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# Child sick care-related absence from work and the consequences on parents' income

Ayhan Adams and Katrin Golsch

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# **Child sick care-related absence from work and the consequences on parents' income**

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## **Abstract**

This study investigates the impact of child-related absence from work on the income of working mothers and fathers, addressing a significant research gap in sociology and labour economics. While previous research has established that gender and parenthood significantly influence income levels, the consequences of caring for a sick child—a common and unpredictable responsibility—remain inadequately explored. We utilise longitudinal data from the German Socio-Economic Panel Study (2010-2022) to examine how the accumulation of absence days due to child illness affects income levels and changes in income over four years among parents while controlling for various job and family-related characteristics. Our findings indicate that increased absenteeism related to child sickness adversely affects fathers' income, aligning with signalling theory, which suggests that absent workers may be perceived as less committed by employers. In contrast, mothers appear to experience less significant income impacts from similar absences, indicating that the stigma associated with absence days may be less pronounced. Additionally, we investigate the role of socio-economic status in these effects, finding that higher income positions do not amplify the negative signalling associated with child-related absenteeism for fathers. Meanwhile, we observed no association between mothers' income and child sickness-related absence when distinguishing between higher and lower income positions, potentially indicating prevailing gendered expectations in the workplace. The results underscore the need for further research into the socio-economic implications of caring for a sick child and employer perceptions to gain deeper insights into the dynamics of work-life balance and career consequences.

## **Keywords**

child sick care; income; gender; signalling theory

## **Introduction**

Gender and parenthood are well-known influences on income (Gangl & Ziefle, 2009; Glauber, 2018; Hodges & Budig, 2010; Yu & Hara, 2021). In this regard, childcare is essential (Bear & Glick, 2017; Kühhirt & Ludwig, 2012). However, there are still areas in this research field that need to be explored, and one of these is the impact of child sick care (CSC)-related absence from work. Our study aims to fill this significant research gap by investigating whether this unique form of absence affects the income of working mothers and fathers.

Every child gets sick from time to time in childhood, so caring for a sick child is normal but, at the same time, unpredictable concerning its occurrence and duration. If a child falls ill, even if not seriously, it is often not possible for parents to send it to childcare or school. Working parents have to decide quickly on how to address the care gap, and thus, child sickness overrides parents' daily routines in child care and paid work, particularly if grandparents, friends, and neighbours cannot step in. To put it on point, care for a sick child implies "normal unpredictability" that turns "schedules into chaos" (Clawson & Gerstel, 2014, p. 6).

In many industrialised countries, parents can claim welfare measures allowing parents to stay home from paid work for CSC (for an overview of leave policies see Raub & Heymann, 2022; World Policy Analysis Center, 2018). In Germany, as the country of perception, welfare entitlement and reimbursement levels are generous and gender-neutral: Until 2020, both mother and father in statutory health insurance could stay home to practice CSC for up to 10 days per child under 12 (called "*Kinderkrankentage*"). During the COVID-19 pandemic, entitlement to child sick pay was extended (30 days per child), and parents were allowed to take up working days off not only when a child is sick but also when school or kindergarten is closed due to Coronavirus restrictions. The reimbursement level is 90 % of the net pay (BMFSFJ). In contrast to other countries (e.g. Piper, Youk, James, & Kumar, 2017; Smith & Schaefer, 2012), all parents with public health insurance have access to paid sick days during a child's illness, independent of sector or occupation.

While the income loss due to claiming *Kinderkrankentage* seems negligible, absence from work is an undesirable condition for employers and frequent absenteeism, an aspect of employee productivity, could be interpreted as a negative signal (Ichino & Moretti, 2009; Strömberg, Aboagye, Hagberg, Bergström, & Lohela-Karlsson, 2017). Employers, therefore, could penalise absenteeism with lower pay raises or bonuses (Pauly et al., 2002; Wiberg, Friberg, Palmer, & Stenbeck, 2015). CSC-related absenteeism, here, differs from sickness absence since the employed parent is fit for work, which may be relevant to the signal to the employer. Although child sickness is a prevalent reason for absence from work – to our knowledge – only one study from Sweden addresses its impact on parents' wages (Boye, 2019).

By addressing signals to the employer related to the interface between childcare and work outcomes, gendered expectations of employers and structural differences between working mothers and fathers must not be disregarded (Lietzmann & Frodermann, 2023; Williams, Blair-Loy, & Berdahl, 2013). Therefore, we discuss and analyse the theoretical and empirical implications of mothers' and fathers' CSC-related absence days (cf. Boye, 2019).

Next, we present theoretical arguments for why CSC-related absence might result in negative career consequences, with potentially differential outcomes for mothers and fathers, and derive our research hypotheses. Based on longitudinal data (years 2010-2022) from the German Socio-Economic Panel (Goebel, et al. 2019; SOEP, v39), this study extends the relatively small body of research by investigating the impact of accumulated CSC-related absence days on both the income intercept and the income development over four years in Germany. Interaction effects between gender and accumulated CSC-related absence days are used to detect potential gendered differences. In addition to discussing the results, the discussion also provides an overview of the limitations of the current data situation and an outlook on the need for further research.

### **The nature of CSC-related absence and its signalling effect on employers**

Employers reward and promote employees who they believe are (economically) valuable, productive, and effort. As it is sometimes difficult to evaluate the output of a single employee, the signalling theory promotes the idea that employees disclose their level of productivity and effort by using signals (Spence, 1973). From the supervisor's standpoint, work absence does not conform to high effort at the workplace and serves as a negative signal for a worker's effort. Therefore, employers invest less in frequently absent employees (Albrecht et al., 1999). Previous research addressed, for instance, the link between sickness and unemployment (Amilon & Walette, 2009; Hesselius, 2007) or parental leave and wage (Evertsson, 2016; Mari & Cutuli, 2021).

CSC-related absence has some unique implications, making the findings of sick leave and parental leave not directly transferable: The employed parent is fit for work, and a third person or – except in the case of single parents – the other parent also could take care of the child (and mostly does not work for the same employer). Both aspects are arguments for the assumption that supervisors may interpret the frequency of CSC-related claims and the number of CSC-related absence days as powerful 'signals' for low work effort. The comparison to parental leave is even more difficult as CSC-related absence is mostly short-term but most often unplanned.

As proposed by Bourdeau, Ollier-Malaterre, and Houlfort (2019), we frame CSC as an “enabling” work-life policy, “giving employees some latitude over when, where, and how much they work” (p. 176) and agree with Bourdeau et al.'s (2019) assumption that “supervisors' attributions about employees who use or request work-life policies mediate the relationship between the nature of the used policies and career consequences” (p. 177). Therefore, using CSC days may result in unintended, negative consequences or what others have called a work–family backlash (Perrigino, Dunford, & Wilson, 2018).

What will a supervisor's attribution about employees on CSC look like? Basic arguments from the literature on the flexibility stigma (Williams et al., 2013) appear relevant in deriving assumptions. More concretely, CSC-related absence is just self-helping and has no advantage for the supervisor (Bourdeau et al., 2019). CSC-related absence can be assessed as a deviation from the ideal worker norm in that a parent is not unrestrictedly committed to work (Acker, 1990; Williams et al., 2013) and the work devotion scheme in that a parent places ad-hoc care at home over working hard at the workplace (Blair-Loy, 2005; Williams et al., 2013). The latter also implies that negative consequences, such as wage penalties, may be more severe for parents working under high-effort conditions. In line with this related research, we suspect a stigma mechanism behind the negative consequences of CSC on income:

**H1:** The more frequently parents use absence days due to CSC in four years, the stronger the negative impact on the income.

### **Is the absence signal equally strong for mothers as for fathers?**

Similar to other aspects of care work (cf. Steinbach & Schulz, 2022), the few studies dedicated to CSC-related absence show that mothers in Sweden take on the lion's share of this type of leave (Amilon, 2007; Angelov, Johansson, & Lindahl, 2016; Boye, 2015; Eriksson & Nermo, 2010). It follows that the supervisor's attribution is likely gendered. The uptake of CSC is not widespread among fathers who, in line with cultural beliefs, are assumed to be more work-oriented than mothers (Davies & Frink, 2014; Williams, 2001). In contrast, mothers are more likely to be perceived as giving priority to family instead of work (Marks & Houston, 2002; Vinkenburg, van Engen, Coffeng, & Dijkers, 2012; Williams, 2001). Therefore, supervisors likely frame mothers' and fathers' CSC in gendered ways and specifically expect mothers but not fathers to care for a sick child and be absent from work.

What follows from gender-specific expectations regarding the usage of CSC-related absence on income? First, the higher maternal share of child-related tasks and women's expected

prioritisation of family tasks are the main arguments for the well-documented motherhood penalty as the explanation for wage gaps between women with children and women without children and men (Correll, Benard, & Paik, 2007; Spence, 1973). Research shows that fatherhood is related to no effect on the income level (Cooke & Hook, 2018) or a higher income, the so-called fatherhood bonus (Hodges & Budig, 2010). However, the impact of parenthood on income discussed in this context is not related to direct behaviour within the job. The motherhood penalty is that employers price the expected lower commitment into the starting salary. This means that CSC-related absence is expected for mothers and does not send a strong signal. This, in turn, suggests that the influence of child sick days on mothers' income is limited.

**H2:** CSC-related absence accumulated over 4 years does not affect mothers' income.

A contrasting picture emerges from the perspective of fathers. It can be assumed that, despite knowing about the offspring of an employee, employers believe that fathers prioritise work according to the ideal worker norm and leave aspects of care work that interfere with work demands to the partner. Therefore, CSC-related absence from work is framed as an unwanted and unexpected behaviour for fathers. The negative signalling effect is potentially reinforced by the low usage of CSC-related absence days by other fathers as a benchmark (cf. Boye, 2015). Therefore, it can be assumed that employers penalise a frequent CSC-related absence of fathers:

**H3:** The more frequently fathers use absence days due to CSC over 4 years, the stronger the negative impact on the income.

### **Moreover, how relevant is the socio-economic position?**

What we have not discussed so far is the influence of socio-economic status on the mechanisms we investigate. Research on income development shows that employees in higher-status jobs not only have a higher income but can also expect more significant pay rises (Aretz, 2013). In cases where the employer can influence salary development, larger average salary increases offer more scope for nuanced assessment. Furthermore, employees in higher positions also face



higher expectations towards work effort (Cooke & Hook, 2018; Schieman, Glavin, & Milkie, 2009). Both aspects indicate that the influence of CSC-related absence is stronger in higher income groups, on the one hand through a stronger negative signalling effect and on the other hand through greater leeway in negotiating new salaries.

**H4:** The negative association between CSC-related absence days accumulated over four years and income is stronger for parents with a higher income.

Based on the previous discussion, the question arises as to whether these considerations have gender-specific implications. An assumption can be that mothers in high-income positions apply similar expectations towards the work effort as men (Gough & Noonan, 2013; Ridgeway & Correll, 2004; Wilde, Batchelder, & Ellwood, 2010).

**H5:** In high-income positions, accumulated CSC-related absence is negatively related to income for mothers.

For fathers, it can be assumed that the expectation to be an ideal worker is the higher the salary (Acker, 1990; Williams et al., 2013). It could be assumed that the adverse signalling effects of CSC-related absenteeism increase with the rising expectations of work effort in better-paid jobs.

**H6:** The higher the income position, the greater the negative association between accumulated CSC-related absence and income for fathers.

## **Data & Method**

### *Sample*

For the empirical analyses, we use the German Socio-Economic Panel [SOEP, v39, 2010 – 2022; doi:10.5684/soep.is.2022] (Goebel et al., 2019). The SOEP gathers longitudinal information on absence days from work, monthly income, and several job- and family-related characteristics. We restricted the sample to persons aged between 18 and 65 years living together with a different-sex partner and at least one child under age 13 in the same household. Additionally, persons in the sample worked at least 20 hours per week in the workforce, a

typical number of hours working halftime in Germany. Self-employed persons were excluded from the analyses because we expect different mechanisms regarding the relationship between sick child care and income. We pool the information from four years each (2010-2013; 2011-2014, ..., 2019-2022) into one sample ( $N_{observations} = 11,057$  of  $N_{individuals} = 3,383$  which consists of  $N_{mothers} = 1,387$  and  $N_{fathers} = 1,996$ ) to be able to assess the mid-term impact of CSC-related absence on income. This will be discussed in more detail in the variable description. We only included persons with information on income and child-related absence days in the analyses. Additionally, we excluded 972 observations from the analyses that had missing values on one or more of the control variables.

### *Variables*

The dependent variable is the individual monthly gross income. To assess different mechanisms regarding the ideas of signalling theory, we use two different measures: the income intercept in the latest time point of the pooled waves (e.g. income in 2013 for the waves 2010-2013) and the income development between the first and the latest time point of the pooled waves (e.g. difference 2013 – 2010 for the waves 2010-2013). We use an inflation-adjusted income to adjust for income developments over the whole time span. To avoid bias through the skewness of the income, we use the logarithmised income.

Our main independent variable is accumulated CSC-related absence days from work. The original question asked to the respondents is: “How many days did you not work because of [your/one of your] child(ren)’s illness in the past year?”. We accumulate the retrospective absence days of four years (e.g. the values of the waves 2010 + 2011 + 2012 + 2013). We do so because we assume that employers do not react directly to absence days by adjustments of payment raises. For example, salary negotiations are held annually at most but often at longer intervals. Additionally, small changes or a few CSC-related absence days occurring in one year

might be a weak signal on their own, while the impression of absences over several years could have a greater impact (cf. Boye, 2019).

We control for several work- and family-related characteristics to account for potential confounders in the relationship between income and CSC-related absence days. We control for non-child-related absence days to estimate the effect irrespective of total absence days from work. We control for actual working hours that have an effect on income and income development and act as a proxy for workforce participation that is its own signal to the employer and makes CSC absence more or less likely. The reason for the last job change (1=no job change; 2=back after interruption; 3=new employer; 4=taken over by the company; 5=change within the company) is added to the model as new positions and working for a new employer potentially affect the usage of CSC-related absence days, and at the same time, often affect the income. For similar reasons, we include the contract type (1=permanent; 2=fixed-term; 3=no regular contract). It can be assumed that employees in the public sector have easier access to child sick days, and at the same time, employers have less autonomy in terms of pay due to stricter collective agreements. For the socio-economic status, we control for the level of education (1=ISCED 1-4; 2=ISCED 5-6; 3=ISCED 7-8) and the classification of the job through the Erikson-Goldthorpe-Portocarero class schema (EGP; 1=EGP 1; 2=EGP 2; 3=EGP 7; 4=EGP 3-4; 5=EGP 8; 6=EGP 9). In Germany, paid sick days for children are a benefit provided by statutory health insurance to which people with private health insurance are not entitled. We, therefore, control for the type of health insurance (0=statutory; 1=private). Additionally, we include the age of the youngest child, the respondent's age (also as a squared term) and the survey year.

### *Method*

We apply ordinary least squares (OLS) regressions to test our hypotheses H1, H2 and H3. As described in the variables section, we calculate two separate models, one for the intercept of income at the last point in time of the pooled waves and one for the difference in income

between the first and the last point in time of the pooled waves. To test gender-specific effects, the models include interaction effects between accumulated CSC-related absence days and being female. Marginal effects were used to present the results adequately. One might think of using fixed-effects models to detect associations, particularly for income development and longitudinal panel data. However, the effect of changes in child sick days from year to year appears less relevant to our research question. Together with the argument already made for medium-term effects of CSC-related absence days, OLS regressions, therefore, appear to be the better choice.

To test the assumptions of hypotheses H4, H5 and H6 that the association between income and CSC-related absence differs for mothers and fathers in different income groups, we applied quantile regressions. Quantile regressions model differences in the response to changes in the independent variables at different points in the conditional distribution of the dependent variable (Buchinsky, 1998). As distribution points, we use the 20-percent, 40-percent, 60-percent, and 80-percent quantiles to analyse different income classes.

All OLS and quantile regression models apply robust standard errors clustered at the individual level to take into account multiple representations of respondents in data. In addition, the models were calculated with weights for control purposes. The results are almost identical to those of the unweighted models.

## **Results**

### *Descriptive statistics*

Table 1 shows descriptive results divided by mothers and fathers. Fathers in the sample have a significantly higher average salary than mothers (4487.61 € compared to 2603.63 €) and work more than the regular full-time employment on average (43.58 hours/week, mothers: 31.43 hours/week). In contrast, mothers accumulated more than three times as many CSC-related absence days over four years as men (9.56 days vs. 2.91 days). One-third of mothers and two-

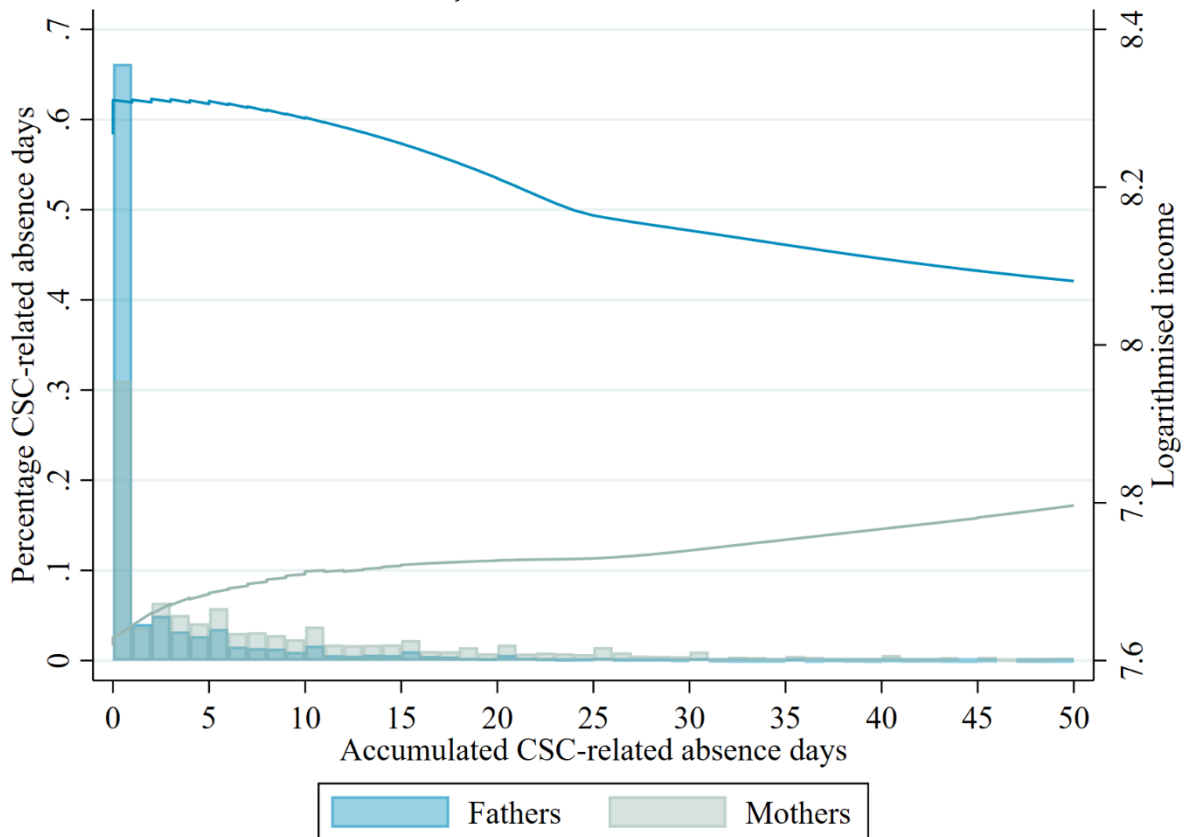
**Table 1. Descriptive Statistics for Mothers and Fathers ( $N_{mothers} = 4,197$ ;  $N_{fathers} = 6,860$ ).**

	Mothers		Fathers	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Income (inflation-adj.)	2603.63	1607.51	4487.61	2317.72
Log. income (inflation-adj.)	7.70	.58	8.29	.49
Accumulated CSC-related absence days	9.56	13.30	2.91	6.60
Accumulated sick days	25.33	26.54	27.75	28.70
Actual working hours	31.43	8.64	43.58	6.86
Reason for last job change				
No job change	89.75	-	92.41	-
Back after interruption	0.45	-	0.47	-
New employer	7.51	-	5.60	-
Taken over by the company	0.21	-	0.13	-
Change within the company	2.07	-	1.40	-
Type of contract				
Permanent	90.28	-	93.82	-
Fixed-term	7.51	-	4.20	-
No regular contract	2.22	-	1.98	-
Education				
ISCED 1–4	3.65	-	5.73	-
ISCED 5–6	52.51	-	51.87	-
ISCED 7–8	43.84	-	42.41	-
EGP				
Unskilled manual workers	3.53	-	15.58	-
Skilled manual workers	1.72	-	12.62	-
Manual supervisors	33.86	-	9.43	-
Routine service class	0.52	-	4.59	-
Lower service class	43.01	-	25.26	-
Upper service class	17.37	-	32.51	-
Private health insurance	14.03	-	15.63	-
Number of children in the household	2.13	0.76	2.31	.90
Age of youngest child in the household				
<6 years	16.77	-	27.90	-
6–8 years	36.14	-	34.33	-
9–11 years	47.08	-	37.77	-
Age	41.80	4.97	44.37	5.83

*Note.* Source: SOEP, 2010-2022. We present means and standard deviations for continuous variables and percentages for categorical variables over all time points analysed. Cumulative percentages  $\neq$  100 percent are due to rounding.

thirds of fathers did not report any CSC-related absence day over the four-year span (see Figure 1). Compared to mothers, fathers were overrepresented in the higher EGP classes, and more fathers than mothers had children younger than age 6, which the higher share of housewives in households with children below school age can explain. Approximately every 7th respondent had private health insurance, and every 10th respondent stated that they had changed jobs during the survey period.

**Figure 1. Percentage distribution of child sick days and predicted values of logarithmised income divided by gender ( $N_{mothers} = 4,197$ ;  $N_{fathers} = 6,860$ ).**

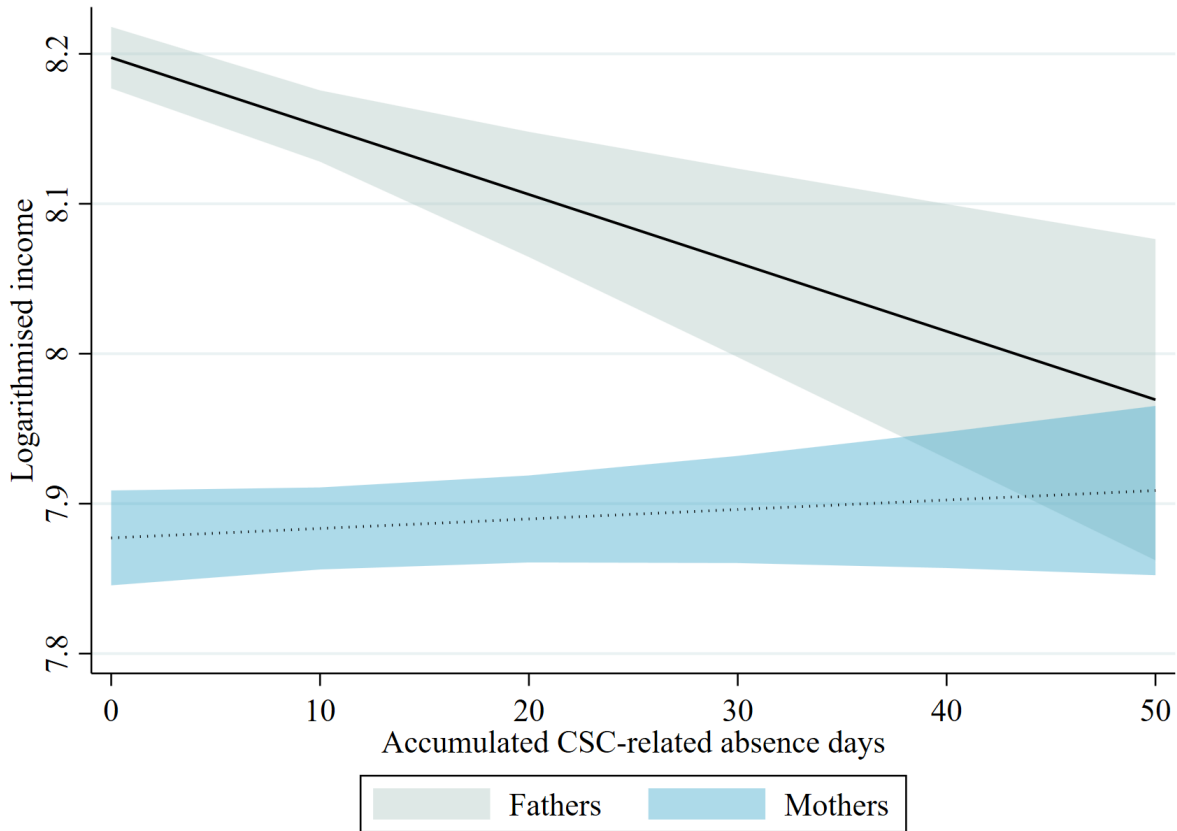


Note. Source: SOEP, 2010-2022. Smoothed distribution of the predicted logarithmised income.

*The association between CSC-related absence and income intercept*

Figure 1 shows the smoothed predictions based on the bivariate regression of the logarithmised income on accumulated CSC-related absence days divided by gender. The graph reveals that the association between the two variables without control for other factors is negative for fathers and positive for mothers. This opposite effect presumably ensures that in a model with control variables but without modulation of gender-specific effect, CSC-related absence days have no significant impact on income (Table A1). It, therefore, seems sensible to consider gender-specific mechanisms. Adding the interaction effect between gender and CSC-related absence days to the model with control variables shows that accumulated absence days are negatively associated with the logarithmised income of fathers ( $\beta = -.005$ ;  $p < .000$ ) while there is no effect for mothers as the baseline effect and the interaction effect ( $\beta = .005$ ;  $p < .000$ ) cancel each other out (Table A1; Figure 2).

**Figure 2. Effects of the OLS regression of logarithmised income on accumulated CSC-related absence divided by gender ( $N_{mothers} = 4,197$ ;  $N_{fathers} = 6,860$ ).**

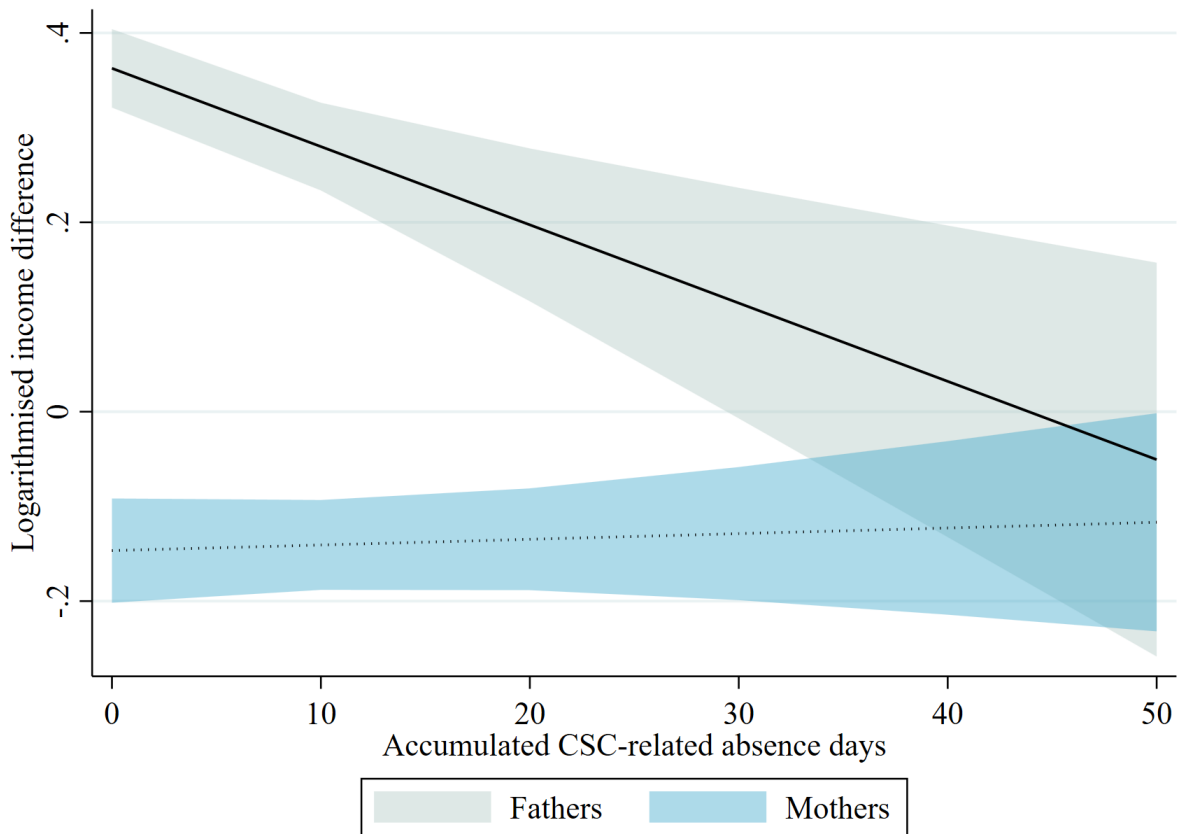


*Note.* Source: SOEP, 2010-2022. Unstandardised regression coefficients and confidence intervals reported. Clustered standard errors at the individual level. Control variables: Sick days, actual working hours, type of last job change, type of work contract, educational degree, EGP, number of children, age of the youngest child, age, age squared, survey year.

### *The association between CSC-related absence and income development*

The results for the analyses using the logarithmised income development over four years as the dependent variable are similar to those of the income intercept (Figure A1). Figure 3 shows the opposite effects of the gender-specific bivariate regression of the logarithmised income development on accumulated CSC-related absence. Again, the model with control variables but without interaction effect between gender and CSC-related absence days did not reveal a significant effect on income development. Including this interaction effect in the model, however, shows that the effect on the income development of fathers is even stronger compared to the income intercept ( $\beta = -.008$ ;  $p < .001$ ), while there is again no effect on the income development of mothers through the reverse interaction effect ( $\beta = .009$ ;  $p = .001$ ) (Table A2; Figure 3).

**Figure 3. Effects of the OLS regression of logarithmised income differences on accumulated CSC-related absence divided by gender ( $N_{mothers} = 4,197$ ;  $N_{fathers} = 6,860$ ).**



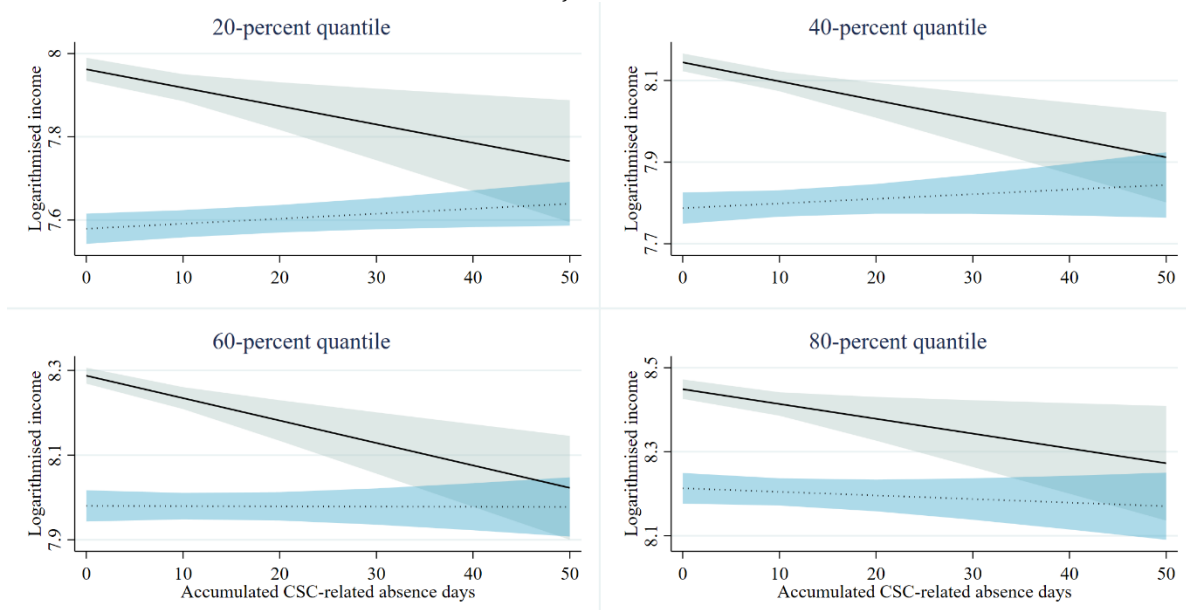
*Note.* Source: SOEP, 2010-2022. Unstandardised regression coefficients and confidence intervals reported. Clustered standard errors at the individual level. Control variables: Sick days, actual working hours, type of last job change, type of work contract, educational degree, EGP, number of children, age of the youngest child, age, age squared, survey year.

*The association between CSC-related absence and income for different income quantiles*

Due to the previous results, only the analyses with interaction effects are presented for the quantile regressions for the 20%, 40%, 60%, and 80% income quantiles. Overall, it can be stated that the differences between the income quantiles in terms of the relationship between income and CSC-related absence days are marginal (Table A3; Figure 4). Only for the 80% quantile does it appear worth mentioning that the interaction effect with gender ( $\beta=.003$ ;  $p=.119$ ) is no longer significant at the 5 percent level. This result does not significantly differ from the other income quantiles. However, it suggests that the assumptions regarding stronger negative signals and consequences of this higher income position do not stand up to empirical scrutiny.



**Figure 4. Effects of the quantile regressions of logarithmised income on accumulated CSC-related absence divided by gender ( $N_{mothers} = 4,197$ ;  $N_{fathers} = 6,860$ ).**



*Note.* Source: SOEP, 2010-2022. Unstandardised regression coefficients and confidence intervals reported. Clustered standard errors at the individual level. Control variables: Sick days, actual working hours, type of last job change, type of work contract, educational degree, EGP, number of children, age of the youngest child, age, age squared, survey year.

## Discussion

Caring for a sick child presents a significant challenge for parents, as it is unpredictable and requires quick adjustments beyond the usual childcare arrangements. At the same time, taking time off work to care for a sick child can have detrimental effects on one's career. We have argued that employers may view absences related to child sickness as a negative signal for an employee's commitment, potentially leading to negative outcomes such as wage penalties, particularly for those who miss work frequently for this reason. These penalties may vary in two important ways. First, CSC-related work absence can be perceived through a gender-specific lens, influenced by gendered expectations in the workplace and societal norms regarding caregiving responsibilities. Second, the possible negative outcomes can be further intertwined with parents' socio-economic status, as these factors often shape employers' perceptions of ideal and committed workers. While there are good reasons to study these issues, to our knowledge, there have been no such investigations in Germany thus far. This research

gap is most likely due to a data gap, which we will get back to later when identifying avenues for further research.

Our study provides some first insights into the negative impact of CSC absence on the incomes of working mothers and fathers in Germany. This impact does not uniformly apply to all parents; thus, H1 does not hold true. Instead, our findings support H3, which posits that fathers experience a negative signalling effect on income the more frequently they use CSC absence days. This aligns with the assumption that employers perceive absenteeism among fathers as a sign of reduced effort and commitment, leading to fewer salary increases or bonuses, adversely affecting their mid-term income trajectory. At the same time, our analysis reveals that mothers are less susceptible to this negative impact, as assumed in H2. This may imply that societal expectation for mothers to take on a larger share of childcare responsibilities mitigates the signals sent to employers when using CSC absence days. These findings raise crucial questions surrounding gender inequality in the workplace, particularly regarding absenteeism caused by the need to care for sick children. If fathers avoid taking on sick child care responsibilities this underpins prevailing societal gender expectations and challenges a more equitable division of child care at home.

The unequal distribution of CSC-related absence days and income between mothers and fathers must also be taken into account when interpreting the results. On average, mothers take three times more child sick days than fathers, while two-thirds of fathers take no child sick days at all. The fact that mothers have a significantly lower income level and only a very specific proportion of fathers are affected by the negative effects of CSC-related absence days offers scope for a further explanation: Parents and especially mothers pay for “family-friendly” jobs by a wage penalty (cf. Fuller & Hirsh, 2019). In terms of signalling theory, one could argue that the signal is already sent when the job is chosen. In other words, a lower wage is bought by a higher acceptance of CSC-related absence - whatever this acceptance is based on.

Another significant aspect highlighted by our study is the impact of socio-economic status on the relationship between absenteeism due to caring for a sick child and parents' income. While we provided arguments for why parents in higher income groups may experience a greater stigma associated with CSC absence, our results do not corroborate our hypothesis H4, nor do they support the gender-specific sub-hypotheses H5 and H6. Our analyses have not yet pinpointed the underlying causes of this issue. It may be that status is irrelevant, as the provision of sick child care is typically perceived as a negative indication of fathers' effort and commitment, regardless of their socio-economic position. Maybe there is a more complex interaction behind it. It is also conceivable that parents in professional roles with higher wages may be able to pursue alternative arrangements for caring for sick children, such as working from home, adjusting their working hours, or utilising private care. This already addresses some aspects that further research should investigate.

With our study, we can shed some light on the complex dynamics between gender, caring for a sick child, and income. Future research should explore the mid-term impacts of child-related absence across various occupational groups and sectors, considering how these impacts differ depending on the time window used to assess mid-term career consequences. Future investigations would also benefit from looking not only at income-related career consequences but also at other potential outcomes, including diminished training opportunities, workplace bullying, and increased criticism, which may vary across different industries, jobs and positions.

Moreover, gaining insights into how parents decide who will stay home with a sick child and how they communicate this decision to their employers is crucial. The number of self-reported CSC days taken for sick child care may significantly underestimate the actual frequency of this issue. It remains unclear when and why parents use fallback strategies, such as calling in sick, coming in late, or leaving early. Understanding these motivations could shed light on parents' awareness of the potential career repercussions associated with their absence due to CSC.

Additionally, it is important to explore which parents are able to reach informal arrangements with their employers, such as flexible working arrangements, as these may provide a way to manage child care for a sick child and mitigate potential negative outcomes. Future research should aim to identify gender-specific differences and assess whether disparities in job resources and positions or societal gender expectations and workplace norms contribute to these outcomes.

It is also essential to provide greater clarity on the employer's perspective. Exploring whether and to what extent employers perceive taking days off for sick child care as a negative signal for employees' effort and commitment is crucial, along with understanding the reasons behind this perception. It is important to consider how this may vary with the gender composition within companies, particularly the dynamics between superiors and employees who share the same or different gender and parent statuses.

To date, no data set has allowed us to address these issues. Considering the sensitive nature of decisions related to sick child care and their potential impact on careers, we recommend employing a mixed-methods design for data collection, which would offer significant advantages. Conducting joint interviews with couples combined with conjoint choice experiments would allow us to gain valuable insights into the undisclosed decision-making processes of couples while considering their resources and the actual and anticipated consequences for their careers. Additionally, standardised interviews — potentially incorporating vignettes — with diverse samples should measure gendered expectations of parents, employers, and society about CSC to better understand the implications of gender roles on the practices of parents and employers, as well as the consequences of CSC on individual careers and workplace dynamics. Such insights could be crucial in shaping targeted policy measures and organisational strategies that support parents' job trajectories and enhance their work-life balance.

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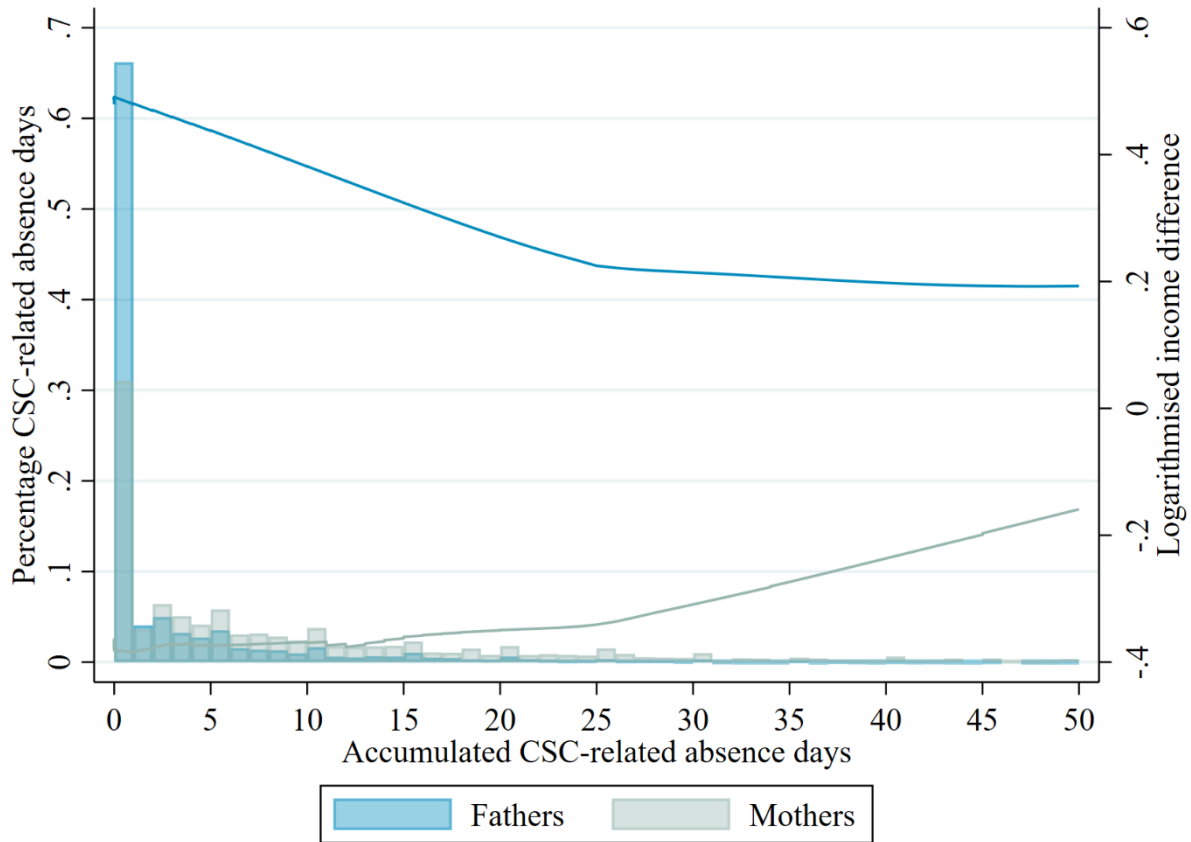
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## Appendix

**Figure A1. Percentage distribution of child sick days and predicted values of logarithmised income differences divided by gender ( $N_{mothers} = 3,835$ ;  $N_{fathers} = 6,259$ ).**



Note. Source: SOEP, 2010-2022. Smoothed distribution of the predicted logarithmised income.

**Table A1. Ordinary Least Squares Regression on Logarithmised Income (N = 11,057).**

	(1)	(2)	(3)
Accumulated CSC-related absence	-.008*** (.001)	-.001 (.001)	-.005*** (.001)
Mothers	-	-.291*** (.020)	-.312** (.022)
Acc. CSC-related absence × Mothers	-	-	.005** (.001)
Sick days	-	.000 (.000)	.000* (.000)
Actual working hours	-	.023*** (.001)	.023*** (.001)
Type of last job change <sup>a</sup>			
Back after interruption -		-.231** (.078)	-.225** (.077)
New employer		-.089*** (.017)	-.090*** (.017)
Taken over by the company		-.118 (.076)	-.125 (.077)
Change within the company		.076** (.027)	.079** (.027)
Type of work contract <sup>b</sup>			
Fixed-term contract	-	-.132*** (.025)	-.128*** (.025)
No regular contract	-	-.151*** (.035)	-.154*** (.034)



Education <sup>c</sup>				
	ISCED 1-2	-	-.360*** (.029)	-.362*** (.029)
	ISCED 3-4	-	-.232*** (.017)	-.232*** (.016)
EGP <sup>d</sup>				
	Unskilled manual workers	-	-.470*** (.024)	-.472*** (.024)
	Skilled manual workers	-	-.345*** (.027)	-.348*** (.027)
	Manual supervisors	-	-.317*** (.022)	-.348*** (.027)
	Routine service class	-	-.305*** (.031)	-.305*** (.031)
	Lower service class	-	-.189*** (.015)	-.189*** (.015)
Private health insurance		-	.249*** (.018)	.253*** (.018)
Number of children in the household		-	-.006 (.007)	-.007 (.007)
Age of the youngest child <sup>e</sup>				
	6-8 years	-	-.026* (.010)	-.028** (.010)
	9-11 years	-	-.046** (.015)	-.048** (.014)
Age		-	.051*** (.011)	.054*** (.011)
Age <sup>2</sup>		-	-.001*** (.000)	-.001*** (.000)
Survey year		-	.017*** (.002)	.018*** (.002)
R <sup>2</sup>			.019	.623
			.623	.625

Note. Source: SOEP, 2010-2022. Unstandardised regression coefficients reported.

Clustered standard errors at the individual level. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  (two-tailed test).

<sup>a</sup>Compared to “no job change”. <sup>b</sup>Compared to “permanent contract”. <sup>c</sup>Compared to ISCED 7-8. <sup>d</sup>Compared to “upper service class”. <sup>e</sup>compared to “<6 years”.

**Table A2. Ordinary Least Squares Regression on Logarithmised Income Differences (N = 11,057).**

	(1)	(2)	(3)
Accumulated CSC-related absence	-.013*** (.002)	-.002 (.001)	-.008*** (.002)
Mothers	-	-.459*** (.036)	-.509*** (.040)
Acc. CSC-related absence × Mothers	-	-	.009** (.003)
Sick days	-	.001** (.000)	.001** (.000)
Actual working hours	-	.027*** (.002)	.026*** (.002)
Type of last job change <sup>a</sup>			
Back after interruption	-	-.243 (.129)	-.234 (.128)
New employer	-	-.123** (.036)	-.124*** (.035)
Taken over by the company	-	-.175 (.179)	-.187 (.180)
Change within the company	-	.100 (.071)	.105 (.071)

Type of work contract <sup>b</sup>			
Fixed-term contract	-	-.177*** (.047)	-.170*** (.047)
No regular contract	-	-.087 (.078)	-.091 (.078)
Education <sup>c</sup>			
ISCED 1-2	-	-.230*** (.058)	-.233*** (.058)
ISCED 3-4	-	-.155*** (.030)	-.156*** (.030)
EGP <sup>d</sup>			
Unskilled manual workers	-	-.457*** (.051)	-.459*** (.051)
Skilled manual workers	-	-.328*** (.052)	-.333*** (.052)
Manual supervisors	-	-.291*** (.040)	-.289*** (.040)
Routine service class	-	-.317*** (.068)	-.318*** (.068)
Lower service class	-	-.220*** (.032)	-.220*** (.032)
Private health insurance	-	.155*** (.037)	.161*** (.037)
Number of children in the household	-	.004 (.015)	.004 (.015)
Age of the youngest child <sup>e</sup>			
6-8 years	-	.016 (.024)	.012 (.024)
9-11 years	-	.039 (.031)	.036 (.031)
Age	-	-.009 (.026)	-.004 (.026)
Age <sup>2</sup>	-	.000 (.000)	.000 (.000)
Survey year	-	-.007 (.004)	-.006 (.004)
R <sup>2</sup>	.019	.293	.294

*Note.* Source: SOEP, 2010-2022. Unstandardised regression coefficients reported. Clustered standard errors at the individual level. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  (two-tailed test).

<sup>a</sup>Compared to “no job change”. <sup>b</sup>Compared to “permanent contract”. <sup>c</sup>Compared to ISCED 7-8. <sup>d</sup>Compared to “upper service class”. <sup>e</sup>compared to “<6 years”. <sup>+</sup> $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  (two-tailed test).

**Table A3. Quantile Regression on Logarithmised Income (N = 11,057).**

	20% quantile	40% quantil	60% quantil	80% quantil
Accumulated CSC-related absence	-.004** (.002)	-.005*** (.001)	-.005*** (.001)	-.004* (.001)
Mothers	-.383*** (.027)	-.357*** (.025)	-.308*** (.023)	-.236*** (.024)
Acc. CSC-related absence × Mothers	.006** (.002)	.006*** (.002)	.005** (.002)	.003 (.002)

*Note.* Source: SOEP, 2010-2022. Unstandardised regression coefficients reported. Clustered standard errors at the individual level. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  (two-tailed test). Control variables: Sick days, actual working hours, type of last job change, type of work contract, educational degree, EGP, number of children, age of the youngest child, age, age squared, survey year.