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## Work-Family Reconciliation Policies and the SES Gradient in Children's Well-Being

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#### ABSTRACT

Recent work has documented associations between socioeconomic health disparities and variation in national economic and institutional contexts. However, any direct role of work-family policy for reducing socioeconomic disparities in children's well-being remains unclear. Developmental-ecological theories recommend the empirical investigation of links between parents' work arrangements and children's well-being, especially in the case of family poverty or severe disadvantage. We utilize country-level data on work-family reconciliation policies, merged with individual-level data on children's mental and physical well-being and family economic disadvantage (2006 and 2010 rounds of the Health Behaviour in School-Aged Children (HBSC) survey). In adjusted models, we find robust evidence consistent with narrowing of poverty well-being gaps by parental and vacation-sick leave mandates, consistent with a critical-period model of child development. Country-level flexible work arrangements also track with narrowed children's well-being gaps, suggesting that work-family reconciliation policies have utility for children's health disparities beyond the early years.

### Work-Family Reconciliation Policies and the SES Gradient in Children's Well-Being

Differences in health by socioeconomic status are an unfortunate hallmark of economically rich societies (Elo 2009). However, these differences or disparities vary considerably across nations, and the sources of this variation remain unclear. While some work finds reduced socioeconomic health disparities in nations with higher levels of general economic development or social expenditures, results are mixed overall (Beckfield et al. 2013). These broad economic variations limit our traction for understanding mechanisms, as particular policies and institutions still vary amply at general levels of development or provision.

In addition to a lack of explicit understanding about how policy levers can intervene in health disparities, work to date on cross-national differences in socioeconomic health disparities is marked by an insufficient separation of economic privilege or advantage from poverty or extreme disadvantage, as well as an incomplete study of well-being dynamics within families. Being poor or severely disadvantaged as a child carries particularly deep and accumulating consequences for well-being across the remaining life course — and family disadvantage is mostly or largely responsible for health disparities occurring across the entire socioeconomic spectrum (Fitzsimons et al. 2017; Montez and Hayward 2011; Moor et al. 2015; Turney et al. 2013). Thus, rates of poverty or severe disadvantage are quite useful for understanding cross-national socioeconomic health differences. Moreover, developmental-ecological perspectives highlight children's susceptibility to the parental stress engendered by severe disadvantage (Bronfenbrenner and Morris 2005; Conger and Donnellan 2007).

In this study, we draw on unique comparative data on children's well-being, to better understand policy-based variation in the SES gradient of children's well-being. Using nation-level measures, we focus on work-family reconciliation policies such as paid leave, work schedule flexibility, and unemployment benefits, due to their direct relevance to shaping parental economic stress and, by implication, children's well-being (Conger and Donnellan 2007; Kamp-Dush et al. 2013; Li et al. 2008). While well-being disparities are sometimes reduced in strong welfare states, the policy components driving this reduction are less clear, as are the consequences for children growing up in poverty. Because childhood contains critical periods of development affecting future health and longevity, vulnerable children arguably represent the group for whom policy investments would reap the greatest rewards in terms of savings on lifelong health care or rehabilitation expenses (Heckman 2006).

### BACKGROUND

Landmark improvements in public health, economic opportunity, and modern medicine drove average levels of population health upward during the twentieth century within developed nations, but inequalities in health by socioeconomic status have not subsided, and in fact have grown stronger for many forms of health (Mackenbach et al. 2017; Masters et al. 2012; Sasson 2016). Increasingly, researchers are turning to comparative studies to better illuminate the potential causes of durable and rising health inequalities, but with limited success. Part of this forestalled insight seems to stem from the fact that general economic and welfare provision differences across nations carry mixed and often difficult-to-understand associations with macro health disparities (Olafsdottir and Beckfield 2011). They leave more granular policy determinants of health unclear in many cases.

Other factors limiting our understanding of policy-based health disparities across nations are conceptualization of socioeconomic status and a prevailing focus on isolated individuals rather than families. Poverty or severe economic disadvantage is largely responsible for driving health inequalities (Fitzsimons et al. 2017; Montez and Hayward 2011; Moor et al. 2015; Turney et al. 2013). Moreover, higher levels of advantage or disadvantage, even measured by a commonly accepted system such as university educational attainment, may carry widely differing consequences across nations with widely differing economic disadvantage not only seems to have relatively more consensus in universal measurement across nations but also is responsible for a disproportionate amount of total, population-wide health problems. Thus, comparative research on health disparities may stand to gain the most by first establishing which policy contexts alleviate poverty or socioeconomic disadvantage. But while monetary policies such as cash transfers may be successful in reducing baseline rates of poverty (Blattman et al. 2018), *disparities* in health *by* socioeconomic status also carry a second-moment set of determinants that needs to be evaluated and acted upon separately (Olafsdottir and Beckfield 2011).

While socioeconomic health disparities stem mostly from poor health among those living in poverty, children are particularly socially and developmentally vulnerable to poverty, and disadvantages experienced early in life accumulate to produce particularly strong inequalities in health in later life (Heckman 2006; Montez and Hayward 2011). Among adults, there is some evidence that general levels of economic or public expenditures can reduce socioeconomic health gradients in some documented cases (e.g., Blom et al. 2016; Mackenbach et al. 2008; Olafsdottir et al. 2014; Stirbu et al. 2010; von dem Knesebeck et al. 2006) but proximal policy determinants remain quite unclear (Mackenbach et al. 2015).

Empirical evidence on the role of work-family policies for disparities in children's well-being is essentially absent. Most work to date focuses on macro determinants of children's health disparities such as income inequality or school- or neighborhood-level resources (e.g., Due et al. 2009; Goodman et al. 2003; Kim and Hagquist 2018; Kimbro and Denney 2013). Yet income inequality possesses highly complex associations with population health disparities, making health interventions quite difficult (Truesdale and Jencks 2016), while effects of schools and neighborhoods occur within larger policy contexts and ultimately are filtered through family and parental processes as well.

Using a family stress model, parent-child relationships and child development suffer under family economic disadvantage (Conger and Donnellan 2007; Currie and Goodman 2010), not only because of material hardships impacting food or housing, but also because financial strain leads to parental stress and emotional and behavioral problems. These in turn undermine parents' ability to provide nurturing or involved parenting consistently. While policies cannot be expected to erase the numerous, multifaceted difficulties associated with socioeconomic disadvantage, they can quite possibly provide parents with more time and freedom for quality parenting and can ease economic burdens somewhat by reducing income lost when taking time off (Glass, Simon, and Andersson 2016; Li et al. 2008). Especially during infancy, parental stress relief may

be tremendously beneficial for children's rapid emotional, social, and cognitive development, in ways that become neurologically or biologically embedded and thus carry durable consequences for the remaining life course (Conti and Heckman 2010; Montez and Hayward 2011). Thus, parent-friendly policies like paid maternal or parental leave, taken around the time of birth, may be especially beneficial for children's well-being, as they mitigate or lessen some of the devastating developmental consequences normally seen with family poverty. Bonds between parents and children take shape rapidly in the first months of development, at the time when paid leaves normally are taken. After the first years of life, flexible work arrangements and paid time off may continue to provide possibilities for parents spending more and better-quality time with their children. Thus, other policies, such as family benefits or transfers, establishment-level work flexibility, or unemployment generosity, may also make a difference for disparities in children's well-being, assuming they mitigate economic strain and improve parent-child relationships.

## OVERVIEW OF THE PRESENT STUDY

In the present project, we investigate whether and to what extent work-family reconciliation policies narrow socioeconomic disparities in children's well-being. To do so, we merge country-level data on various work-family reconciliation policies with individual-level data on children's mental and physical well-being and family socioeconomic disadvantage. By considering an array of work-family policies relevant to parental roles as well as work flexibility and unemployment benefits more broadly, we adjudicate among distinct theoretical perspectives on parental involvement and children's well-being that emphasize critical developmental periods early in life or parental involvement across the entire childhood more generally.

## DATA

Country-level data were pooled from a variety of sources including the OECD database and Comparative Welfare Entitlements Dataset (CWED), with a focus on policies related to vacation and sick leave, paid maternity leave, flexibility in work hours and schedule, family benefits public spending, and generosity in unemployment benefits. To ensure adequate time between the measurement of policies and their expected impact on child health and well-being, each policy variable is constructed according to the policy details in effect in each country in 2000, creating an average lag of eight years. Policy specifics and their sources are detailed more below.

Individual-level data were derived from the 2006 and 2010 rounds of the Health Behaviour in School-Aged Children (HBSC) study. The HBSC is a cross-national, representative survey focused on the health and well-being, health behaviors, and social environments of boys and girls ages 11, 13, and 15. More information on the HBSC can be found at their website (http://www.hbsc.org).

#### MEASURES

#### Dependent Variables: Child Health and Well-Being

*Psychological health complaints*. In the HBSC, respondents recorded the frequency of 1) feeling low and 2) irritability or bad temper within the previous 6 months. Responses categories were ranged from 0 (*rarely or never*) to 4 (*about every day*). Responses to the two questions were averaged to create a single measure of the frequency of psychological health complaints.

*Life satisfaction.* For life satisfaction, respondents were asked to indicate where they felt their life was at the moment based on a picture of a ladder, with the top of the ladder indicating the best possible life and the bottom indicating the worse possible life. Responses ranged from 0 to 10, with higher values indicating higher life satisfaction.

*Self-rated health.* Respondents were asked to rate their current health across the following categories: 1) poor, 2) fair, 3) good, and 4) excellent. Responses were dichotomized such that 1 indicates fair or poor health and 0 indicates good or excellent health.

### Country-Level Independent Variables

*Combined paid vacation and sick leave.* Data on number of weeks of available vacation and sick leave were pooled from multiple sources (International Labour Organization 2001; International Social Security Association 2002, 2003; Jorgensen 2002; Gornick and Meyers 2003; Ray, Gornick, and Schmitt 2009; Rho et al. 2009; Glass, Andersson, and Simon 2016). The final indicator represents the average number of paid weeks (as determined by government policies) for vacation and sick leave.

*Work flexibility*. Our measure of work flexibility is derived from the OECD Family Database (2000) and focuses on flexibility in working time not necessarily tied to a reduction in overall work hours. Specifically, work flexibility is measured at the country level as the proportion of establishments or companies providing either 1) the ability to vary start and end times of daily work or 2) the possibility to accrue hours for time off. Establishments counted towards this percentage must employ at least 10 workers, with the agriculture sector not included. More information on this measure can be found at: http://www.oecd.org/els/family/LMF\_2-4-Family-friendly-workplace-practices.pdf.

*Paid leave available to mothers.* We measure paid leave available to mothers, or maternity leave, based on data identifying country-level policy mandates (e.g., International Labour Organization 2001; Kamerman and Kahn 2004; Council of Europe 2009). Our maternity leave indicator represents the sum of the total weeks of unique paid leave to mothers plus any additional standard parental leave available to either parent.

*Family benefits public spending*. Our measure of family benefits public spending (OECD 2018) refers to total public spending on family benefits, including cash benefits and benefits in kind, and is measured in percentage of GDP. Specifically, this indicator includes: 1) child-related cash transfers, or cash benefits, to families with children, 2) public income support payments during

parental leave, and 3) income support for sole-parent families. More information on this indicator is available at: https://data.oecd.org/socialexp/family-benefits-public-spending.htm.

*Unemployment generosity*. Unemployment generosity is based on data from the Comparative Welfare Entitlements Dataset (CWED 2; http://cwed2.org/). This single-item measure of unemployment generosity combines information from five indicators of unemployment: 1) level of benefits paid to the unemployed (replacement rate), 2) qualifying period, 3) duration of benefits payments, 4) waiting period before entitlement, and 5) percentage of the working-age population covered by the program. Values for replacement rate, qualifying period, benefit duration, and waiting period are first summed and then multiplied by the coverage ratio to create the unemployment generosity indicator (Scruggs and Allan 2006; Scruggs 2008; Buffel et al. 2017).

*Comprehensive policy index.* Since work-family reconciliation policies may be most impactful on child health and well-being as a collective rather than alone, we created a four-item comprehensive policy index based on paid maternity leave, paid vacation and sick leave, work flexibility, and family benefits public spending. To calculate this index, we converted each policy measure to a percentage score relative to the highest-scoring country. These percentages were then summed to create our comprehensive policy index (CPI). Countries missing on any of the four policy measures did not receive a CPI value.

## Individual-Level Independent Variables

*Family disadvantage*. Our measure of socioeconomic status in the form of family disadvantage is based off the HBSC-developed family affluence scale (FAS). FAS has been found to have strong validity as a proxy for SES, especially when examining adolescent health (Mullan and Currie 2000; Boyce and Dallago 2004; Boyce et al. 2006) and has been linked to specific adolescent health outcomes such as self-rated health (Moor et al. 2014), health complaints, physical activity, and smoking (Holstein et al. 2004). FAS is constructed based on responses to the following questions:

1) Does your family own a car, van or truck? No (0), Yes, one (1), Yes, two or more (2)

2) Do you have your own bedroom for yourself? No (0), Yes (1)

3) During the past 12 months, how many times did you travel on holiday with your family? Not at all (0), Once (1), Twice (2), More than twice (3)

4) How many computers does your family own? None (0), One (1), Two (2), More than two (3)

Following Currie et al. (2004), the two highest response categories for both *holiday travel* and *computer ownership* were collapsed, creating a composite FAS score ranging from 0 to 7. Responses were then categorized along the following three-point ordinal scale: FAS low (score = 0-3), FAS moderate (score = 4, 5), and FAS high (score = 6, 7). Finally, since FAS has been described as a marker of deprivation in the context of health variation (Boyce et al. 2006), we dichotomized the FAS indicator such that 1 corresponds to low FAS (i.e. high family disadvantage). To justify this configuration, we compiled country-specific OECD childhood poverty rates from 2005 to 2010 and found that our measure of family disadvantage was comparable.

## Country- and Individual-Level Sociodemographic Covariates

2005 Gross domestic product. GDP per capita was taken from the World Bank database (World Bank 2005) and is expressed in thousands of 2005 U.S. dollars. We include this basic economic measure as a country-level control since economic development may influences both policy and child health and well-being (e.g., Beckfield 2006).

2005 Total fertility rate. To control for selection into parenthood in each country, we include the 2005 total fertility rate (TFR) obtained from the OECD Family Database (OECD 2005).

*Individual sociodemographic controls.* We also control for the following individual-level sociodemographic characteristics: *gender* (girl = 1), *age* (in years), *total number of siblings*, and *family structure*. For *family structure*, respondents were coded as being in either a two-parent, one-parent, or other-home type. Biological and step parents were included in our coding scheme.

## ANALYTIC STRATEGY

We model the effects of national policies on child health and well-being, with particular attention to whether and how SES-health gradients narrow (or widen) across policy contexts. We employ multiple linear regression to explore variation in child psychological complaints and life satisfaction across policy contexts, while self-rated health is modeled using logistic regression. All models are clustered by country to account for the nonindependence of observations at the country-level. Since influential observations can hinder small N analyses (van der Meer et al. 2010), we first identified bivariate country outliers using DFBETAS procedures up to four iterations (see Appendix Figure 1).

Each child health outcome was first regressed on policy and family disadvantage, while controlling for country- and individual-level sociodemographic measures to model the main effects of both policy and family disadvantage on child health and well-being. Next, policies were interacted with family disadvantage to reveal SES differences in the effect of policy on child health and well-being. All policy measures were cut into quintiles and grand-mean centered to obtain more stable policy estimates as well as aid in interpretation by providing a universal metric across policies.

Future analyses will employ two- and three-level hierarchical linear models, to establish robustness to assumptions about data and respondent nesting.

# RESULTS

## Descriptive Results

Table 1 present descriptive statistics for the total sample while Table 2 presents policy specifics for each country. Of the 20 countries examined, Sweden is the most generous in terms of work-family reconciliation policies with a CPI value of 3.27 (theoretical range 0-4). Conversely, the

United States offers the least generous policies, with a CPI value of .39. Table 3 illustrates the differences in child health outcomes by family disadvantage status for each country. Across all countries, respondents with high family disadvantage report higher average psychological health complaints, lower life satisfaction, and higher proportions of fair/poor self-rated health than respondents with low family disadvantage.

## Preliminary Key Findings

Results exploring the effects of policy on child health outcomes are presented in Table 4. Results are modeled separately by policy and health outcome, with Model 1 presenting the main effects of policy and family disadvantage on child health outcomes. Model 2 adds an interaction between policy and family disadvantage to explore whether policies narrow or widen the SES-health gradient for child health outcomes.

*Main effects - policy and family disadvantage*. In looking at the main effects of each policy (Model 1), we find that unemployment generosity significantly decreases average psychological health complaints (b = -.10; p < .05), while vacation and sick leave (b = -.11; p < .05) and work flexibility (b = -.13; p < .05) decrease the log-odds of reporting fair/poor health. Conversely, family benefits public spending (b = .27; p < .001) and unemployment generosity (b = .14; p < .10) increase the log-odds of reporting fair/poor health. Family disadvantage is significant and operates in the expected direction across all health outcomes.

Interaction effects - policy by family disadvantage. Turning to the interaction between policy and family disadvantage, we find that both work flexibility and CPI narrow the disadvantage gap for psychological health complaints. For each unit increase in policy, the effect of family disadvantage on psychological health complaints decreases by .04 units for work flexibility (p < .05) and CPI (p < .05). For life satisfaction, we find that vacation and sick leave also narrows the disadvantage gap (b = .05; p < .10), while maternity leave appears to widen the gap, with every unit increase in maternity leave corresponding to an additional .06 unit decrease in life satisfaction (p < .05). For self-rated health, we find significant interactions between family disadvantage and both vacation and sick leave and work flexibility. For each unit increase in policy, the effect of family disadvantage on the log-odds of reporting fair/poor health decreases by .11 units for vacation/sick leave (p < .05) and .08 units for work flexibility (p < .01).

Figure 2 highlights a subsample of these results by showing the narrowing of the SES-health gradient across policy levels. Overall, our results indicate that while policies generally have little direct effect on child health, they do contribute to improved child health by narrowing the SES-health gradient for psychological health complaints, life satisfaction, and self-rated health. In other words, in countries with generous work-family reconciliation policies, the adverse effects of disadvantage on child health are significantly weakened. These results are especially evident for policies aimed towards vacation and sick leave and work flexibility.

#### REFERENCES

Beckfield, Jason. 2006. "European Integration and Income Inequality." *American Sociological Review* 71:964–85.

Beckfield, Jason, Sigrun Olafsdottir and Benjamin Sosnaud. 2013. "Healthcare Systems in Comparative Perspective: Classification, Convergence, Institutions, Inequalities, and Five Missed Turns." *Annual Review of Sociology* 39:127-46.

Blom, Niels, Tim Huijts and Gerbert Kraaykamp. 2016. "Ethnic Health Inequalities in Europe: The Moderating and Amplifying Role of Healthcare System Characteristics." *Social Science & Medicine* 158:43-51.

Boyce, William, and Lorenza Dallago. (2004). Socioeconomic inequality. In WHO. (Ed.), *Young people's health in context*. Health Behaviour in School-aged Children study: international report from the 2001/2002 survey.

Boyce, William, Torbjorn Torsheim, Candace Currie, and Alessio Zambon. 2006. "The Family Affluence Scale as a Measure of National Wealth: Validation of an Adolescent Self-Report Measure." *Social Indicators Research* 78(3):473–87.

Blattman, Christopher, Nathan Fiala and Sebastian Martinez. 2018. "The Long Term Impacts of Grants on Poverty: 9-Year Evidence from Uganda's Youth Opportunities Program." NBER Working Paper 24999.

Bronfenbrenner, Urie and Pamela A. Morris. 2005. "The Bioecological Model of Human Development." Pp. 3-15 in *Making Human Beings Human: Bioecological Perspectives on Human Development*, edited by Urie Bronfenbrenner. Thousand Oaks, CA: Sage.

Buffel, Veerle, Jason Beckfield, and Piet Bracke. 2017. "The Institutional Foundations of Medicalization: A Cross-National Analysis of Mental Health and Unemployment." *Journal of Health and Social Behavior* 58(3):272–90.

Conger, Rand and M. Brent Donnellan. 2007. "An Interactionist Perspective on the Socioeconomic Context of Human Development." *Annual Review of Psychology* 58:175-99.

Conti, Gabriella and James J. Heckman. 2010. "Understanding the Early Origins of the Education-Health Gradient: A Framework That Can Also Be Applied to Analyze Gene-Environment Interactions." *Perspectives on Psychological Science* 5:585-605.

Council of Europe. 2009. "Reconciliation of Work and Family Life." Family Policy Database. http://www.coe.int/familypolicy/database. Accessed September 23, 2013.

Currie, Candace et al. 2004. *Young People's Health in Context*. World Health Organization Regional Office for Europe.

Currie, Janet and Joshua Goodman. 2010. "Parental Socioeconomic Status, Child Health, and Human Capital." Pp. 253-259 in *International Encyclopedia of Education*, Vol. 2.

Due, Pemille, Juan Merlo, Yossi Harel-Fisch et al. 2009. "Socioeconomic Inequality in Exposure to Bullying During Adolescence: A Comparative, Cross-Sectional, Multilevel Study in 35 Countries." *American Journal of Public Health* 99:907-914.

Elo, Irma. 2009. "Social Class Differentials in Health and Mortality: Patterns and Explanations in Comparative Perspective." *Annual Review of Sociology* 35:553-572.

Fitzsimon, Emla, Alissa Goodman, Elaine Kelly and James P. Smith. 2017. "Poverty Dynamics and Parental Mental Health: Determinants of Childhood Mental Health in the UK." *Social Science & Medicine* 175:43-51.

Glass, Jennifer, Robin W. Simon, and Matthew A. Andersson. 2016. "Parenthood and Happiness: Effects of Work-Family Reconciliation Policies in 22 OECD Countries." *AJS; American Journal of Sociology* 122(3):886–929.

Goodman, Elizabeth, Bin Huang, Terrance J. Wade, and Robert S. Kahn. 2003. "A Multilevel Analysis of the Relation of Socioeconomic Status to Adolescent Depressive Symptoms: Does School Context Matter?" *Journal of Pediatrics* 143:451-456.

Gornick, Janet, and Marcia Meyers. 2003. Families That Work: Policies for Reconciling Parenthood and Employment. New York: Russell Sage.

Heckman, James J. 2006. "Skill Formation and the Economics of Investing in Disadvantaged Children." *Science* 312:1900-1902.

Holstein, Bjørn, Nina Parry-Langdon, Alessio Zambon, Candace Currie and Chris Roberts. (2004). Socioeconomic inequalities and health. In WHO. (Ed.), *Young people's health in context*. Health Behaviour in School-aged Children study: international report from the 2001/2002 survey.

International Labour Organization. 2001. "National Labour Law Profiles." http://www.ilo.org/ ifpdial/information-resources/national-labour-law-profiles/lang-en/index.htm.

International Social Security Association. 2002. "Social Security Programs throughout the World: Europe." https://www.ssa.gov/policy/docs/progdesc/ssptw/2002-2003/europe/ index.html

------. 2003. "Social Security Programs throughout the World: The Americas." http:// www. ssa.gov/policy/ttps://www.ssa.gov/policy/docs/progdesc/ssptw/index.html.

Jorgensen, H. 2002. "Give Me a Break: The Extent of Paid Holidays and Vacation." Briefing paper. Center for Economic and Policy Research, Washington, D.C.

Kamerman, Sheila B., and Alfred J. Kahn. 2004. "Maternity, Paternity, and Parental Leaves in the OECD Countries, 1998–2002." Clearinghouse on International Developments in Child, Youth and Family Policies at Columbia University.

Kamp-Dush, Claire M., Kammi K. Schmeer and Miles Taylor. 2013. "Chaos as a Social Determinant of Child Health: Reciprocal Associations?" *Social Science & Medicine* 95:69-76.

Kapteyn, Arie. 2010. "What Can We Learn from (and about) Global Aging?" *Demography* 47:S191-S209.

Kim, Yunhwan and Curt Hagquist. 2018. "Mental Health Problems among Economically Disadvantaged Adolescents in an Increasingly Unequal Society: A Swedish Study Using Repeated Cross-Sectional Data from 1995 to 2011." *SSM – Population Health* 6:44-53.

Kimbro, Rachel Tolbert and Justin T. Denney. 2013. "Neighborhood Context and Racial/Ethnic Differences in Young Children's Obesity: Structural Barriers to Interventions." *Social Science & Medicine* 95:97-105.

Li, Jianghong, Anne McMurray and Fiona Stanley. 2008. "Modernity's Paradox and the Structural Determinants of Child Health and Well-Being." *Health Sociology Review* 17:64-77.

Mackenbach, Johan P. et al. 2008. "Socioeconomic Inequalities in Health in 22 European Countries." *New England Journal of Medicine* 358:2468-2481.

Mackenbach, Johan P., Ivana Kulhánová, Matthias Bopp, Patrick Deboosere, Terje A. Eikemo et al. 2015. "Variations in the Relation Between Education and Cause-Specific Mortality in 19 European Populations: A Test of the 'Fundamental Causes' Theory of Social Inequalities in Health." *Social Science & Medicine* 127:51-62.

Mackenbach, Johan P., Caspar W.N. Looman, Barbara Artnik, Matthias Bopp, Patrick Deboosere, Chris Dibben et al. 2017. "Fundamental Causes' of Inequalities in Mortality: An Empirical Test of the Theory in 20 European Nations." *Sociology of Health & Illness*. Advance online publication: doi: 10.1111/1467-9566.12562

Masters, Ryan K., Robert A. Hummer, Daniel A. Powers. 2012. "Educational Differences in U.S. Adult Mortality: A Cohort Perspective." *American Sociological Review* 77:548-572.

Montez, Jennifer Karas and Mark D. Hayward. 2011. "Early Life Conditions and Later Life Mortality." Pp. 187-206 in *International Handbook of Adult Mortality*, edited by R.G. Rogers and E.M. Crimmins. New York: Springer.

Moor, Irene et al. 2014. "Psychosocial and Behavioural Factors in the Explanation of Socioeconomic Inequalities in Adolescent Health: A Multilevel Analysis in 28 European and North American Countries." *Journal of Epidemiology and Community Health* 68(10):912.

Moor, Irene et al. 2015. "Trends in Social Inequalities in Adolescent Health Complaints from 1994 to 2010 in Europe, North America and Israel: The HBSC Study." *European Journal of Public Health* 25:57-60.

Mullan, E. and C. Currie. 2000. "Socioeconomic Inequalities in Adolescent Health." *Health and Health Behaviour in Young People. Copenhagen, Den: World Health Organization* 65–72.

OECD (Organization for Economic Cooperation and Development). 2000. "Family-Friendly Workplace Practices." OECD Family Database. http://www.oecd.org/els/family/database.htm.

OECD. 2018. "Family benefits public spending (indicator)". OECD Family Database. https://data.oecd.org/socialexp/family-benefits-public-spending.htm

OECD. 2005. "Fertility rates". OECD Family Database. http://www.oecd.org/els/family/database.htm.

Olafsdottir, Sigrun and Jason Beckfield. 2011. "Health and the Social Rights of Citizenship: Integrating Welfare-State Theory and Medical Sociology." Pp. 101-115 in *Handbook of the Sociology of Health, Illness, and Healing*, edited by Bernice A. Pescosolido. New York: Springer.

Olafsdottir, Sigrun, Elyas Bakhtiari and Emily Barman. 2014. "Public or Private? The Role of State and Civil Society in Health and Health Inequalities Across Nations." *Social Science & Medicine* 123:174-181.

Ray, Rebecca, Janet Gornick, and John Schmitt. 2009. "Who Cares? Assessing Generosity and Gender Equality in Parental Leave Policy Designs in 21 Countries." *Journal of European Social Policy* 19:196–214.

Rho, Hye Jin, John Schmitt, Alison Earle, and Jody Heymann. 2009. "A Review of Sickness-Related Leave in 22 High Human Development Index Countries." Center for Economic and Policy Research, Washington, D.C.

Sasson, Isaac. 2016. "Trends in Life Expectancy and Lifespan Variation by Educational Attainment: United States, 1990-2010." *Demography* 53:269-293.

Scruggs, Lyle, and Julie Allan. 2006. "Welfare-state Decommodification in 18 OECD Countries: A Replication and Revision." *Journal of European Social Policy* 16(1):55–72.

Scruggs, Lyle. 2008. Social Rights, Welfare State and Inequality. in C. Anderson and P. Baramendi (eds) *Democracy, Inequality, and Representation*. New York: Russell Sage Foundation.

Stirbu, Irina, Anton E. Kunst, Matthias Bopp, Mall Leinsalu, Enrique Regidor et al. 2010. "Educational Inequalities in Avoidable Mortality in Europe." *Journal of Epidemiology and Community Health* 64:913-920.

Truesdale, Beth C. and Christopher Jencks. 2016. "The Health Effects of Income Inequality: Averages and Disparities." *Annual Review of Public Health* 37:413-30.

Turney, Kristin, Hedwig Lee and Neil Mehta. 2013. "The Social Determinants of Child Health." *Social Science & Medicine* 95:1-5.

van der Meer, Tom, Manfred Te Grotenhuis and Ben Pelzer. 2010. "Influential Cases in Multilevel Modeling: A Methodological Comment." *American Sociological Review* 75:173-178.

von dem Knesebeck, Olaf, Pablo E. Verde and Nico Dragano. 2006. "Education and Health in 22 European Countries." *Social Science & Medicine* 63:1344-1351.

World Bank. 2005. "GDP Per Capita (Current US Dollars)." http://data.worldbank.org/indicator/ NY.GDP.PCAP.CD.

Variable	Ν	Mean	SD	Min	Max
Child health outcomes:					
Psychological health complaints	210,250.00	1.16	1.09	0	4
Life satisfaction.	204,201.00	7.63	1.88	0	10
Self-rated health (% fair/poor)	210,669.00	0.14		0	1
Country-level policy:					
Comprehensive policy index (CPI)	161,097.00	2.16	0.69	0.39	3.27
Vacation/sick leave	194,854.00	17.63	10.34	0	38
Work flexibility	170,848.00	0.45	0.14	0.1	0.64
Paid leave for mothers	194,854.00	16.17	10.01	0	42
Family benefits public spending	201,021.00	2.07	0.82	0.79	3.39
Unemployment generosity	163,846.00	11.18	1.95	6	14.5
Individual level variables:					
Family disadvantage (% high)	209,966.00	0.15		0	1
Female (%)	214,426.00	0.51		0	1
Age (years)	212,494.00	13.61	1.69	11	17
Family structure (%)					
Two-parent home	214,426.00	0.79		0	1
One-parent home	214,426.00	0.14		0	1
Other-home	214,426.00	0.07		0	1
Number of siblings	199,740.00	1.71	1.37	0	8
Country-level variables:					
Gross domestic product (GDP) per capita 2005	214,426.00	33,249	15,938	5,323	66,775
Total fertility rate (TFR) 2005	214,426.00	1.64	0.37	1.2	2.8

Table 1. Descriptive Statistics for Total Sample

Table 2: Policy Measures by Country

	Vacation/Sick Leave (Average Weeks)	Work Flexibility (%)	Paid Maternity (Weeks)	Family Benefits Public Spending	Comprehensive Policy Index (CPI)	Unemployment Generosity
Belgium	9.3	38	11	2.45	1.82	13.6
Czech Republic	28	54	19	1.78	2.56	
Denmark	29	51	16	3.39	2.94	12.1
Finland	24	62	12	2.93	2.75	9.3
France	24.5	48	16	2.92	2.64	10.6
Germany	29.7	51	14	2.05	2.52	11.3
Greece	38	29	9	0.98	1.96	6
Hungary	17.6	36	17	3	2.31	
Ireland	6.9	55	13	1.97	1.93	10.8
Israel				2.41		
Netherlands	20.2	43	16	1.38	1.99	12.1
Norway	28.1		42	2.99		14.5
Poland		55		1.18		
Portugal	10.45	23	6	0.97	1.06	10.7
Russia	6.4		20			
Spain	22.5	43	16	0.94	1.92	10.8
Sweden	16.9	64	42	2.81	3.27	11.2
Switzerland	5		16	1.37		13.5
United Kingdom	5.2	56	5	2.56	1.88	8.5
Unites States	0	10	0	0.79	0.39	10.6

	Psycholog Comp	ical Health plaints	Life Sat	isfaction	Self-rated Health (% Fair/Poor)		
Family Disadvantage	Low	High	Low	High	Low	High	
All countries	1.14	1.31	7.73	7.11	.13	.20	
Belgium	.92	1.07	7.68	7.20	.17	.27	
Czech Republic	1.34	1.42	7.50	7.00	.10	.14	
Denmark	.99	1.11	7.72	7.47	.15	.22	
Finland	1.14	1.24	7.89	7.55	.11	.15	
France	1.17	1.29	7.55	7.13	.11	.19	
Germany	.97	1.05	7.42	6.90	.13	.19	
Greece	1.50	1.68	8.01	7.56	.06	.08	
Hungary	1.21	1.33	7.56	6.75	.19	.28	
Ireland	1.06	1.24	7.73	7.34	.10	.17	
Israel	1.64	1.91	8.21	7.31	.07	.11	
Netherlands	.81	1.03	7.96	7.53	.13	.23	
Norway	1.18	1.30	7.86	7.02	.17	.23	
Poland	1.24	1.36	7.42	6.89	.14	.19	
Portugal	.76	.89	7.53	7.04	.12	.18	
Russia	1.15	1.26	7.66	6.97	.21	.28	
Spain	.96	1.24	8.10	7.51	.07	.12	
Sweden	1.35	1.47	7.79	7.28	.12	.18	
Switzerland	1.25	1.34	7.79	7.12	.08	.12	
United Kingdom	1.27	1.43	7.53	6.84	.17	.25	
United States	1.12	1.32	7.57	6.87	.20	.33	

Table 3: Health Outcomes by Family Disadvantage

	Psychological Complaints				Life Satisfaction				Self-Rated Health (Fair/Poor)			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	В	(SE)	В	(SE)	В	(SE)	В	(SE)	В	(SE)	В	(SE)
Vacation/sick leave												
Policy	.02	(.03)	.02	(.03)	.03	(.05)	.02	(.05)	11*	(.05)	10+	(.05)
Family disadvantage	.08***	(.02)	.08***	(.02)	48***	(.04)	48***	(.04)	.48***	(.04)	.47***	(.05)
Policy × family disadvantage			01	(.02)			.05+	(.02)			11*	(.05)
Work flexibility												
Policy	.04	(.04)	.05	(.04)	04	(.04)	04	(.04)	13*	(.07)	11+	(.07)
Family disadvantage	.10***	(.02)	.10***	(.02)	40***	(.03)	40***	(.03)	.44***	(.04)	.46***	(.03)
Policy × family disadvantage			04*	(.02)			004	(.02)			08**	(.03)
Paid leave for mothers												
Policy	.04	(.04)	.04	(.04)	02	(.04)	01	(.04)	.04	(.06)	.03	(.06)
Family disadvantage	.08***	(.01)	.08***	(.01)	47***	(.05)	45***	(.04)	.48***	(.04)	.46***	(.03)
Policy × family disadvantage			02	(.02)			06*	(.03)			.04	(.03)
Family benefits public spending												
Policy	002	(.03)	001	(.03)	06	(.07)	07	(.07)	.27***	(.04)	.27***	(.05)
Family disadvantage	.10***	(.02)	.10***	(.02)	49***	(.04)	48***	(.05)	.42***	(.03)	.42***	(.03)
Policy × family disadvantage			01	(.02)			.02	(.03)			.02	(.03)
Comprehensive policy index												
Policy	.04	(.03)	.04	(.03)	02	(.05)	02	(.05)	07	(.08)	06	(.08)
Family disadvantage	.09***	(.02)	.10***	(.02)	45***	(.05)	45***	(.04)	.43***	(.04)	.44***	(.04)
Policy × family disadvantage			04*	(.01)			.04	(.03)			04	(.03)
Unemployment generosity												
Policy	10*	(.04)	10*	(.03)	04	(.08)	03	(.08)	.14+	(.07)	.14+	(.08)
Family disadvantage	.11**	(.03)	.10**	(.03)	47**	(.09)	50**	(.09)	.43***	(.04)	.43***	(.03)
Policy $\times$ family disadvantage			01	(.02)			05	(.05)			01	(.04)

Table 4: Results from Regressions of Health Outcomes on Work-Family Reconciliation Policies and Family Disadvantage

*Note:* Data from 2005/06 and 2009/10 HBSC. Linear regression estimates provided for psychological complaints and life satisfaction. Logistic regression estimates provided for self-rated health. All models are clustered by country and include individual-level controls for family structure, siblings, gender, age, and year of survey and country-level controls for GDP an TFR.

+ p < .10. \* p < .05. \* \* p < .01. \* \* \* p < .001.











Appendix Figure 1. Illustration of Procedure Used to Identify Country-Level Disparity-Policy Outliers

*Note.* Associations between country-level disparities in well-being (here psychological complaints, psychcomp, or physical complaints, physcomp) and level of work-family reconciliation policy (here, paid leave on the X-axis) are estimated before and after the iterative exclusion of regression outliers using DFBETAS. This yields a slope that is representative of all non-outlier country observations, enabling more robust conclusions from comparative analyses that guard against single influential countries even when country-year N is high (e.g., van der Meer et al. 2010).