

**The Stratified Impact of Everyday Unpredictability: A Daily Diary Study on Unexpected Events and Mothers' and Father's Wellbeing**

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### Short abstract

How do unexpected events in everyday life affect parent wellbeing and do socioeconomic factors buffer or exacerbate these effects? While scholars increasingly recognize time as an unequally distributed resource across families, most evidence relates to absolute time (i.e., minutes and hours). This paper moves beyond “clock time” and shifts focus to people’s ability to manage and control time. We do so by studying the unequal consequences of unexpected events in everyday life: children become ill, the washing machine breaks down, or work demands abruptly increase, but not all families are able to manage these events to a similar extent. First, we hypothesize that the extent to which unexpected events trigger distress differs by SES. Various indicators are considered, as higher income may buffer negative effects, whereas demanding work schedules could exacerbate them. Second, we hypothesize that, due to gendered family roles and relative bargaining power, mothers are affected more negatively than fathers, especially in low-SES families. We test these ideas using a recently conducted daily diary study among 256 mothers and fathers from 128 Dutch families. Over 100 days, participants reported via their smartphone on the unexpected events they experienced that day in work, family, and health domains. Using these real-time repeated measures, we were able to perform multilevel modelling to test (1) within-person fluctuations in the wellbeing of mothers versus fathers as triggered by unexpected daily events (*within-level*) and (2) the proportion of variance being explained by socioeconomic differences (*between-level*).

## Extended abstract

### *Research question*

How do daily unexpected events affect the wellbeing of mothers and fathers and to what extent is their vulnerability or resilience to everyday unpredictability stratified?

### *Background*

Although average child wellbeing is rather high in many countries, and in the Netherlands specifically, differences between children are growing (Hudson & Kühner, 2016). To explain these inequalities, scholars increasingly point to a potentially important but long understudied mechanism, namely the role of *time as a resource* (Gerstel and Clawson, 2018). So far, however, most scientific evidence relates to the unequal distribution of absolute time (i.e., the minutes and hours spent on work, home, leisure, e.g., Altintas, 2016). As a result, current knowledge has largely centered around the topic of time scarcity.

We move beyond this focus on “clock time” and instead argue that we should emphasize people’s differing ability to manage, control and negotiate time (Doucet, 2022). After all, some parents can easily rearrange their schedules, leave their workplace or call a babysitter if a child suddenly becomes ill, while others simply have no such option.

In this paper, we aim to capture these dynamics by focusing on the unexpected events mothers and fathers encounter in everyday life and the stratified implications for parents’ daily wellbeing (i.e., stress, positive affect, negative affect). Focusing on unexpected events acknowledges the inherent unpredictability in people’s lives and, importantly, draws attention to how it may have unequal consequences for those involved. Children fall ill, work demands abruptly increase, family members suddenly require help, traffic causes delays, yet not all families are able to manage these disruptions. Our central expectation is that unexpected events may set off a chain of stress and parenting challenges in some families, and for some parents in those families specifically, but not (or not to the same extent) in others.

### *Hypotheses*

Building on these arguments, we expect systematic differences in how families experience and respond to daily unpredictability. We first theorize that the extent to which unexpected events trigger distress among parents varies across socioeconomic factors such as education, income, work hours, and work flexibility. Families from different socioeconomic backgrounds likely differ in the flexibility of parents’ work schedules and childcare divisions, as well as in their access to paid childcare services and grandparent support (Altintas, 2016; Gerstel & Clawson, 2018). These factors are expected to shape the extent to which unexpected events lead to distress. Various indicators should be considered here, as higher income may, for instance, buffer negative effects through increased access to formal support services, whereas demanding work schedules may exacerbate them.

As abilities to manage time may also be unequal within families, we second theorize that mothers are affected by unexpected events more negatively than fathers. This idea is embedded in arguments about gendered normative perceptions of family roles and responsibilities (the “motherhood myth”; Braverman, 1989) and differences in relative resources and bargaining power between mothers and fathers (Gatrell et al., 2013). The flexibility of men’s and women’s time may therefore be (perceived as) different, producing gender discrepancies in how parents respond to unexpected events. Moreover, this gender gap

is likely to be particularly pronounced families with fewer financial and temporal resources, because limited resources restrict parents' ability to buffer disruptions and reinforce traditional gender divisions in how such disruptions are managed.

Overall, we expect that unexpected events have implications for parent wellbeing, and that these implications intensify as events are more unexpected and place greater demands on a person's ability to manage, control, and negotiate time. We also expect that the extent of these implications depends on socioeconomic characteristics and gender, reflecting inequalities both between and within families. This leads us to the following set of hypotheses:

- **H1.** *On days when parents experience an unexpected event, their daily affect will be lower compared to days without such events. The more unexpected an event, the stronger its negative implications.*
- **H2.** *Mothers will experience stronger declines in daily affect in response to unexpected events than fathers.*
- **H3.** *The size of daily affect fluctuations in response to an unexpected event will vary by socioeconomic status: those with higher income, higher education, or more flexible work conditions will experience weaker declines in wellbeing.*
- **H4:** *The gender gap in the impact of unexpected events on daily affect will be largest in families with fewer financial and temporal resources to buffer disruptions.*

#### *Data*

Opportunities to test these ideas have long been limited, as it requires intensive longitudinal data including reports from both mothers and fathers from the same families. To address this, we recently conducted a 100-day daily diary study among 256 mothers and fathers from 128 families in the Netherlands. Over a period of 100 consecutive days, these parents completed a brief daily questionnaire on their smartphones, reporting on unexpected events they encountered in the domains of work, family, and health, as well as their levels of stress and positive and negative affect that day. Respondents could report any event, as long as it was in some way unexpected. For each reported event, participants were asked to describe the event, indicate how stressful and unexpected it was, and report which coping strategies they used. Examples of reported events range from “*my son needed to go to the hospital*” or “*my dad called me for emotional support, this hardly ever happens,*” to “*I accidentally burned tonight's dinner.*”

The daily diary study was embedded within the ongoing 3HOEK survey, a longitudinal panel among families in the Netherlands. 3HOEK is based on a stratified sample in which half of the families were of lower SES (neither parent has more than intermediate vocational training) and the other half of higher SES (at least one of the parents obtained higher vocational training or [post] university degree). Recruitment involved re-approaching the original 3HOEK families and inviting new families who wished to participate. Eligible families had at least one child aged 8 to 11, and participation required that the mother and father were together and that both were willing to take part to reduce the common risk of low paternal participation in family research.

All participants first completed the baseline questionnaire (February 2025), after which they entered the 100-day diary phase (March-June 2025). We developed a custom 3HOEK app that allowed respondents to fill in their survey each evening between 20:00 and 02:00 and to view their personalized virtual wallet. Participants received 1 euro for each completed daily survey, a bonus of 5 euros for every 10-day streak, and an additional 50-euro bonus for completing at least 90 days. We achieved an exceptionally high compliance rate: a total of

22,890 sessions were completed out of 25,600 possible, yielding an overall response rate of 89.4%. This means that, on average, participants completed 89 out of 100 daily diaries.

### *Method*

Using these real-time, repeated measures, we can perform multilevel models of daily wellbeing with days nested in parents nested in families (Myin-Germeys & Kuppens, 2022). This structure allows us to separate *within-level* fluctuations in daily stress, positive affect, and negative affect as triggered by unexpected events from *between-level* differences associated with gender and socioeconomic factors. We perform several stepwise models in *Mplus* to test our hypotheses.

First, we estimate baseline models to assess the within-person association between daily unexpected events and wellbeing (H1). Next, we include cross-level interactions to test whether this association differs by gender (H2) and socioeconomic indicators (H3). Finally, we add three-way interactions between unexpected events, gender, and socioeconomic indicators to assess whether the gender gap in the impact of unexpected events is strongest in families with fewer resources (H4). We first run this series of models to answer whether any event occurring has stratified implications for daily wellbeing, regardless of domain, after which we will continue with models for events in the work, home, and health domains separately. In all models, we accounted for serial correlation by specifying an AR(1) residual structure and included the lagged effect of stress<sub>*t-1*</sub> on stress<sub>*t*</sub>. Model fit statistics indicated good fit for the full model predicting within-person fluctuations in stress.

### *Preliminary results for stress*

Parents' stress levels were significantly higher on days when they experienced any unexpected events, averaging about 1.12 points above their own typical baseline ( $p < .001$ ). Yesterday's stress also predicted today's stress, with approximately 25% of stress carrying over to the next day ( $p < .001$ ). The intraclass correlation (ICC) indicated that roughly 65% of the total variation in daily stress occurred within parents across days, while 35% reflected stable between-parent differences. Beyond that, parents also differed meaningfully in how strongly their stress levels responded to unexpected events, as evidenced by significant random slope variance for event reactivity ( $\sigma^2 = 0.61$ ). This means that, while some parents were minimally affected by daily unpredictability, others faced much greater stress increases, encouraging further exploration of which between-person factors may explain this heterogeneity.

Mothers reported somewhat higher overall stress than fathers, yet the daily stress response to unexpected events did not significantly differ by gender ( $b = 0.02, p = .86$ ). In contrast, a significant interaction between daily unexpected events and household income indicated that parents with higher income showed a smaller stress increase following unexpected events ( $b = -0.06, p = .045$ ). A similar pattern was found for education. It should be noted, however, that these cross-level interactions explained only a small additional share of the between-person heterogeneity in event reactivity (~4% and ~3% each respectively), suggesting that educational and income differences modestly account for why some parents react more strongly to everyday unpredictability than others. None of the other cross-level interactions with socioeconomic factors reached statistical significance.<sup>2</sup>

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<sup>2</sup> Stress was measured on a 1 (*no stress*) to 10 (*extreme stress*) scale. Gender was coded as 1 for females. Household income was measured on a 1-10 scale. Education was coded as 0 (*practically trained*) and 1 (*theoretically trained*).

### *Future plans*

The above results form an illustration the analytical possibilities of our daily diary data. Next steps include exploring positive and negative daily affect as additional outcome measures and disaggregating results by event domain. For the full paper, we intend to distinguish the analyses by *type of event*, as stratified implications by gender and SES may particularly emerge in some domains but not others, potentially cancelling each other out in the overall analyses. A first exploration indicates that, while there is no gender contrast in the stress response to personal work-related or health-related events, mothers experience substantially higher stress than fathers in response to practical or logistical disruptions (e.g., domestic schedule changes, sudden household repairs), whereas fathers report higher stress than mothers when partner-related events occur (e.g., partner being ill). Moreover, financial resources appear to buffer the impact of child-related and logistical events, though not others, while unexpected events related to personal health are less impactful when work flexibility is higher.

### *References*

- Altintas, E. (2016). The widening education gap in developmental child care activities in the United States, 1965–2013. *Journal of Marriage and Family*, 78(1), 26-42.
- Braverman, L. (1989). Beyond the Myth of Motherhood. In M. McGoldrick, C. Anderson, & F. Walsh (Eds.), *Women in Families: A Framework for Family Therapy* (pp. 227-243). New York.
- Doucet, A. (2022). “Time is not time is not time”: A feminist ecological approach to clock time, process time, and care responsibilities. *Time & Society*, 0961463X221133894
- Gerstel, N., & Clawson, D. (2018). Control over time: Employers, workers, and families shaping work schedules. *Annual Review of Sociology*, 44, 77-97.
- Hudson, J., & Kühner, S. (2016). *Fairness for Children: A League Table of Inequality in Child Well-Being in Rich Countries*. Innocenti Report Card 13. *UNICEF*.
- Myin-Germeys, I., & Kuppens, P. (2022). *The open handbook of experience sampling methodology*. Second edition.