_{it} + \mu_i + \lambda_t + \varepsilon_{it} \tag{2}$$

$$\ln wage_{it} = \delta_0 + \delta_1 emo_demand_{it} + \delta_2 M_{it} + \delta_3 X_{it} + \mu_i + \lambda_t + \varepsilon_{it} \tag{3}$$

where M_{it} represents potential channels through which child-related emotional labor affects earnings, namely working hours and housework hours.

3.2 Variables

3.2.1 Dependent Variable: mother's or father's Earning ($\ln wage$)

The dependent variable is the earnings of the father or the mother. this is measured by individual annual after-tax wage income. To improve comparability across survey waves, income is further adjusted to constant 2014 prices using province-specific annual consumer price indices (CPI), and then transformed using the natural logarithm.

3.2.2 Key Explanatory Variable: Child-Related Emotional Labor Context (emo_demand)

The core concept of this paper is child-related emotional labor. Because the survey data do not allow us to directly observe how much emotional labor parents actually perform, we identify whether children's emotional support needs are primarily directed toward parents by using information on whether adolescents usually turn to their parents when distressed, and on this basis characterize parents' exposure to a child-related emotional labor context.

Specifically, the CFPS children's questionnaire asks respondents aged 10–15: "*When you feel troubled, whom do you usually talk to?*" If the adolescent reports turning to parents, this indicates that parents are the primary targets of emotional support-seeking when emotional distress arises[6]. Based on this item, we construct

[6] The CFPS Children's Questionnaire asked teenagers aged 10-15: "When you feel troubled, whom do you usually talk to?" There were many answer options for this question, including: 1) Never talk to anyone; 2) Parents; 3) Siblings; 4) Grandparents; 5) Other family members; 6) Teachers; 7) Classmates; 8) Childhood friends; 9) Online friends or friends;

a binary variable. The variable takes the value of 1 for the corresponding father or mother if the adolescent usually turns to parents when distressed, and 0 otherwise.

It should be emphasized that this variable does not directly measure the actual intensity of emotional labor performed by parents. Rather, it captures exposure to a situation in which emotional caregiving demands are primarily directed toward parents. When adolescents usually turn to parents when distressed, parents are more likely to bear the main responsibility for emotional support and response, which is an important precondition for the occurrence of family emotional labor. By contrast, when adolescents usually turn to friends, peers, or other people, emotional caregiving demands directed toward parents are likely to be weaker along this dimension.

Using whether parents are adolescents' usual confidants in situations of distress as a proxy is justified for two reasons. First, it reflects the primary orientation of adolescents' emotional support networks—that is, whom adolescents usually turn to first when facing emotional difficulties. Prior research suggests that emotional management and child care within the household are strongly gendered: mothers typically bear more emotional caregiving responsibilities and are more likely to be viewed as the primary emotional supporters within the family (Coltrane, 1989; Ehrensaft, 1990). Accordingly, when adolescents usually turn to parents, this indicates that their emotional support needs are oriented more toward the family, with parents bearing the main responsibility for responding. Under existing gendered divisions of labor, this responsibility is also more likely to become concentrated on mothers. Second, the validity of this proxy can be assessed indirectly through the mechanism variables. If it indeed captures the emotional caregiving context faced by parents—especially mothers—then systematic changes in time allocation and labor-related behavior should also be observed, such as reduced working hours and increased housework hours. The empirical results below support this expectation and thus provide indirect validation for this measure.

3.2.3 Control Variables

Based on existing literature and CFPS data availability, the control variables are specified as follows. (1) Individual characteristics include age, age squared divided by 100, educational attainment, health status, internet use, and urban–rural residence status. (2) Family characteristics include the number of children, the age of the youngest child, and whether the respondent lives with parents or parents-in-law. (3) Spousal characteristics include the spouse's educational attainment and health status. (4) Regional characteristics include indicators for whether the respondent resides in eastern China and whether the respondent resides in central China[7].

3.2.4 Mediating Variables

To test the mechanisms proposed in Hypotheses 2 and 3, two mediating variables are used: working hours and housework hours.

The variable housework hours is measured using the CFPS adult or individual questionnaire item: "*Under normal circumstances, about how many hours per day do you spend on household chores in your own home?*"

The variable working hours is measured using the CFPS individual questionnaire item: "*During the past 12 months, how many hours per week did you usually work in this job?*"

3.2.5 Variables for Heterogeneity Analysis

To test the heterogeneity hypotheses proposed in Hypotheses 4 through 8, this paper further uses mothers' emotional intelligence, emotional disposition, educational attainment, employment stability, and occupational

10) Psychological counselors; 11) Confess in a diary; 77) Other.

[7] According to the classification standards used in the China Health Statistics Yearbook, the eastern region includes 11 provinces (municipalities): Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, and Hainan. The central region includes 8 provinces: Shanxi, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei, and Hunan. The western region includes 12 provinces (municipalities): Sichuan, Chongqing, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia, Xinjiang, Guangxi, and Inner Mongolia.

status as grouping variables.

Occupational status is measured using the CFPS adult or individual questionnaire item: "*Do you hold an administrative or managerial position in this job?*"

Employment stability is measured using the CFPS adult or individual questionnaire item: "*Have you signed a contract for this job?*"

Emotional intelligence is proxied by respondents' self-assessed interpersonal popularity. Prior research suggests that individuals with higher emotional intelligence are generally better able to perceive, understand, and respond effectively to others' emotions, which makes them more likely to be perceived favorably in interpersonal interactions (Goleman, 1995). Based on this relationship, the paper uses respondents' self-evaluation of how good their interpersonal relations are as a proxy for emotional intelligence. This variable comes from the CFPS adult or individual questionnaire item: "*How good do you think your interpersonal relationships are?*"

Emotional disposition is measured using the CFPS adult or individual questionnaire item: "*During the past week, how often did you feel emotionally low or depressed?*"

3.3 Data Source and Sample Construction

This paper uses panel data from the 2014, 2016, 2018, and 2020 waves of the China Family Panel Studies (CFPS). The main reason for using the CFPS is that both the dependent variable and the proxy measure for the key explanatory variable can be obtained from the relevant CFPS questionnaires. The analysis begins in 2014 because the measurement of employment status and individual income in the 2010 and 2012 CFPS waves is less stable, with substantial changes in questionnaire items and inconsistencies in statistical definitions. Starting in 2014, the CFPS adopted employment-status criteria consistent with those used by the National Bureau of Statistics of China and, in subsequent waves, used comparable question wording and statistical definitions to measure employment and individual income, making these waves more suitable for intertemporal comparison.

The sample is constructed in several steps. First, information on adolescents' emotional support orientation is matched to information on their parents in order to create a parent–child matched dataset containing parental wage income and the direction of children's emotional support needs. Second, the analysis focuses on mothers as the primary sample and excludes, in sequence, women older than 55, those who are still in school or training, those who are retired, those who have lost work capacity because of disability or illness, single mothers, and women who are not currently employed. The final sample consists of 1,559 women of working age who are currently employed, have at least one child aged 10–15, and are married with a spouse present.

A key reason for focusing on children aged 10–15 is that only the children's questionnaire for this age group in the CFPS contains the item on whom respondents usually turn to when they feel troubled. Table 1 reports the definitions and descriptive statistics of the main variables in the four-wave unbalanced panel. It should be noted that the number of father observations reported in Table 1 is smaller than the number of mother observations, mainly because, although some mothers have a living spouse, information on the spouse could not be successfully matched, or the corresponding income variable for the spouse is missing.

Table 1 Variable Definitions and Descriptive Statistics

Variable Category	Variable Name	Definition	Mother Sample			Father Sample		
			N	Mean	Std. Dev.	N	Mean	Std. Dev.
Dependent variable	Earnings	Annual wage income (yuan), natural log	1559	9.7604	1.5331	1022	10.437 3	1.1828

Key independent variable	Child-related emotional labor context	=1 if the adolescent usually turns to parents when distressed; =0 otherwise	1559	0.3573	0.4794	1022	0.3659	0.4819
Control variables	Age	Discrete variable	1559	38.9064	4.763	1022	40.6125	4.7036
	Age squared / 100	Age squared divided by 100	1559	15.3638	3.8036	1022	16.7148	3.933
	Education attainment	Illiterate/Semi-literate/No need for education = 1; Primary school = 2; Junior high school = 3; High school/Technical secondary school/Vocational high school = 4; Junior college = 5; Bachelor's degree = 6; Master's degree = 7; Doctoral degree = 8	1559	3.1616	1.3079	1022	3.4706	1.2792
	Health status	Healthy=1; Average=2; Unhealthy=3	1559	1.2848	0.5764	1022	1.2025	0.5209
	Internet use	Yes=1; No=0	1559	0.6851	0.4646	1022	0.7436	0.4368
	Urban residence	Urban=1; Rural=0	1559	0.6485	0.4776	1022	0.6849	0.4648
	Number of children	Discrete variable	1559	1.8172	0.7959	1022	1.7613	0.8111
	Youngest child aged 0–2	Yes=1; No=0	1559	0.0391	0.194	1022	0.0411	0.1986
	Youngest child aged 3–5	Yes=1; No=0	1559	0.0847	0.2785	1022	0.0812	0.2733
	Spouse education	Illiterate/Semi-literate/No need for education = 1; Primary school = 2; Junior high school = 3; High school/Technical secondary school/Vocational high school = 4; Junior college = 5; Bachelor's degree = 6; Master's degree = 7; Doctoral degree = 8	1559	3.3008	1.2307	1022	3.3386	1.3155
	Spouse health status	Healthy=1; Average=2; Unhealthy=3	1559	1.2328	0.5542	1022	1.275	0.5631
	Living with parents or parents-in-law	Yes=1; No=0	1559	0.4888	0.5	1022	0.4873	0.5001
	Eastern region	Yes=1; No=0	1559	0.4869	0.5	1022	0.499	0.5002
	Central region	Yes=1; No=0	1559	0.3066	0.4612	1022	0.3131	0.464
Mediating variables	Housework hours	Daily hours spent on household chores (hours)	661	1.9555	1.3844	873	1.0686	1.1565
	Work hours	Weekly working hours (hours)	1553	52.0256	18.3236	1017	53.5522	16.8844

Variables for heterogeneity analysis	Occupational status	= 1 if holding an administrative/managerial position; = 0 otherwise	1447	0.0753	0.264	946	0.1543	0.3615
	Employment stability	= 1 if a labor contract has been signed; = 0 otherwise	1556	0.4165	0.4931	1022	0.5254	0.4996
	Emotional intelligence	0–10 scale. Higher values indicate better interpersonal relations; used in this paper as a proxy for emotional intelligence	1339	7.0874	1.7999	949	6.9768	1.7295
	Emotional disposition	1–4 scale. Frequency of feeling depressed over the past week; 1 = rarely, 4 = most of the time (5–7 days)	1558	1.7798	0.7516	1022	1.6761	0.7176

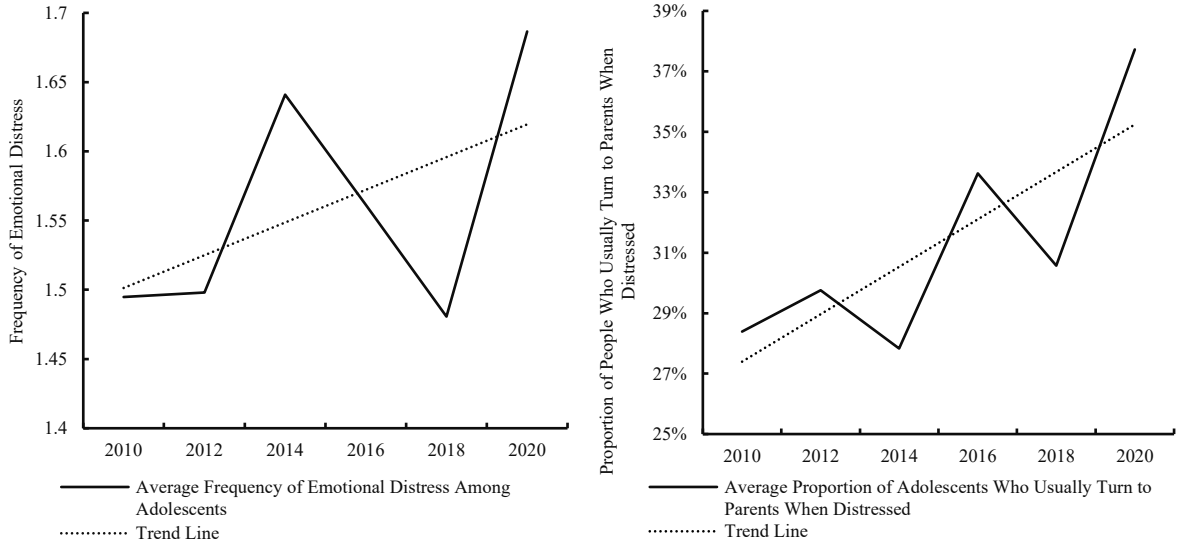
4 Empirical Results

4.1 Descriptive Patterns

4.1.1 Child Perspective

From the perspective of children, the frequency of adolescents' emotional distress was relatively low in 2010. Thereafter, however, the overall frequency of emotional distress among adolescents exhibited an upward trend (see Figure 1a). This pattern suggests that, during the sample period, the emotional difficulties faced by adolescents intensified and mental health risks increased.

When confronted with distress, adolescents typically seek emotional support from others. Figure 1b shows that the proportion of adolescents who usually turn to their parents when distressed increased overall during the sample period. This pattern indicates that parents became increasingly important within adolescents' emotional support networks and, correspondingly, that emotional support needs directed toward the family were also rising.



(1a) Frequency of Emotional Distress Among Adolescents

(1b) Proportion of Adolescents Who Usually Turn to Their Parents When Distressed

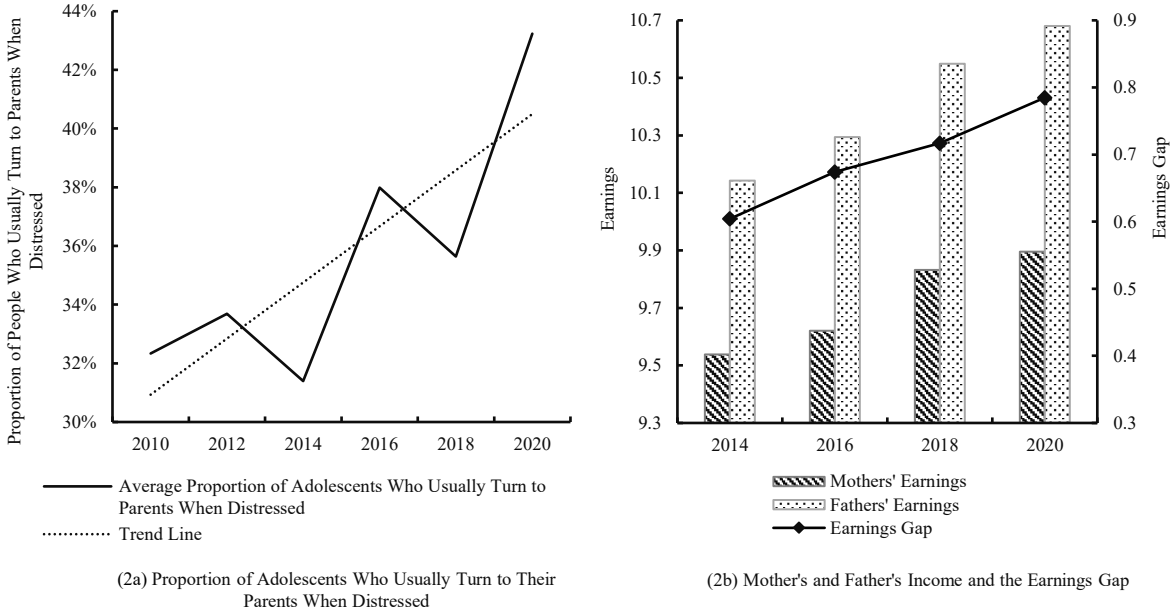
Fig. 1 Trends in adolescents' emotional distress and the proportion usually turning to parents when distressed, from the child perspective. **Data source:** CFPS 2010, 2012, 2014, 2016, 2018 and 2020. **Note:** The frequency of emotional distress

is measured as an ordinal variable ranging from 1 to 4. Specifically, the frequency of feeling emotionally low during the past week is coded as follows: almost never (less than 1 day) = 1, sometimes (1–2 days) = 2, often (3–4 days) = 3, and most of the time (5–7 days) = 4.

4.1.2 Parent Perspective

Because each child corresponds to only one pair of parents, whereas one pair of parents may correspond to multiple children, the pattern in which children usually turn to parents when distressed is more readily observed from the parent perspective. As shown in Figure 2a, the proportion of children who usually turn to parents when distressed, as measured from the parent perspective, shows an overall upward trend.

At the same time, Figure 2b shows that both mothers' and fathers' mean earnings increased over time, but fathers' earnings remained consistently higher than mothers' earnings, and the earnings gap between mothers and fathers widened overall. This raises an important question: against the backdrop of rising emotional support needs from children, does child-related emotional labor further worsen mothers' disadvantaged position in earnings? This question is examined in the regression analysis that follows.



(2a) Proportion of Adolescents Who Usually Turn to Their Parents When Distressed

(2b) Mother's and Father's Income and the Earnings Gap

Fig. 2 Trends in the proportion of children usually turning to parents when distressed and in parents' earnings, from the parent perspective. **Data source:** CFPS 2010, 2012, 2014, 2016, 2018, and 2020. **Note:** In Figure 2b, the bars show mothers' and fathers' mean earnings, measured on the left axis. The line shows the earnings gap between fathers and mothers (fathers' mean earnings minus mothers' mean earnings), measured on the right axis. Earnings are defined as the natural logarithm of annual wage income.

4.2 Baseline Regression Results

The baseline regressions are estimated using sequential model specifications to examine the effects of child-related emotional labor on parents' earnings. Empirically, this emotional labor context is identified mainly by whether adolescents usually turn to their parents when distressed. The results are reported in Table 2. Columns (1) and (2) include individual fixed effects and year fixed effects. The results show that child-related emotional labor has a significant negative effect on mothers' earnings, whereas its effect on fathers' earnings is not statistically significant. Columns (3) and (4) further add individual- and family-level control variables to Columns (1) and (2), respectively. The inclusion of these additional controls improves model fit without altering the main conclusion: child-related emotional labor significantly reduces mothers' earnings but has no significant effect on fathers' earnings.

These findings suggest that when adolescents usually turn to their parents when distressed, their emotional support needs are more strongly directed toward parents. Under the existing gendered division of labor within the household, however, this additional caregiving responsibility is not allocated neutrally between mothers and fathers; instead, it is concentrated more heavily on mothers and is reflected in mothers' earnings losses, while fathers' earnings remain largely unchanged. This result supports Hypothesis 1 and indicates that the family emotional labor triggered by children's emotional distress reveals clear gender asymmetry in both the allocation of family emotional labor and its economic consequences

Table 2 Baseline Regression Results

	（1）	（2）	（3）	（4）
	Mothers' earnings	Fathers' earnings	Mothers' earnings	Fathers' earnings
Child-related emotional labor context	-0.2530*	-0.0361	-0.2946**	-0.0165
	(0.1416)	(0.0519)	(0.13)	(0.0524)
Control variables			Control	Control
Individual fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
N	1559	1022	1559	1022
R-squared	0.0559	0.0351	0.1331	0.0694

Note: Robust standard errors are reported in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

4.3 Mechanism Analysis

To examine the mechanisms underlying mothers' earnings losses, this paper further investigates changes in two mediating variables: working hours and housework hours. Because the baseline regression results show that child-related emotional labor has a significant effect on mothers' earnings but no significant effect on fathers' earnings, the mechanism analysis below focuses primarily on the sample of mothers. Table 3 reports the results of the mediation analysis.

4.3.1 Working Hours

Column (1) of Table 3 shows that mothers exposed to child-related emotional labor work significantly fewer hours per week. Compared with mothers who are not exposed to this context, they work about 3.5 fewer hours on average per week. This finding suggests that child-related emotional labor crowds out mothers' time invested in paid work. Column (2) shows that mothers' working hours have a significant positive effect on earnings: the longer they work, the higher their earnings. Taken together, these two columns indicate that child-related emotional labor indirectly reduces mothers' earnings by reducing their working hours. This pathway supports Hypothesis 2.

4.3.2 Housework Hours

Column (3) of Table 3 shows that mothers exposed to child-related emotional labor spend significantly more time on housework each day. This suggests that when children experience emotional distress and mainly seek support from parents, mothers not only bear greater emotional caregiving responsibilities but also become more deeply involved in the organization and maintenance of daily family life, such as arranging routines, preparing meals, maintaining the household environment, and handling other routine tasks necessary for family functioning. Column (4) shows that the longer mothers spend on housework, the lower their individual earnings, with the relationship being significantly negative. This implies that the expansion of housework accompanying

emotional labor further crowds out the time and energy mothers can devote to market work and career development. On the one hand, the increase in unpaid housework reduces mothers' work investment and career opportunities. On the other hand, the long-term combination of emotional caregiving and housework may intensify physical fatigue and psychological strain, thereby reducing work efficiency and depressing earnings. These results support Hypothesis 3: child-related emotional labor indirectly lowers mothers' earnings by increasing their housework hours.

Table 3 Mechanism Analysis

	Working Hours		Housework Hours	
	（1）	（2）	（3）	（4）
	Working hours	Mothers' earnings	Housework hours	Mothers' earnings
Child-related emotional labor context	-3.5198*	-0.2457**	1.0062**	-0.3627*
	(1.8787)	(0.1232)	(0.4996)	(0.1858)
Working hours		0.0106*		
		(0.0054)		
Housework hours				-0.2472***
				(0.0858)
Control variables	Control	Control	Control	Control
Individual fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
N	1553	1553	661	661
R-squared	0.0438	0.1551	0.8206	0.7364

Note: Robust standard errors are reported in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Taken together, the mechanism analysis shows that child-related emotional labor affects mothers' earnings mainly through two channels: by reducing mothers' working hours and by increasing their housework hours. This suggests that the family emotional labor triggered by children's emotional distress is not limited to emotional response itself, but also reshapes mothers' allocation of time between work and family, thereby translating into observable economic consequences.

4.4 Heterogeneity Analysis

The negative effect of child-related emotional labor on mothers' earnings is not uniform across all groups of mothers. As suggested by Hypotheses 4–8, mothers' individual characteristics and occupational conditions shape their ability to respond to children's emotional needs, thereby generating heterogeneous earnings consequences. The subgroup regressions show the following patterns.

4.4.1 Emotional Intelligence

Columns (1) and (2) of Table 4 show that, among mothers with lower emotional intelligence, child-related emotional labor has a larger and statistically significant negative effect on earnings, whereas the effect is relatively weaker among mothers with higher emotional intelligence. This difference may be related to the stronger capacity of mothers with higher emotional intelligence to recognize and regulate emotions, which lowers the family emotionallabor costs they face when responding to children's emotional needs. By contrast, mothers with lower emotional intelligence may find it more difficult to identify, regulate, and express emotions, making their earnings more vulnerable to the adverse effects of family emotional labor. These results are consistent with Hypothesis 4.

4.4.2 Emotional Disposition

Columns (3) and (4) of Table 4 show that, among mothers with a more negative emotional disposition, child-related emotional labor has a stronger negative effect on earnings, whereas the effect is relatively weaker among mothers with a more positive emotional disposition. One possible explanation is that mothers with a more negative emotional disposition must exert greater emotion-regulation effort in order to suppress their own negative emotions when providing appropriate emotional support. This additional burden may intensify fatigue and stress and, in turn, affect job performance and earnings. By contrast, mothers with a more positive emotional disposition require less additional regulation when responding to children's emotional needs, so the earnings penalty they experience is relatively limited. These results support Hypothesis 5.

4.4.3 Educational Attainment

Columns (5) and (6) of Table 4 show that the negative effect of child-related emotional labor on earnings is larger among mothers with lower educational attainment, whereas the effect is weaker and statistically insignificant among mothers with higher educational attainment. This difference may be related to the relative advantages of highly educated mothers in both intra-household bargaining and access to labor market resources. On the one hand, they may be better able to negotiate the division of labor within the household and encourage their partners to share part of the emotional caregiving burden. On the other hand, highly educated mothers often possess more social resources and better employment conditions, such as greater work flexibility and more comprehensive support systems, which can mitigate the disruptive effects of family emotional labor on work. By contrast, mothers with lower educational attainment are in a relatively disadvantaged position in both household bargaining and access to workplace support, making their earnings more susceptible to the adverse effects of family emotional labor. Hypothesis 6 therefore receives empirical support.

Table 4 Heterogeneity Analysis by Individual Characteristics

Variable	Emotional Intelligence (EI)		Emotional Disposition		Education Attainment	
	（1）	（2）	（3）	（4）	（5）	（6）
	Lower EI	Higher EI	More positive emotional dispositio n	More negative emotional dispositio n	Lower educational attainment	Higher educational attainment
	Mother's Earnings					
Child-related emotional labor context	-0.4653**	-0.2853*	-0.2600*	-1.1598***	-0.3001*	-0.2117
	(0.2274)	(0.1597)	(0.1423)	(0)	(0.1547)	(0.2653)
Control variables	Control	Control	Control	Control	Control	Control
Individual fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
N	322	1237	1388	170	1049	510
R-squared	0.8483	0.245	0.1168	1	0.1301	0.2546

Note: Robust standard errors are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. Emotional intelligence is proxied by mothers' self-rated interpersonal relations. Mothers scoring below 6 are classified into the lower emotional intelligence group, while those scoring 6 or above are classified into the higher emotional intelligence group. Emotional disposition is grouped according to the frequency of mothers' emotional distress during the past week. Mothers reporting emotional distress on 3 or more days are classified as having a more negative emotional disposition, whereas those reporting emotional distress on fewer than 3 days are classified as having a more positive emotional disposition. Educational attainment is grouped as follows: junior high school or below = lower

educational attainment; high school or above = higher educational attainment.

4.4.4 Employment Stability

Columns (1) and (2) of Table 5 show that the negative effect of child-related emotional labor on earnings is more pronounced among mothers with unstable employment. More specifically, the coefficient on the core explanatory variable is significantly negative for mothers without a labor contract, whereas it is smaller and statistically insignificant for mothers who have signed a labor contract. This indicates that mothers with less stable employment have greater difficulty adjusting flexibly between family responsibilities and work demands when responding to children's emotional needs. One possible reason is that unstable employment is typically associated with weaker bargaining power and lower job autonomy, making mothers more likely to reduce work investment and thus face larger earnings losses. By contrast, mothers in more stable employment generally enjoy clearer institutional protection and organizational support and may therefore be better able to buffer the impact of children's emotional support needs. This pattern is consistent with Hypothesis 7.

4.4.5 Occupational status

Columns (3) and (4) of Table 5 show that the negative effect of child-related emotional labor on earnings is more pronounced among mothers in lower-status occupations. Specifically, the coefficient on the core explanatory variable is significantly negative among mothers without administrative or managerial positions, whereas it is significantly positive among mothers who hold such positions. This result suggests that mothers in higher-status occupations do not exhibit a clear earnings penalty and instead display a significant positive association. One possible explanation is that higher-status positions often provide greater work flexibility, richer organizational resources, and more family-friendly support, all of which may cushion the disruptive effects of family emotional labor on occupational activities. At the same time, managerial roles require strong communication, emotion-regulation, and relationship-maintenance skills. According to work–family enrichment theory, resources developed in one role may be transferred to another role and improve performance there (Greenhaus & Powell, 2006). Thus, the capabilities developed through family emotional caregiving may, to some extent, become advantageous resources at work for higher-status mothers. By contrast, mothers in lower-status occupations are in a relatively disadvantaged position with respect to work flexibility, support resources, and organizational protection, making them more likely to incur occupational and earnings losses as a result of child-related emotional labor. Overall, Hypothesis 8 is supported.

Table 5 Heterogeneity Analysis by Occupational conditions

Variable	Employment Stability		Occupational Status	
	（1）	（2）	（3）	（4）
	Unstable employment	Stable employment	Lower Occupational Status	Higher Occupational Status
	Mother's earnings			
Child-related emotional labor context	-0.5014***	-0.2083	-0.2841**	0.5467**
	(0.1803)	(0.174)	(0.1393)	(0.2171)
Control variables	Control	Control	Control	Control
Individual fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
N	908	648	1338	109
R-squared	0.1723	0.2381	0.1403	0.9379

Note: Robust standard errors are reported in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively. Employment stability is grouped according to whether the mother has signed a labor contract: mothers without

a labor contract are classified as being in unstable employment, whereas those with a labor contract are classified as being in stable employment. Occupational status is grouped according to whether the mother holds an administrative or managerial position: mothers with such a position are classified as having higher occupational status, whereas those without one are classified as having lower occupational status.

4.5 Summary of Empirical Findings

Overall, the empirical results are broadly consistent with the theoretical hypotheses proposed in this paper. Family emotional labor triggered by children's emotional distress is borne disproportionately by mothers and leads to earnings losses through channels such as reduced working hours and increased housework hours (supporting H1–H3). At the same time, mothers with lower emotional intelligence, a more negative emotional disposition, lower educational attainment, unstable employment, and lower occupational status are more vulnerable to the adverse effects of child-related emotional labor (supporting H4–H8). By contrast, mothers with greater individual capacities or stronger labor market resources are more likely to buffer, and in some cases partly offset, these negative effects.

These findings indicate that the motherhood penalty generated by family emotional labor has clear structural and unequal features. It is reflected not only in the earnings disadvantage mothers face relative to fathers, but also in differences in the magnitude of the effect across mothers with different socioeconomic positions.

5 Discussion: Why Family Emotional Labor Becomes a Structural Earnings Penalty

The findings above suggest that, in a context of intensifying children's emotional distress and rising family demands for emotional support, mothers are facing a new and relatively hidden form of labor market disadvantage. Family emotional labor induced by children's emotional distress is becoming an important source of the contemporary motherhood penalty. This penalty is structural not only because it is reflected in mothers' earnings losses, but also because it does not arise from individual preferences alone. Rather, it is jointly shaped by gendered divisions of labor, cultural norms, and the institutional environment.

First, this earnings penalty is rooted in gender structures and cultural expectations. Mothers' primary responsibility for children's emotional care is not simply a matter of personal choice, but a product of long-standing gendered divisions of labor. Prior research shows that women are commonly expected to provide emotional care and nurturing, whereas men are more often positioned as economic providers (Coltrane, 1989; Erickson, 2005; Hochschild, 2012). As a result, when children experience emotional distress, it is often taken for granted that mothers should listen, comfort, and help regulate those emotions. Correspondingly, mothers who are unable to respond promptly because of work commitments are more likely to face moral pressure, whereas fathers' absence from emotional support is less likely to attract comparable social criticism. These asymmetric role expectations imply that family emotional labor is gendered at the point of initial allocation, and the resulting earnings penalty emerges from precisely this structural division of labor.

Second, the lack of a reward mechanism for family emotional labor traps mothers in a pattern of "giving without compensation." Existing studies suggest that, in conventional understandings of family life, comforting and encouraging children are often seen as a natural expression of maternal love rather than as labor that deserves social recognition or institutional compensation (Coltrane, 2000; Erickson, 2005; Hochschild, 1983). This naturalizing narrative obscures the time, energy, and skill required for family emotional labor and makes it difficult for such labor to be translated into material or occupational returns. The consequence is that mothers reduce their work investment in order to respond to emotional needs within the family, but that investment does

not generate compensating occupational rewards; instead, it often appears as lower earnings and slower career advancement. In this sense, the penalty associated with family emotional labor differs from more visible costs such as career interruptions caused by childbirth or employer discrimination. Rather, it is a more hidden penalty generated by the internalization of family responsibility. Precisely because it appears voluntary, this penalty is more easily overlooked, even though it has real consequences for women's economic returns.

Third, this process also reinforces existing inequalities. The heterogeneity analysis shows that the negative effects of family emotional labor are stronger among more disadvantaged mothers, especially those with lower educational attainment, lower occupational status, and unstable employment. This implies that family emotional labor does not affect all women equally, but instead amplifies inequality along existing socioeconomic lines. For mothers who are already disadvantaged in the labor market, emotional caregiving responsibilities within the household further compress working time, flexibility in work arrangements, and opportunities for earnings growth, thereby creating a double constraint in which disadvantage within the family and disadvantage in the labor market reinforce one another. By contrast, mothers with higher levels of education, more stable employment, and higher-status occupations are more likely to buffer or partly transform the effects of family emotional labor by drawing on greater bargaining power within the household, stronger organizational support, and more abundant occupational resources. The earnings penalty generated by family emotional labor is therefore not only a gender issue, but also a class-based one. Without institutional support, it is unlikely to diminish on its own and may instead solidify and widen existing gender inequality and social stratification.

Overall, the empirical results suggest that family emotional labor triggered by children's emotional distress does not remain confined to parent–child relations or family well-being, but spills over into the labor market and becomes an observable economic outcome in the form of mothers' earnings losses. Family emotional labor, therefore, is not merely a form of emotional practice within the household; it is also an important mechanism linking household division of labor, gender norms, and labor market outcomes. In this sense, the paper does not simply document a phenomenon specific to Chinese families. Rather, it identifies a broader question in household economics: when demands for emotional support within the family increase, how are these responsibilities allocated between mothers and fathers, and how do they in turn shape mothers' labor supply and earnings? It is precisely in this sense that the paper moves the discussion of family emotional labor beyond parent–child relations and family well-being into an economic framework centered on the motherhood penalty and earnings inequality.

6 Conclusion and Contributions

6.1 Conclusion

Using data from the 2014, 2016, 2018, and 2020 waves of the CFPS, this paper examines the effects of children's emotional distress on parents' earnings from the perspective of family emotional labor. The results show that when children usually turn to their parents when distressed, mothers' earnings decline significantly, whereas fathers' earnings do not exhibit a significant change. This suggests that the family emotional labor triggered by children's emotional distress is not evenly shared between mothers and fathers, but is disproportionately borne by mothers and subsequently translated into earnings losses.

Further mechanism analysis shows that child-related emotional labor affects mothers' earnings mainly through two channels: by reducing mothers' working hours and by increasing their housework hours. In other words, children's emotional distress not only means that mothers assume greater responsibility for emotional response, but also reshapes their allocation of time between work and family, thereby adversely affecting labor

supply and economic returns.

The heterogeneity analysis further indicates that mothers with lower emotional intelligence, a more negative emotional disposition, lower educational attainment, unstable employment, and lower occupational status are more vulnerable to the adverse effects of child-related emotional labor. By contrast, mothers with greater individual capacities or stronger labor market resources are more likely to buffer, and in some cases partly offset, these negative effects. Overall, the paper shows that family emotional labor induced by children's emotional distress has become an important source of the contemporary motherhood penalty and reinforces gender earnings inequality through the interaction between household division of labor and labor market outcomes.

6.2 Contributions

This paper makes three main contributions.

First, it brings the concept of emotional labor—traditionally used to analyze interactions in the workplace—into the context of family childrearing and shows how children's emotional distress can be translated, through the intra-household allocation of emotional caregiving responsibilities, into mothers' earnings losses. In doing so, the paper moves the discussion of family emotional labor beyond parent–child relations and family well-being into an economic framework centered on the motherhood penalty and earnings inequality, thereby extending existing explanations of the motherhood penalty and gender earnings gaps.

Second, using nationally representative household panel data, the paper provides micro-level empirical evidence on the economic consequences of family emotional labor. In contrast to previous studies, which have focused more heavily on parent–child relations, subjective well-being, and mental health, this paper shows that family emotional labor not only affects interactions within the household but also spills over into the labor market, generating observable earnings consequences. At the same time, the paper presents a relatively systematic account of the transmission mechanisms involved and of how these effects vary across different groups of mothers.

Third, the paper shows that children's mental health problems are not merely issues of emotion and care within the household; through the gendered allocation of family emotional labor, they may also be transformed into mothers' earnings losses. This implies that household caregiving responsibilities, gender norms, and labor market outcomes are closely interconnected. The paper therefore provides new empirical evidence for understanding how hidden labor within the household can be translated into structural inequality in the labor market. More importantly, it identifies a broader mechanism in household economics: how emotional caregiving responsibilities within the family are transformed, through gendered allocation, into mothers' earnings penalties.

6.3 Limitations and Directions for Future Research

Although this paper makes contributions at both the theoretical and empirical levels, it still has an important limitation in variable measurement.

More specifically, the paper cannot directly observe the actual intensity of family emotional labor performed by parents. Instead, it identifies an emotional labor context triggered by emotional support needs based on whether adolescents usually turn to their parents when distressed. Although this proxy captures reasonably well the direction of emotional support needs within the family, it cannot fully measure the frequency, intensity, or quality of the emotional labor that parents actually provide. Future research combining more direct data on family interactions or time use would help measure the specific forms of family emotional labor more precisely.

Overall, this paper shows how children's emotional distress is translated, through the gendered allocation

of family emotional labor, into mothers' earnings losses as an observable economic outcome. Future advances in variable measurement and data collection would allow for a more comprehensive understanding of the relationship between family emotional labor and gender inequality.

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Key statements

1. Data availability

The data used in this study are from the China Family Panel Studies (CFPS), administered by the China Social Science Survey Center of Peking University. The CFPS data are publicly available to registered users upon

application through the official CFPS data platform. Due to the CFPS data use agreement, the authors are not permitted to redistribute, publish, transfer, or upload the full or partial CFPS datasets. To support peer review and replication, we provide the variable definitions, coding scheme, sample construction procedure, and statistical code used for data processing and analysis as supplementary materials. Researchers with authorized access to the CFPS data can reproduce the analysis using these materials.

2.Ethical Approval

This article does not contain any studies with human participants performed by any of the authors. The study uses secondary data from the China Family Panel Studies (CFPS).

3.Informed Consent

This article does not contain any studies with human participants performed by any of the authors.

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

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