# Safety Concerns, Intensive Parenting, and the Rise in Childcare Time in 11 Industrialized Countries, 1980 to 2008

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## 1. Introduction

This paper uses time diary surveys for 11 industrialized countries over the last three decades to quantify and explore behavioral explanations behind the increase in the time parents spend with their children. Behavioral mechanisms have mostly received a "residual" treatment in previous literature –as potential explanations for the unaccounted portion of the secular increase in childcare time (Aguiar and Hurst 2007; Ramey and Ramey 2010; Gimenez-Nadal and Sevilla 2011). The upward trend in childcare is surprising given concurrent increases in female labor force participation and declines in fertility. Moreover, average increases in paid work hours for women have been greater than declines in the time they spend in housework (Bianchi, Robinson, and Milkie 2006; Sevilla-Sanz, 2010). Parental time inputs are critical for children's development (Leibowitz 1974; Datcher-Loury 1988; Hofferth and Sandberg 2001; Zick, Bryant, and Osterbacka 2001; Crosnoe and Trinitapoli 2008; Carneiro and Rodrigues 2009; Hsing 2009; Del Boca, Flinn, and Wiswall 2010), and recent research suggests that early transmission of human capital across generations goes a long way in explaining children's later life outcomes (Heckman, Stixrud, and Urzua 2006; Cunha and Heckman 2010). A better understanding of

recent changes in parental time investments in children is thus crucial for policies aimed at reducing social and economic inequality.

In time diary surveys, respondents are asked to keep a detailed record of activities throughout a 24-hour period.[1] In this paper, we focus on 11 countries (Australia, Canada, Finland, Germany, Italy, Netherlands, Norway, Spain, Sweden, United Kingdom, and United States) with a longstanding tradition of high-quality diary data collection. In keeping with the existing literature (Bianchi 2000; Gauthier, Smeedeng, and Furstenberg 2004) we document increases in parental time devoted to childcare from the early 1980s all the way up to the late 2000s.[2]

Previous research has found that increases in parental time with children cannot be fully explained by demographic factors that have altered the composition of the parent population, such as increases in childbearing age, declines in family size, or a higher rate of sole and unmarried motherhood (Sayer, Bianchi, and Robinson, Robinson, Robinson, and Robinson 2004). This indicates that the upward trend in childcare time is not primarily driven by the fact that fewer adults have children today and that contraceptive technology has made it easier to control childbearing, with parents being increasingly selected among those with the motivation or preference to invest heavily in children –as argued by Bianchi, Robinson and Milkie (2006), and Ramey and Ramey (2010) among others. Neither is increasing childcare time due to increases in income over this period which would have led to parents investing more time (and money) in their children, especially among the college educated (Guryan, Hurst, and Kearney 2008; Ramey and Ramey 2010). Finally, even though working mothers spend less time with

[1] An extensive literature confirms the reliability and validity of diary data for the analysis of time allocation (Juster and Stafford 1985; Robinson and Gobey 1985). Diary data is superior over other methods for collecting time-use data, such as the "stylised" estimates, in which respondents are asked to estimate time in activities on a 'typical day' (Kan and Pudney 2008).

[2] We see increases since the 1960s in most countries, in keeping with previous research. However, given that increase in childcare time have been steeper since the 80s, and that we only have data on safety and parental styles since the 80s, our main analysis focuses on the past three decades.

children than stay-at-home mothers, increases in childcare time are robust to the addition of employment and work status variables, which account for the increased flexibility in working arrangements that allows working mothers to reallocate their time and spend more time with their children (Ramey and Ramey 2010; Sayer and Gornick 2011). In this paper, we confirm findings from existing literature, for a larger sample of countries, using a more recent time window: we continue to see increases in childcare time after controlling for the variables above.

The limited ability of compositional and demographic factors to account for the generalized increase in childcare time across countries has led researchers to consider alternative behavioral explanations. Our main contribution in this paper is to measure and test, for the first time, the two behavioral explanations most frequently mentioned in the literature: increases in safety concerns, and the spread of norms of intensive parenting.

The first explanation suggests that heightened worries about safety may have induced parents to spend more time accompanying their children and supervising their activities (Sayer, Bianchi, and Robinson 2004; Bianchi, Robinson, and Milkie 2006). It has been argued that the erosion of community bonds within neighborhoods, as well as heightened perceptions of crime in some settings, have contributed to an increased level of parental supervision of children's activities. This is plausible, since fears about street safety inform parental decisions about children's activities (Valentine and McKendrick, 1997; Kurz 2002; Timperio, Crawford, Telford, and Salmon, 2004; Carver, Timperio, and Crawford, 2008). On the other hand, the increase in children's participation in extracurricular activities since the early 1980s may have also been fueled by parents' concern for children's safety (Hofferth and Sandberg, 2001; Kurz , 2002; Timperio, Crawford, Telford, and Salmon, 2004). As a result, free, unaccompanied play on neighborhood streets (which was the norm in earlier times) has been replaced by supervised play or substituted by structured activities led by adults.

The plausibility of this explanation rests on parents' subjective assessment of neighborhood safety. In order to test this explanation, we use data from the International Crime Victims Survey (ICVS) to measure parents' perceived likelihood of burglary, and feelings of street unsafety, over time and across countries. Our results fail to support this hypothesis, since perceived unsafety has decreased in most countries, for both fathers and mothers. This is particularly true for the US, where increases in time with children have been steeper, but people feel safer now than in the past.

The second behavioral explanation we investigate refers to the emergence of norms about "intensive mothering" (Hays 1996) and "involved fathering" (Coltrane 1996, Pleck 1987), which have important class implications in parent's approach to child development (Lareau 2003). Messages and social norms about what constitutes proper parenting have multiplied in recent decades, and employed mothers have not been released from normative expectations that they will devote substantial time and energy to hands-on caregiving, despite their increasing work effort (Sayer, Bianchi and Robinson 2004). Moreover, as the value of children has switched from being economically to emotionally based, the amount of time necessary to provide a "good" childhood has ratcheted up tremendously (Daly 2001). Mothers are expected to be experts in the needs and desires of their children, to cultivate and supervise all aspects of their children's development and well-being, and to vigilantly protect children's innocence (Sayer, Bianchi, and Robinson, 2004). Expectations that fathers too will invest considerable time in children have also grown, and with it the emergence of an ideal of involved fatherhood: fathers should become more intimately involved in the daily lives and cares of their children (Coltrane 1996, 2004). Although this normative view that young children need constant and sustained parental attention

varies across countries, intensive parenting has become more popular across the industrialized world.[3]

In order to measure intensive parenting, we use data from the World Values Suvey (1990s and 2000s) to build country-level indexes of parenting values, using principal component analysis. Our indexes measure the traits that parents consider most important in their children's upbringing. In all countries, we find that parents increasingly value independence, which the parenting styles literature associates with more involved forms of parenting (an authoritative but reasoned and self-entitled approach to child development), as opposed to obedience, associated with a more authoritarian parenting style (cfr. Lareau 2003). We conclude that attitudinal changes towards intensive parenting styles, rather than increases in safety concerns, are a more plausible explanation for the upward childcare trend observed in most countries in recent decades.

The remainder of this paper is organized as follows. Section 2 describes the data presents the empirical method. Section 3 analyzes general trends in parental time investments in children, and tests compositional and demographic explanations behind these trends. Section 4 tests alternative behavioral explanations, which constitute the main contribution of this study. Section 5 concludes and presents the additional analyses and robustness checks that we plan to carry out to support our preliminary findings.

[3] Intensive parenting is prevalent in Anglo countries such as Australia, Canada, the United Kingdom, and the United States (Craig and Mullan 2011). Most Northern Europe countries (Norway and the Netherlands, for instance) also share that view (Sayer and Gornick 2011). On the contrary, in Sweden and France raising children is viewed as a shared social concern what shapes a different attitude towards children's entitlement to parental time. In particular, French parents appear not to prioritize childcare time over other uses of time such as adult-oriented leisure (Sayer and Gornick 2011).

## 2. Data

We examine diary data since the 1970s for the following industrialized countries (corresponding sample years in parentheses): Australia (1987, 1992, 1997), Canada (1981, 1986, 1992, 1998), Finland (1987, 1999), Germany (1991, 2001), Italy (1989, 2002), the Netherlands (1980, 1985, 1990, 1995, 2000, 2005), Norway (1981, 1990, 2000), Spain (1992, 1997, 2002, 2008), Sweden (1991, 2001), the United Kingdom (1983, 1987, 1995, 2000, 2005) and the United States (1985, 1992, 1994, 1998, 2003, 2004, 2005, 2006, 2007, 2008). Our choice of countries and time periods is based on the availability of 24-hour time diaries, which maximize comparability across surveys in time-use categories –see Guryan, Hurst and Kearney (2008) for a discussion about the conceptualization and comparability of child care time using these surveys. A diary is completed by respondents on selected days, and is divided into intervals where the respondent records a main activity (and other features depending on the survey such as the secondary activity carried out simultaneously with the primary activity, whether the activity was performed in the company of a child, another member of the household, or another adult, and where the activity took place).

Our data come from the Multinational Time Use Study (MTUS), an ex-post harmonized cross-time, cross-national comparative time-use database, constructed from national random-sampled time-diary studies with detailed measures of time use. The MTUS aggregates daily 'primary activity' in 40 time use categories (and an additional category for missing time), with approximately 30 standardized demographic variables. The fact that our analysis is based on the comparison of child care provides a good basis to run meaningful comparisons over time and across countries, as it minimizes the risk that time use child care-related activities may have been coded differently across surveys. Moreover, as Aguiar and Hurst (2007) point out, to the extent that low and highly educated individuals are affected by data collection methods in the same

way, the comparison of time use trends between educational groups should remain unaffected by survey methodology and so comparisons of finer leisure activities between education groups should still be valid. The harmonization exercise also addressed differences in survey methodologies such as different response rates (especially the lower response rate of some of the surveys), whether they covered or not the twelve months of the year, and the sampling frame. All the surveys provide weights designed to ensure that the surveys are nationally representative.

The dependent variable for the analysis is the total number of hours per week that a respondent reports caring for his or her child/children as the primary activity. This conceptualization of child-care is similar to definitions used in Chasalani (2007), Guryan, Hurst, and Kearney (2008) and Ramey and Ramey (2010), for instance. Estimates of parental time based solely on primary activities – that is, reported as main activities – are known to underestimate the total time devoted by parents to children given that a large fraction of childcare activities are carried out in parallel to other activities – that is, as secondary activities (Zick and Bryant 1996; Folbre and Bittman, 2004; Bianchi, Robinson, and Milkie, 2006). Also, time diary studies do not measure the time parents are accessible to children but not directly engaged with them, nor the quality of parents' time with children (Sayer, Bianchi, and Robinson, 2004). Our data do not contain information on secondary activities, nor the presence of other family members at present, and we are aware that our results rely on the simplest definition of child-care. However, to the extent that childcare activities reported as primary activities in time diaries may represent more intense parent–child interactions than childcare activities reported as secondary activities (Gauthier, Smeeding, and Furstenberg, 2004), our estimates constitute at least a lower bound on total parental time investments in children. For the sake of comparison with previous studies, our main sample consists of mothers and fathers aged 18 to 64 who are

neither retired nor students, where being a "parent" is defined as having a child under 18 years in the household (Ramey and Ramey, 2010).

## 3. Testing compositional effects to increases in childcare

In order to analyze changes, and to ease comparison with previous studies, particularly Ramey and Ramey (2010), we estimate the following baseline OLS model:

$$CT_{it} = \alpha + \beta_1 T_t + \beta_2 X_{it} + \varepsilon_{it} \quad (1)$$

The dependent variable $CT_{it}$ is total parental time in hours per week of individual *i* at survey *t*. The constant term $\alpha$ reflects the average childcare time, across individuals and time. The main coefficient of interest $\beta_1$ accompanies a series of time dummies $T_t$, capturing the trend on parental childcare across time. $\beta_2$ is a vector of coefficients capturing the effects of a series of controls, $X_{it}$ (which we incorporate in a stepwise fashion, as explained in the next paragraph). The error term $\varepsilon_{itj}$ captures the effect of omitted factors that affect childcare time. The standard errors are clustered at the survey level to account for any within-study correlations.

We estimate the model in equation (1) separately for mothers and fathers, by country. We proceed in two steps. First we run a *baseline model*, which only includes controls for parental age, capturing period change in time devoted to childcare, from the reference year (constant term) to later surveys. Second, we run the *compositional model*, adding a set of variables to hold constant the demographic composition of the sample.

- *Childcare time trends for mothers*

Table 1 presents results from the *baseline model* for women, by country and survey year. In the reference year (which varies by country, between the 1980s and early 1990s) mothers spent on average about 14 hours per week (2 hours/day) on childcare; this magnitude varied widely

across countries, from levels below 11 hours/week in Italy and the US, to well over 18 hours in Australia. As found in previous literature (Sayer, Gauthier, and Furstenberg 2004; Craig 2006; Guryan, Hurst, and Kearney 2008) we document a statistically significant increase in maternal childcare from the reference survey year to the last available data point (in the late 1990s and 2000s), for all countries except for Sweden (where it declined). The greatest increases in childcare time over this 30-year period are observed in the UK and in the US, both of which had below-average starting values and increased them by over 5 hours/week. Alternatively, countries with some of the highest initial levels of maternal time investments in children (such as Australia and Germany) saw the lowest increases across time, under one hour/week –pointing at convergence between countries.

*[Table 1 around here]*

Table 2 presents the *compositional model* for men, by country and survey year. This model builds on the baseline model, by adding demographic variables to hold constant the composition of the sample. As hinted in previous research, we confirm that the increase in maternal childcare time cannot be fully explained by the rise in single motherhood (we control for marital status), nor by decreases in fertility (we include controls for number of children, number of children squared, and the presence of children under age 5 in the household). Similarly, the upward maternal childcare time trends don't seem to reflect a mere income effect (we control for whether mothers have incomes below or above the median), nor mere increases in the educational composition of the sample (since more educated mothers spend more time with children than their less educated counterparts –Sayer et al. 2004).

*[Table 2 around here]*

- *Childcare time trends for fathers*

We replicate the same two models for the fathers in our sample. Results for the *baseline models* (Table 3) are strikingly similar to those reported for mothers, except that men's time contributions to childcare in the reference year start at a lower level (at an average just over 5 hours per week), reflecting the fact that in all countries women bear the lion's share of parental time investments in children. However, fathers increased parental time as much (if not more, in some countries) as mothers between the early 1980s and the late 2000s. Given their lower initial levels of childcare, men's relative increase was larger than that of mothers, amounting to a higher share in total parental time with children (Coltrane, Sullivan).

*[Table 3 around here]*

When we add demographic controls to the *compositional models*, we also find that these seem insufficient to fully explain the secular rise in father's time with children. This means that father's increased involvement with their children can't be accounted for by changes in family structure or size, nor by their income or education.

*[Table 4 around here]*

These results confirm the failure of demographic factors to explain both fathers' and mothers' growing time investment in children. At this point the literature

## 4. Behavioral explanations for the increasing trends in Childcare

As increases in childcare across all countries cannot be explained by compositional effects, in this section we test the two behavioral explanations suggested in the literature to account for the upward trend in childcare across countries. We consider safety concerns (Sayer, Bianchi, and Robinson 2004; Bianchi, Robinson, and Milkie 2006; Ramey and Ramey 2010), and involved

parenting (Sayer, Bianchi, and Robinson 2004; Sullivan 2011). To test these two possible mechanisms, we use data from micro-level and secondary macro-level data sources.

### 4.1 Safety Concerns

Sayer, Bianchi, and Robinson (2004), have suggested that heightened perceptions of crime in some settings stemming from the erosion of community bonds might have motivated parents to spend more time supervising their children's play and accompanying them to and from school and other events. The expansion in children's extracurricular activities could itself be the consequence of parent's concern with children's safety during their after-school and weekend free time (Hofferth and Sandberg, 2001; Kurz , 2002; Timperio, Crawford, Telford, and Salmon, 2004). These are plausible explanations, in view of research showing that fears about safety affect parental decisions about children's participation in structured activities (Valentine and McKendrick, 1997; Kurz 2002; Timperio, Crawford, Telford, and Salmon, 2004; Carver, Timperio, and Crawford, 2008).

Linking safety concerns and parental time with children is not easy, given the lack of survey instruments including good measures of both. For the US, Ramey and Ramey (2010) compared trends in the incidence of violent crime and parent's perceptions of safety from Safe Kids USA (2008) to the general increasing trends in childcare time. They found that safety concerns have decreased over the last decades, making it very implausible to positively link crime and childcare time. We build on this approach, and expand the analysis to the 11 countries analyzed in the previous section (Australia, Canada, Finland, France, Italy, Netherlands, Spain, Sweden, the United Kingdom, and the United States).

We use microdata from the International Crime Victims Survey (ICVS) (van Kesteren, J.N. 1989; 1992; 1996; 2000; 2005) to analyze changes over time in parents' *perceptions* of safety in

their neighborhoods. For robustness' sake, we use two different measures of safety perceptions, both of which were are available in the ICVS for a couple of decades.

First, we use the question *"How safe do you feel when walking alone on the street after dark?"* (1=very safe, 4=very unsafe), coding responses as a dummy (1=very unsafe); this question is available for all countries in our study, except for Germany, Norway and Spain. For this reason, we investigate another variable which is available for all countries since 1989. We look at subjective estimates of the likelihood that the respondents house will be burglarized in the coming year (1=very unlikely, 3=very likely), coding responses as a dummy (1=very likely). For both analyses, we estimate logistic models, with the street unsafety and house burglary dummies as dependent variables; otherwise, the models are similar to those we used for childcare time in equation (1) above, including controls for parents' marital status, college education, working status and age. As in our previous analyses, we run our models separately for men and women, and our sample is composed of individuals aged 18-65 who are not student or retired. Given that some surveys did not contain information on household composition for some countries, we didn't limit our analysis to adults with children in the household. However, we run robustness checks using only those countries for which we had that, and results did not vary when only parents were selected (results available upon request).

*[Tables 5 and 6 around here]*

Tables 5 and 6 present trends in women's perceptions of unsafety. In all countries except for Sweden and UK safety concerns at dusk decreased over time (Table 5). With respect to perceptions of the risk of house burglary (Table 6), we observe a significant decreases in all countries except for Canada, Finland, Spain and UK. When we explore father's safety concerns (Tables 7 and 8), a similar picture emerges: safety concerns decreased in most countries, and increased in some. In any case, the evidence presented here (for both women and men) makes it

difficult to argue that changes in safety concerns (decreasing in most cases, but unclear in many others) lie behind the sustained and almost universal increase in parental time with children. In fact, there is not one single country in our sample for which both types of safety concerns explored here (street safety and fear of house burglary) increased consistently for both men and women, between the early 1990s and the mid-2000s. All in all, these results don't provide much evidence for the proposition that heightened perceptions of unsafety are responsible for the consistent increase across countries in parents' involvement in their children's lives.

*[Tables 7 and 8 around here]*

### 4.2 Parenting Styles

In this section, we use the information from three recent waves of the World Values Survey (WVS, 1994-1999, 1999-2004, 2005-2007) to investigate the qualities that parents prioritize in their children's upbringing. The analyses cannot be conducted for Italy as no such information is available from the WVS. As in the main analysis, our sample is composed of all women (men) aged 18-65 who are not student or retired.[4]

In Anglo countries such as Australia, Canada, the United Kingdom, and the United States, shared views of what constitutes proper parenting have recently intensified (Craig and Mullan 2011). The normative view that young children need constant and sustained parental attention has been argued to explain different time investments across class in the US.[5] Highly educated,

[4] No information on household composition was available for the selected sample.

[5] For example, Sayer, Bianchi, and Robinson (2004) underline that mothers have not been released from normative expectations that they will devote substantial time and energy to hands-on caregiving, even with increasing work effort. Indeed, as the value of children has switched from being economically to emotionally based, the amount of time necessary to produce a "good" childhood has ratcheted up tremendously (Daly 2001). Mothers are expected to be experts in the needs and desires of their children, to cultivate and supervise all aspects of their children's development and well-being, and to vigilantly protect children's innocence (Sayer, Bianchi, and Robinson, 2004). Expectations that fathers too will invest considerable time in children have also grown, and with it the emergence of an ideal of involved fatherhood: fathers should become more intimately involved in the daily care of their children (Coltrane 1996, 2004).

middle class parents seem to subscribe more whole-heartedly to current expert parenting advice to 'concertedly cultivate' their children by fostering children's talents through organized leisure activities and extensive reasoning. Working-class, less-educated parents engage in the accomplishment of natural growth, providing the conditions under which children can grow but leaving leisure activities to children themselves. This parenting style requires less involvement from parents and relies more often on the use of directives rather than reasoning (Lareau 2003; Vincent and Ball 2007).[6] Similar arguments have been used in other industrialized countries, such as Germany, Italy, Norway (Sayer, Gauthier, Furstenberg 2004), Sweden and France (Sayer and Gornick 2011; Suizzo 2004). Even though this literature is frequently framed in term of class differences (approximated by parental education), these theories predict that parenting styles which place a heavier emphasis on children's independence over obedience require higher levels of parental time involvement.

In the World Values Survey, respondents must select up to five items that they consider important among a list of qualities that "children can be encouraged to learn at home". The qualities listed include: independence; hard work; feeling of responsibility; tolerance and respect; thrift, saving money and things; determination, perseverance; religious faith; and obedience. Rankings are revealing since most respondents may subscribe, to some degree, to all the qualities listed. We thus interpret these measures as representative of the parenting values involved in the concerted cultivation approach.

In order to summarize this information, we use principal component analysis as in Heckman and Rubinstein (2001). In all the countries, for both men and women, the first principal

[6] Kalil et al. (2012) argue that the education gradient in mothers' time with children is also characterized by a developmental gradient, by which educated mothers alter the composition of that time in ways that may optimize children's socioemotional and cognitive development.

component heavily weights the lack of emphasis on obedience and the stress on independence and perseverance. For each country and gender, we calculate our composite measure of child-rearing values by multiplying the vector of respondent answers by the eigenvector associated to the largest eigenvalue of the matrix of correlations. Appendix Tables 1 and 2 list the weights assigned to each variable for the first principal component in constructing both women's and men's measures. The tables also show the proportion of variance attributable to the first principal component.

*[Table 9 around here]*

Table 9 presents results from OLS regressions predicting our composite measure of women's parenting styles, by age and year; they include controls for marital status, college education, employment status and age. Positive values of our synthetic measure of parenting styles can be interpreted as emphasizing qualities that are concordant with a time-intensive, concerted-cultivation approach. The predominance of positive regression coefficients reveals that, from the early 1980s to the late 2000s, there has been a marked increase in women's support qualities that require intensive parenting styles. Table 10 presents equivalent results for men, which are qualitatively similar to those observed for women except in Spain, where men seem to have decreased their adherence to the promotion of children's qualities that require intensive parental investments.

*[Table 10 around here]*

In short, these results would be compatible with the proposition that the well-established secular increase in parental childcare time in industrialized societies stems from the spread of parenting ideologies that stress certain attributes, and which require a more hands-on approach from parents.

## 5. Conclusions and complementary research plan

In this paper, we have made three contributions. Firstly, we have expanded our evidence on the increase in parental investments in childcare to 11 countries, for a more recent period of time all the way to the end of the last decade. Secondly, we have confirmed, for our expanded sample of countries and years, that demographic and compositional factors are insufficient to account for the upward trend in childcare time. Thirdly, we have incorporated information from two well-known sources of comparative micro-level data (the International Crime Victims Survey, and the World Values Survey) to explore the two alternative behavioural explanations that scholars have argued could account for the increase in parental time with children: the rise in safety concerns, and the spread of intensive parenting norms.

We have found a high degree of heterogeneity in the evolution of safety concerns over time: in most countries these have decreased, making it difficult to argue that parents are spending more time with children due to safety fears. On the other hand, we have found remarkably consistent trends pointing towards the fact that men and women, in different countries, increasingly subscribe to the promotion of qualities for their children that are associated with involved and intensive parenting.

These results are highly revealing, but we acknowledge that cross-country correlations and the overlapping of secular trends is not enough to establish any definite evidence for a link between behavioral changes in parenting styles and the rise in parental time with children. Even though the evidence presented here supports what most scholars have previously hypothesized, more evidence is needed to substantiate these claims. In order to further investigate this issue, we will complete the analysis presented here with an exploration of some micro-level mechanisms behind our results. If intensive parenting is the true force behind the increase in childcare time across countries, we expect to be able to see that certain activities (such as the organization of

adult-supervised events, or the transportation of children to and from structured activities) account for the majority of the increase in parental childcare time, across countries and over time.

**References**

Aguiar, Mark and Erik Hurst (2007), "Measuring Trends in Leisure: The Allocation of Time Over Five Decades," *Quarterly Journal of Economics,* 122 (2007): 969-1006.

Bianchi, S. (2000), Maternal employment and time with children: Dramatic change or surprising continuity?, in: *Demography*, Vol. 37, No. 4, 401-414.

Bianchi, Suzanne M., John P. Robinson, and Melissa A. Milkie (2006), *Changing Rhythms of American Family Life,* New York: Russell Sage Foundation, 2006.

Coltrane, Scott. (1996). *Family Man: Fatherhood, Housework, and Gender Equity*. New York: Oxford University Press.

Coltrane, Scott. (2000). Research on household labor: modeling and measuring the social embeddedness of routine family work. *Journal of Marriage and the Family,* 62: 1209–1233.

Coltrane, Scott. (2004). Fathering: paradoxes, contradictions and dilemmas. In *Handbook of Contemporary Families: Considering the Past, Contemplating the Future*, ed. Marilyn Coleman and Lawrence Ganong, 224-243. Thousand Oaks, CA: Sage.

Craig, L. (2006), 'Parental education, time in paid work and time with children: an Australian time-diary analysis', *British Journal of Sociology* 57 (4): 553-575.

Craig, L. and Killian Mullan (2011) "How Mothers and Fathers Share Childcare: A Cross-National Time-Use Comparison" *American Sociological Review* 76(6): 834-861.

Crosnoe, R. and Trinitapoli, J. (2008), Shared Family Activities and the Transition From Childhood Into Adolescence", *Journal of Research on Adolescence*, 18(1), 23–48.

Cunha, Flavio and James J. Heckman, 2010. "Investing in Our Young People," NBER Working Papers 16201.

Daly, K. J. (2001). Deconstructing family time: from ideology to lived experience. *Journal of Marriage and the Family* , 63 , 283–294.

Datcher-Loury, L. (1988), Effects of mother's home time on children's schooling, in: *The Review of Economics and Statistics*, Vol. 70, No. 3, 367-373.

Del Boca, Daniela &Flinn, Christopher &Wiswall, Matthew, (2010) "Household Choices and Child Development," IZA Discussion Papers 5155.

Fisher, Kimberly, Muriel Egerton and Jonathan Gershuny. 2006. *American Heritage Time Use Survey*. http://www.timeuse.org/ahtus/ .

Gauthier, A.H. (2011). Comparative Family Policy Database, Version 3 [computer file]. Netherlands Interdisciplinary Demographic Institute and Max Planck Institute for Demographic Research (distributors). Retrieved from: www.demogr.mpg.de.

Gauthier, A., Smeeding, T. and F. Furstenberg, Jr. (2004), Are parents investing less time in children? Trends in selected industrialized countries, in: *Population and Development Review*, Vol. 30, No. 4, 647-671.

Gimenez-Nadal, J.I. &Sevilla-Sanz, A. (2010) "The Allocation of Time Over Decades: A Cross-Country Analysis"

Guryan, Jon, Erik Hurst, and Melissa Kearney (2008), "Parental Education and Parental Time With Children," *Journal of Economic Perspectives*, Summer 2008: 23-46**.**

Heckman, James, Stixrud, Jora and Urzua, Sergio, (2006)."The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior," *Journal of Labor Economics*, vol. 24(3), pages 411-482.

Heckman, J. J. and Y. Rubinstein (2001). "The importance of noncognitive skills: Lessons from the GED testing program". *American Economic Review* 91(2), 145—149.

Hofferth, S. and J. Sandberg (2001), How American children spend their time, in: *Journal of Marriage and the Family*, Vol. 63, No. 2, 295-308.

Hsing, Amy (2009) "Parent's Time with Children: Does Time Matter for Children's Cognitive Achievement?" *Social Indicators Research* 93:123–126

Kalil, A., Ryan, R., and Corey, M. (2012) "Diverging Destinies: Maternal Education and the Developmental Gradient in Time with Children", *Demography* (forthcoming).

Kan, M.-Y.andPudney, S. E. (2008). "Measurement Error in Stylized and Diary Data on Time Use".*Sociological Methodology* **38**, 101-132.

Klevmarken, N. Anders and Stafford, Frank P. (1999). "Measuring investment in young children with time diaries," in J. P. Smith and R. J. Willis (eds.), *Wealth, Work, and Health: Innovations in Measurement in the Social Sciences*. Ann Arbor: University of Michigan Press, pp. 34–63.

Lareau, Annette (2003), *Unequal Childhoods*, Berkeley: University of California Press, 2003.

Leibowitz, Arleen, (1974) "Home Investments in Children," *Journal of Political Economy* 82(2): S111-S131.

Monna, B. & Gauthier, A. (2008) "A Review of the Literature on the Social and Economic Determinants of Parental Time" *Journal of Family and Economic Issues* (2008) 29:634–653.

Ramey, G. & Ramey, V. A. (2010) "The Rug Rat Race", *Brookings Papers on Economic Activity*, Spring 2010, pp. 129-176.

Rapoport, B., & Le Bourdais, C. (2008).Parental time and working schedules.*Journal of Population Economics*, 21(4), 903–932.

Robinson, John P. and Geoffrey Godbey (1999), *Time for Life: The Surprising Ways Americans Use their Time*, University Park, Pennsylvania: The Pennsylvania State University Press, 2nd edition.

Sandberg, J. and S. Hofferth (2001), Changes in children's time with parents, U.S., 1981-1997, in: *Demography*, Vol. 38, No. 3, 423-436.

Sayer, L., Bianchi, S. and J. Robinson (2004a), Are parents investing less in children? Trends in mothers' and fathers' time with children, in: *American Journal of Sociology*, Vol. 10, No. 1, 1-43.

Sayer, L., Gauthier, A. and F. Furstenberg (2004b), Educational differences in parents' time with children: Cross-national variations, in: *Journal of Marriage and the Family*, Vol. 66, No. 5, 1149-1166.

Sayer, Liana and Janet Gornick. 2011. "Cross-National Variation in the Influence of Employment Hours on Child Care Time." *European Sociological Review*. doi: 10.1093/esr/jcr008.

Sevilla-Sanz, A. (2010) "Division of Household Labor and Cross-Country Differences in Household Formation Rates", *Journal of Population Economics* (2010), Volume 23, Issue 1, Page 225

Suizzo, M. A. (2004). French and American mothers' childrearing beliefs: Stimulating, responding, and long-term goals. *Journal of Cross-Cultural Psychology, 35*, 606–626.

Sullivan. O. (2011) 'Changing differences in the division of domestic labor; the case ofeducation '. University of Oxford Sociology Working Paper no.2011/02.

Timperio, A., Crawford, D., Telford, A., Salmon, J., (2004). Perceptions of the local neighborhood and walking and cycling among children. *Preventive Medicine* 38 (1), 39–47.

Valentine, G., McKendrick, J., (1997). Children's outdoor play: exploring parental concerns about children's safety and the changing nature of childhood. *Geoforum*28 (2), 219–235.

van Kesteren, J.N. ( 1989; 1992; 1996; 2000; 2005 ) , *International Crime Victims Surveys - ICVS - 1989, 1992, 1996, 2000, 2005*.

Vincent, Carol and Stephen J. Ball. 2007. "'Making Up' the Middle-Class Child: Families, Activities and Class Dispositions." *Sociology* 41:1061–1077.

World Value Survey, (1981, 1990, 1995, 2000, 2005) (ICPSR 6160). Ann Arbor, MI: Inter-university Consortium for Political and Social Research.

Zick, C. D., & Bryant, W. K. (1996). "A new look at parents' time spent in child care: Primary and secondary time use ", *Social Science Research*, 25 (3): 260–280.

Zick, C. D., Bryant, K., &Osterbacka, E. (2001).Mothers' employment, parental involvement, and the implications for intermediate child outcomes.*Social Science Research*, 30: 25–49.

Table 1. *Baseline model* for mothers' time with children, by country and year.

| VARIABLES | (1) Australia | (2) Canada | (3) Finland | (4) Germany | (5) Italy | (6) Netherlands | (7) Norway | (8) Spain | (9) Sweden | (10) UK | (11) US |
|---|---|---|---|---|---|---|---|---|---|---|---|
| year_1980_1984 | | ref. | | | | ref. | ref. | | | ref. | |
| year_1985_1989 | ref. | -0.80*** | ref. | | ref. | 1.28*** | | | | -4.00*** | ref. |
| | | (0.090) | | | | (0.026) | | | | (0.078) | |
| year_1990_1994 | 0.65*** | 0.81*** | | ref. | | 2.33*** | 2.09*** | ref. | ref. | | 0.19 |
| | (0.015) | (0.102) | | | | (0.051) | (0.046) | | | | (0.863) |
| year_1995_1999 | 0.79*** | 1.76*** | 2.97** | | | 2.64*** | | -1.16*** | | 4.14*** | 2.59*** |
| | (0.004) | (0.148) | (0.168) | | | (0.062) | | (0.138) | | (0.030) | (0.003) |
| year_2000_2004 | | | | 0.23* | 1.98** | 3.52*** | 1.81*** | 3.33*** | -2.85* | 1.44*** | 5.35*** |
| | | | | (0.029) | (0.140) | (0.057) | (0.042) | (0.249) | (0.238) | (0.019) | (0.015) |
| year_2005_2010 | | | | | | 3.99*** | | 6.32*** | | 5.71*** | 5.30*** |
| | | | | | | (0.112) | | (0.346) | | (0.014) | (0.018) |
| Constant | 18.50*** | 14.34*** | 14.44** | 15.59** | 10.88** | 11.68*** | 14.76*** | 13.58*** | 16.84** | 12.55*** | 10.27*** |
| | (0.499) | (0.208) | (0.643) | (0.524) | (0.279) | (0.198) | (0.286) | (0.638) | (1.260) | (0.299) | (0.085) |

Notes: This table shows coefficients from OLS regression on maternal time investments in children, measured as hours per week spent on total childcare as primary activity, reported by the diarist. The samples include all mothers 18-64 who are not students or retired, where mother is defined as having a child under the age of 18 in the house. The omitted year is labelled ref. in each column. Controls for parents' ages (dummies for 18-24, 25-34, 35-44, 45-54, 55-64) are included. The omitted category is age 25-34. Standard errors are in parentheses.

* p<0.10; ** p<0.5; *** p<0.1

Table 2. *Compositional model* for mothers' time with children, by country and year

| . | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| VARIABLES | Australia | Canada | Finland | Germany | Italy | Netherlands | Norway | Spain | Sweden | UK | US |
| year_1980_1984 | | ref. | | | | ref. | ref. | | | ref. | |
| year_1985_1989 | ref. | 2.17*** | ref. | | ref. | 0.94*** | | | | -0.52* | ref. |
| | | (0.271) | | | | (0.034) | | | | (0.242) | |
| year_1990_1994 | 1.80*** | 2.73*** | | ref. | | 0.93*** | 1.49* | ref. | ref. | | 2.08*** |
| | (0.097) | (0.232) | | | | (0.052) | (0.374) | | | | (0.022) |
| year_1995_1999 | 1.29*** | 3.25*** | 1.60* | | | 1.00*** | | -0.77** | | 4.84*** | -0.39*** |
| | (0.065) | (0.251) | (0.160) | | | (0.046) | | (0.172) | | (0.097) | (0.066) |
| year_2000_2004 | | | | 2.90** | 1.83** | 3.06*** | 1.34** | 3.09*** | -3.19** | 2.72*** | 3.87*** |
| | | | | (0.105) | (0.053) | (0.244) | (0.306) | (0.186) | (0.123) | (0.088) | (0.035) |
| year_2005_2010 | | | | | | 1.42*** | | 7.82*** | | 6.38*** | 3.67*** |
| | | | | | | (0.160) | | (0.627) | | (0.091) | (0.035) |
| Constant | 14.07*** | 9.90*** | 16.45** | 4.06 | 15.88*** | 12.63*** | 12.64*** | 10.15*** | 12.98 | 9.37*** | 3.24*** |
| | (0.484) | (1.449) | (0.797) | (3.054) | (0.106) | (0.691) | (0.294) | (0.778) | (2.237) | (1.218) | (0.516) |

Notes: This table shows the regression of maternal time investments in children measured as hours per week spent on total childcare as primary activity reported by the diarist. The samples include all mothers 18-64 who are not students or retired, where mother is defined as having a child under the age of 18 in the house. The omitted year is labelled ref. in each column. Controls for parents' ages (dummies for 18-24, 25-34, 35-44, 45-54, 55-64) are included. The omitted category is age 25-34. This specification also includes marital status, a quadratic in the number of children, two dummies on income levels, whether the household has children under age 5, whether the mother has some college education, whether the mother works, and a vector of dummies to control for the day of the week the diary was reported (ref.: Sunday). Standard errors in parentheses.

* p<0.10; ** p<0.5; *** p<0.1

Table 3. *Baseline model* for fathers' time with children, by country and year.

| VARIABLES | (1) Australia | (2) Canada | (3) Finland | (4) Germany | (5) Italy | (6) Netherlands | (7) Norway | (8) Spain | (9) Sweden | (10) UK | (11) US |
|---|---|---|---|---|---|---|---|---|---|---|---|
| year_1980_1984 | | ref. | | | | ref. | ref. | | | ref. | |
| year_1985_1989 | ref. | 0.20 | ref. | | ref. | 0.26*** | | | | -0.43*** | ref. |
| | | (0.478) | | | | (0.061) | | | | (0.034) | |
| year_1990_1994 | 0.36*** | 1.16* | | ref. | | 0.69*** | 1.45*** | ref. | ref. | | 0.97 |
| | (0.029) | (0.472) | | | | (0.094) | (0.056) | | | | (0.512) |
| year_1995_1999 | 1.15*** | 2.43*** | 1.47** | | | 1.78*** | | 1.29*** | | 3.43*** | 3.85*** |
| | (0.025) | (0.474) | (0.088) | | | (0.081) | | (0.103) | | (0.022) | (0.005) |
| year_2000_2004 | | | | 1.24** | 0.62* | 2.21*** | 0.90*** | 2.26*** | -0.69** | 1.32*** | 4.28*** |
| | | | | (0.039) | (0.059) | (0.100) | (0.073) | (0.058) | (0.042) | (0.017) | (0.003) |
| year_2005_2010 | | | | | | 2.44*** | | 5.07*** | | 5.38*** | 4.30*** |
| | | | | | | (0.048) | | (0.097) | | (0.021) | (0.004) |
| Constant | 5.46*** | 6.09*** | 5.94* | 3.70** | 6.01** | 4.64*** | 6.59*** | 5.04*** | 7.79* | 4.85*** | 3.14*** |
| | (0.165) | (0.693) | (0.630) | (0.137) | (0.172) | (0.046) | (0.218) | (0.596) | (0.878) | (0.374) | (0.097) |

Notes: This table shows the regression of paternal time investments in children measured as hours per week spent on total childcare as primary activity reported by the diarist. The samples include all fathers 18-64 who are not students or retired, where mother is defined as having a child under the age of 18 in the house. The omitted year is labelled ref. in each column. Controls for parents' ages (dummies for 18-24, 25-34, 35-44, 45-54, 55-64) are included. The omitted category is age 25-34. Standard errors in parentheses.

* p<0.10; ** p<0.5; *** p<0.1

Table 4. *Compositional model* for mothers' time with children, by country and year

| VARIABLES | (1) Australia | (2) Canada | (3) Finland | (4) Germany | (5) Italy | (6) Netherlands | (7) Norway | (8) Spain | (9) Sweden | (10) UK | (11) US |
|---|---|---|---|---|---|---|---|---|---|---|---|
| year_1980_1984 | | ref. | | | | ref. | ref. | | | ref. | |
| year_1985_1989 | ref. | 0.02 | ref. | | ref. | -0.28* | | | | -0.16 | ref. |
| | | (0.229) | | | | (0.108) | | | | (0.143) | |
| year_1990_1994 | 0.49** | 0.90*** | | ref. | | 0.03 | 1.02*** | ref. | ref. | | 1.56*** |
| | (0.099) | (0.177) | | | | (0.116) | (0.071) | | | | (0.017) |
| year_1995_1999 | 1.00** | 2.25*** | 1.11** | | | 0.93*** | | 1.04*** | | 3.55*** | 2.99*** |
| | (0.112) | (0.210) | (0.032) | | | (0.126) | | (0.067) | | (0.155) | (0.021) |
| year_2000_2004 | | | | 1.58*** | 0.72*** | 1.53*** | 0.89*** | 2.00*** | -1.09** | 1.62*** | 3.46*** |
| | | | | (0.007) | (0.007) | (0.147) | (0.065) | (0.119) | (0.045) | (0.142) | (0.022) |
| year_2005_2010 | | | | | | 1.75*** | | 4.46* | | 4.86*** | 3.54*** |
| | | | | | | (0.137) | | (1.708) | | (0.157) | (0.021) |
| Constant | 6.47** | 5.20** | 8.62* | 2.44 | 7.71*** | 3.03** | 7.25*** | 7.21** | 9.58 | 8.20*** | 1.88*** |
| | (0.977) | (1.178) | (0.883) | (1.498) | (0.033) | (0.794) | (0.467) | (1.752) | (3.781) | (0.884) | (0.040) |

Notes: This table shows the regression of maternal time investments in children measured as hours per week spent on total childcare as primary activity reported by the diarist. The samples include all mothers 18-64 who are not students or retired, where mother is defined as having a child under the age of 18 in the house. The omitted year is labelled ref. in each column. Controls for parents' ages (dummies for 18-24, 25-34, 35-44, 45-54, 55-64) are included. The omitted category is age 25-34. This specification also includes marital status, a quadratic in the number of children, two dummies on income levels, whether the household has children under age 5, whether the father has some college education, and a vector of dummies to control for the day of the week the diary was reported (ref.: Sunday). Standard errors in parentheses.

* p<0.10; ** p<0.5; *** p<0.1

Table 5. Safety concerns: trends in women's feelings of street unsafety at dusk.

| | (1) Australia | (2) Canada | (3) Finland | (4) Italy | (7) Netherland | (9) Sweden | (10) UK | (11) US |
|---|---|---|---|---|---|---|---|---|
| Year dummies | | | | | | | | |
| year_1992 | ref. | ref. | ref. | ref. | ref. | ref. | | |
| year_1996 | | -0.01** | 0.00** | | 0.00 | | ref. | ref. |
| | | (0.001) | (0.001) | | (0.003) | | | |
| year_2000 | 0.02* | -0.04*** | -0.01*** | | -0.03*** | -0.00*** | -0.02** | -0.04*** |
| | (0.004) | (0.002) | (0.000) | | (0.002) | (0.000) | (0.002) | (0.001) |
| year_2004 | -0.06*** | -0.04*** | | | | | | -0.03*** |
| | (0.002) | (0.002) | | | | | | (0.001) |
| year_2005 | | | -0.01*** | -0.02* | -0.04*** | 0.03** | 0.02** | |
| | | | (0.001) | (0.003) | (0.004) | (0.004) | (0.003) | |
| Constant | 0.26*** | 0.16*** | 0.06* | 0.16** | 0.15*** | 0.10** | 0.20** | 0.09 |
| | (0.017) | (0.002) | (0.023) | (0.011) | (0.020) | (0.020) | (0.034) | (0.038) |

Notes: International Crime Victims Survey Data, 1989-2005. This table shows the regression of the dummy for how safe do you feel walking alone in your area after dark (1=very unsafe) on the variables of interest. The samples include all women 18-64 who are not students or retired. Controls for marital status, college education, working status, and individuals' ages (dummies for 18-24, 25-34, 35-44, 45-54, 55-64) are included. The omitted category is age 25-34. Standard errors in parentheses.
* p<0.10; ** p<0.5; *** p<0.1

Table 6. Safety concerns: trends in women's fears of house burglary.

| | (1) Australia | (2) Canada | (3) Finland | (4) Italy | (5) Germany | (6) Norway | (7) Netherland | (8) Spain | (9) Sweden | (10) UK | (11) US |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year dummies | | | | | | | | | | | |
| year_1989 | ref. | ref. | ref. | | ref. | ref. | ref. | ref. | | ref. | ref. |
| year_1992 | -0.01 | 0.04*** | 0.01 | ref. | | -0.01 | | | ref. | | |
| | (0.012) | (0.006) | (0.005) | | | (0.006) | | | | | |
| year_1996 | | 0.01* | 0.01 | | | -0.01 | | | 0.00* | 0.08*** | -0.02 |
| | | (0.005) | (0.004) | | | (0.007) | | | (0.001) | (0.005) | (0.009) |
| year_2000 | -0.07*** | 0.01 | 0.01 | | | -0.02** | | | -0.00** | 0.01 | -0.02 |
| | (0.009) | (0.005) | (0.004) | | | (0.007) | | | (0.000) | (0.006) | (0.009) |
| year_2004 | -0.07*** | 0.00 | | | | | -0.01 | | | | -0.04** |
| | (0.009) | (0.006) | | | | | (0.002) | | | | (0.011) |
| year_2005 | | | 0.04*** | -0.00 | -0.03* | -0.06*** | | 0.01 | | 0.05*** | |
| | | | (0.006) | (0.003) | (0.004) | (0.007) | | (0.002) | | (0.008) | |
| Constant | 0.15*** | 0.05*** | -0.00 | 0.03 | 0.05* | 0.06*** | 0.03* | 0.04 | 0.01 | 0.10*** | 0.11*** |
| | (0.006) | (0.007) | (0.008) | (0.005) | (0.004) | (0.005) | (0.004) | (0.014) | (0.007) | (0.015) | (0.007) |

Notes: International Crime Victims Survey Data, 1989-2005.This table shows the regression of the likelihood of their house being burgled in the coming year (1=very unlikely) on the variables of interest. The samples include all women 18-64 who are not students or retired. Controls for marital status, college education, working status, and individuals' ages (dummies for 18-24, 25-34, 35-44, 45-54, 55-64) are included. The omitted category is age 25-34. Standard errors in parentheses.

* p<0.10; ** p<0.5; *** p<0.1

Table 7. Safety concerns: trends in men's feelings of street unsafety at dusk.

| | (1) Australia | (2) Canada | (3) Finland | (4) Italy | (7) Netherland | (9) Sweden | (10) UK | (11) US |
|---|---|---|---|---|---|---|---|---|
| Year dummies | | | | | | | | |
| year_1992 | ref. | ref. | ref. | ref. | ref. | ref. | | |
| year_1996 | | 0.01*** | 0.01*** | | 0.01** | | | |
| | | (0.001) | (0.001) | | (0.001) | | | |
| year_2000 | 0.00 | -0.00* | -0.00*** | | 0.00 | 0.00** | -0.01** | -0.03*** |
| | (0.002) | (0.001) | (0.001) | | (0.001) | (0.000) | (0.003) | (0.002) |
| year_2004 | -0.01*** | 0.01*** | | | | | | -0.01 |
| | (0.000) | (0.001) | | | | | | (0.004) |
| year_2005 | | | 0.00 | 0.02** | -0.00** | 0.02*** | 0.03** | |
| | | | (0.000) | (0.001) | (0.001) | (0.000) | (0.003) | |
| Constant | 0.05* | 0.02* | 0.00* | 0.06 | 0.01 | -0.00 | 0.05*** | 0.04 |
| | (0.015) | (0.008) | (0.001) | (0.039) | (0.007) | (0.005) | (0.005) | (0.046) |

Notes: International Crime Victims Survey Data, 1989-2005. This table shows the regression of the dummy for how safe do you feel walking alone in your area after dark (1=very unsafe) on the variables of interest. The samples include all men 18-64 who are not students or retired. Controls for marital status, college education, working status, and individuals' ages (dummies for 18-24, 25-34, 35-44, 45-54, 55-64) are included. The omitted category is age 25-34. Standard errors in parentheses.
* p<0.10; ** p<0.5; *** p<0.1

Table 8. Safety concerns: trends in men's fears of house burglary.

| | (1) Australia | (2) Canada | (3) Finland | (4) Italy | (5) Germany | (6) Norway | (7) Netherland | (8) Spain | (9) Sweden | (10) UK | (11) US |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year dummies | | | | | | | | | | | |
| year_1989 | ref. | ref. | ref. | | ref. | ref. | ref. | ref. | | ref. | ref. |
| year_1992 | 0.05*** | 0.02* | 0.01** | ref. | | 0.00 | | | ref. | | |
| | (0.005) | (0.009) | (0.002) | | | (0.006) | | | | | |
| year_1996 | | 0.01 | -0.00 | | | -0.01 | | | | -0.00 | -0.04 |
| | | (0.009) | (0.002) | | | (0.006) | | | | (0.006) | (0.017) |
| year_2000 | 0.00 | -0.00 | -0.01** | | | -0.02** | | | -0.01** | -0.03** | -0.04* |
| | (0.004) | (0.008) | (0.002) | | | (0.006) | | | (0.002) | (0.005) | (0.014) |
| year_2004 | -0.03*** | -0.02 | | | | | -0.02** | | | | -0.04* |
| | (0.003) | (0.007) | | | | | (0.001) | | | | (0.016) |
| year_2005 | | | 0.00 | -0.00 | -0.05** | -0.04** | | 0.01 | 0.01** | -0.03*** | |
| | | | (0.003) | (0.002) | (0.001) | (0.008) | | (0.002) | (0.001) | (0.005) | |
| Constant | 0.11*** | 0.06** | 0.01** | 0.04 | 0.05* | 0.09*** | 0.03** | 0.00 | 0.01 | 0.08*** | 0.07** |
| | (0.014) | (0.015) | (0.003) | (0.009) | (0.007) | (0.010) | (0.002) | (0.019) | (0.004) | (0.006) | (0.016) |

Notes: International Crime Victims Survey Data, 1989-2005.This table shows the regression of the likelihood of their house being burgled in the coming year (1=very unlikely) on the variables of interest. The samples include all men 18-64 who are not students or retired. Controls for marital status, college education, working status, and individuals' ages (dummies for 18-24, 25-34, 35-44, 45-54, 55-64) are included. The omitted category is age 25-34. Standard errors in parentheses.

* p<0.10; ** p<0.5; *** p<0.1

Table 9. Parenting styles: trends in women's support for qualities that require intensive parenting.

| | (1) Australia | (2) Canada | (3) Finland | (4) France | (5) Germany | (6) Norway | (7) Netherland | (8) Spain | (9) Sweden | (10) UK | (11) US |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year dummies | | | | | | | | | | | |
| year_1981_1984 | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. |
| year_1989_1993 | | 0.30*** | -0.23** | 0.07** | 0.77*** | 1.02*** | 0.50*** | 0.14*** | 0.31*** | 0.42*** | 0.56*** |
| | | (0.006) | (0.033) | (0.013) | (0.017) | (0.009) | (0.018) | (0.009) | (0.017) | (0.007) | (0.006) |
| year_1994_1999 | 0.81*** | | | 0.25*** | 0.71*** | | 0.76*** | 0.09*** | 0.70*** | 0.63*** | |
| | (0.014) | | | (0.032) | (0.015) | | (0.047) | (0.007) | (0.042) | (0.005) | |
| year_1999_2004 | | 0.48*** | | | | | | 0.01 | 0.80*** | | 0.49*** |
| | | (0.013) | | | | | | (0.014) | (0.031) | | (0.022) |
| year_2005_2007 | 1.05*** | 0.52*** | 0.12* | 0.20* | 0.83*** | 1.43*** | 0.56*** | 0.11*** | 0.91*** | 0.73*** | 0.68*** |
| | (0.027) | (0.019) | (0.033) | (0.066) | (0.037) | (0.047) | (0.052) | (0.017) | (0.035) | (0.022) | (0.021) |
| Constant | -0.69*** | -0.48*** | -0.03 | -0.01 | -0.60*** | -1.12*** | -0.51*** | 0.21** | -0.66*** | -0.38*** | -0.54** |
| | (0.043) | (0.056) | (0.081) | (0.026) | (0.092) | (0.090) | (0.086) | (0.068) | (0.100) | (0.019) | (0.141) |

Notes: World Values Survey Data, 2005. This table shows the regression of the composite measure of child-rearing values on the variables of interest for mothers. The measure is computed applying principal component analysis to the respondents' rankings on the qualities that children can be encouraged to learn at home from the following list: independence; hard work; feeling of responsibility; tolerance and respect; thrift, saving money and things; determination, perseverance; religious faith; and obedience. The samples include all mothers 18-64 who are not students or retired. Controls for marital status, college education, working status, and individuals' ages (dummies for 18-24, 25-34, 35-44, 45-54, 55-64) and marital status are included. The omitted category is age 25-34. Standard errors in parentheses.

* p<0.10; ** p<0.5; *** p<0.1

Table 10. Parenting styles: trends in men's support for qualities that require intensive parenting.

| | (1) Australia | (2) Canada | (3) Finland | (4) France | (5) Germany | (6) Norway | (7) Netherland | (8) Spain | (9) Sweden | (10) UK | (11) US |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year dummies | | | | | | | | | | | |
| year_1981_1984 | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. |
| year_1989_1993 | | 0.38*** | -0.18*** | 0.05 | 0.69*** | 0.94*** | 0.32*** | 0.12*** | 0.34*** | 0.40*** | 0.41*** |
| | | (0.018) | (0.006) | (0.029) | (0.038) | (0.009) | (0.043) | (0.021) | (0.027) | (0.006) | (0.014) |
| year_1994_1999 | 0.82*** | | | 0.07 | 0.76*** | | 0.44*** | 0.04*** | 0.87*** | 0.76*** | |
| | (0.005) | | | (0.052) | (0.033) | | (0.038) | (0.007) | (0.042) | (0.019) | |
| year_1999_2004 | | 0.55*** | | | | | | -0.15*** | 0.75*** | | 0.57*** |
| | | (0.017) | | | | | | (0.021) | (0.048) | | (0.019) |
| year_2005_2007 | 1.01*** | 0.54*** | 0.15*** | 0.15 | 0.73*** | 1.27*** | 0.32*** | -0.12** | 0.86*** | 0.93*** | 0.59*** |
| | (0.013) | (0.015) | (0.006) | (0.065) | (0.030) | (0.039) | (0.038) | (0.027) | (0.053) | (0.037) | (0.016) |
| Constant | -0.84*** | -0.49** | -0.08 | 0.01 | -0.56** | -1.34*** | -0.49* | 0.06 | -1.06*** | -0.55*** | -0.26* |
| | (0.005) | (0.125) | (0.177) | (0.163) | (0.148) | (0.109) | (0.176) | (0.117) | (0.021) | (0.061) | (0.094) |

Notes: World Values Survey Data, 2005. This table shows the regression of the composite measure of child-rearing values on the variables of interest for mothers. The measure is computed applying principal component analysis to the respondents' rankings on the qualities that children can be encouraged to learn at home from the following list: independence; hard work; feeling of responsibility; tolerance and respect; thrift, saving money and things; determination, perseverance; religious faith; and obedience. The samples include all fathers 18-64 who are not students or retired. Controls for marital status, college education, working status, and individuals' ages (dummies for 18-24, 25-34, 35-44, 45-54, 55-64) and marital status are included. The omitted category is age 25-34. Standard errors in parentheses.

* p<0.10; ** p<0.5; *** p<0.1

Appendix Table 1. Construction of child-rearing values measure. Women

| | (1) Australia | (2) Canada | (3) Finland | (4) Germany | (5) Norway | (6) Spain | (7) Sweden | (8) UK | (9) US |
|---|---|---|---|---|---|---|---|---|---|
| Independence | 0.664 | 0.419 | 0.394 | 0.486 | 0.447 | 0.606 | 0.668 | 0.519 | 0.579 |
| Hard work | 0.218 | -0.104 | -0.357 | -0.368 | -0.076 | -0.045 | -0.268 | 0.122 | 0.128 |
| Feeling of responsibility | 0.436 | 0.306 | 0.325 | 0.394 | 0.460 | 0.215 | 0.296 | 0.254 | 0.099 |
| Tolerance | 0.355 | 0.370 | 0.589 | 0.569 | 0.545 | 0.187 | 0.484 | 0.156 | 0.257 |
| Frugality | -0.165 | -0.331 | -0.478 | -0.487 | -0.389 | -0.284 | -0.514 | -0.404 | 0.231 |
| Perseverance | 0.470 | 0.471 | 0.392 | 0.465 | 0.480 | 0.508 | 0.222 | 0.448 | 0.272 |
| Religious faith | -0.448 | -0.568 | -0.330 | -0.263 | -0.352 | -0.582 | -0.261 | -0.457 | -0.674 |
| Obedience | -0.643 | -0.662 | -0.445 | -0.522 | -0.558 | -0.615 | -0.557 | -0.655 | -0.693 |
| Proportion of variance | 20.81 | 18.86 | 17.81 | 20.57 | 19.14 | 18.8 | 19.14 | 17.17 | 18.63 |

Notes: World Values Survey Data, 1994-2007. This table shows the weights assigned to each variable for the first principal component in constructing women's composite measures of child-rearing values. The last row also shows the proportion of variance attributable to the first principal component.

Appendix Table 2. Construction of child-rearing values measure. Men

| | (1) Australia | (2) Canada | (3) Finland | (4) Germany | (5) Norway | (6) Spain | (7) Sweden | (8) UK | (9) US |
|---|---|---|---|---|---|---|---|---|---|
| Independence | 0.634 | 0.301 | 0.497 | 0.411 | 0.603 | 0.442 | 0.702 | 0.538 | 0.585 |
| Hard work | 0.325 | -0.195 | -0.187 | -0.549 | -0.246 | 0.062 | -0.167 | -0.249 | 0.166 |
| Feeling of responsibility | 0.431 | 0.295 | 0.402 | 0.519 | 0.490 | 0.319 | 0.141 | 0.402 | 0.224 |
| Tolerance | 0.279 | 0.450 | 0.335 | 0.587 | 0.423 | 0.316 | 0.315 | 0.241 | 0.024 |
| Frugality | -0.013 | -0.320 | -0.558 | -0.450 | -0.248 | -0.343 | -0.585 | -0.384 | -0.001 |
| Perseverance | 0.411 | 0.428 | 0.469 | 0.336 | 0.433 | 0.490 | 0.359 | 0.513 | 0.352 |
| Religious faith | -0.468 | -0.648 | -0.306 | -0.110 | -0.514 | -0.510 | -0.291 | -0.408 | -0.647 |
| Obedience | -0.647 | -0.595 | -0.572 | -0.471 | -0.373 | -0.593 | -0.628 | -0.592 | -0.687 |
| Proportion of variance | 19.71 | 18.47 | 18.86 | 20.42 | 18.69 | 17.14 | 19.87 | 18.73 | 17.95 |

Notes: World Values Survey Data, 1994-2007. This table shows the weights assigned to each variable for the first principal component in constructing men's composite measures of child-rearing values. The last row also shows the proportion of variance attributable to the first principal component.